MEMORANDUM

TO: Council Members and Others

FROM: Tony Willardson, Executive Director

DATE: June 20, 2017

RE: Briefing Books for the 184th Council Meetings in Rohnert Park, California

This is notification that the briefing book for our meetings scheduled in Rohnert Park, California on June 27-29, 2017 is available on our 184th meetings web page. The minutes from our last meetings held in Nebraska City, Nebraska are posted on our website (under Past Meetings) for your review.

Council members and guests are invited to join our California hosts on a full-day field trip on Tuesday, June 27th. Please meet in the hotel lobby at 7:20 a.m. for a 7:30 a.m. bus departure. Advance registration is required and is $35 per person. Payment arrangements can be made in advance on-line or you may pay on site. We will be hearing about water management challenges in the Lower Russian River Basin, managing for flood versus drought, and balancing competing needs of cities, high-value agriculture (premium wine grape acreage), and ESA-listed salmonids. Groundwater management and unique water rights administration challenges are other topics. It is anticipated we will return to the hotel around 6:00 p.m. Dinner is on your own.

On Wednesday, the schedule will begin at 8:00 a.m., with the California host state presentation. WSWC Committee meetings will be held sequentially thereafter beginning with the Water Resources Committee meeting at 9:15 a.m. The Executive Committee will begin at 11:45 a.m. and meet over lunch until 1:15 p.m. All others will be on their own for lunch. The Water Quality Committee meeting will begin at 1:30 p.m., followed by the Legal Committee, which will start at 3:45 pm. A reception will be held at the hotel from 6:00 – 7:00 p.m., and all Council members and guests are invited to attend.

The meetings will conclude with the Full Council, which begins at 8:00 a.m. on Thursday, June 29th. We wish to express special thanks to our meeting hosts: Sonoma County Water Agency and Scripps Institution of Oceanography.

On Wednesday, the Water Resources, Water Quality, and Legal Committee meetings, as well as the Thursday morning Full Council meeting will be available via teleconference and webinar. Call-in instructions and information on how to participate via webinar are attached to this memorandum. If you wish to participate via teleconference in the Executive Committee meeting, please let Tony know in advance. In the event you have difficulties connecting, please call or text Tony at 801-573-7593 or Michelle at 801-615-1673.

We look forward to enjoyable and productive meetings in California, and hope you are able to join us. If you have any questions regarding these matters, please let us know.
CALL-IN AND WEBINAR INSTRUCTIONS

A. Call-In Information
The dates, times, and call-in information for each meeting are listed below. The below list also indicates which meetings will be available via webinar. Instructions on how to participate via webinar are contained in Section B, which follows.

For teleconference and webinar audio, please use the dial-in numbers as indicated below.

<table>
<thead>
<tr>
<th>Day, Date</th>
<th>Time</th>
<th>Meeting</th>
<th>Dial-in Number</th>
<th>Webinar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wed, Jun 28</td>
<td>8:00 am</td>
<td>Host State Presentation</td>
<td>1-800-920-7487 Code: 25335968#</td>
<td>Yes</td>
</tr>
<tr>
<td>Wed, Jun 28</td>
<td>9:00 am</td>
<td>Water Resources Committee</td>
<td>1-800-920-7487 Code: 25335968#</td>
<td>Yes</td>
</tr>
<tr>
<td>Wed, Jun 28</td>
<td>1:30 pm</td>
<td>Water Quality Committee</td>
<td>1-800-920-7487 Code: 25335968#</td>
<td>Yes</td>
</tr>
<tr>
<td>Wed, Jun 28</td>
<td>3:45 pm</td>
<td>Legal Committee</td>
<td>1-800-920-7487 Code: 25335968#</td>
<td>Yes</td>
</tr>
<tr>
<td>Thurs, Jun 29</td>
<td>8:00 am</td>
<td>WSWC 184th Full Council Meeting</td>
<td>1-800-920-7487 Code: 25335968#</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Please send a request if you wish to participate via teleconference in the Executive Committee.

<table>
<thead>
<tr>
<th>Day, Date</th>
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<th>Dial-in Number</th>
<th>Webinar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wed, Jun 28</td>
<td>11:45 am</td>
<td>Executive Committee</td>
<td>Upon Request</td>
<td>No</td>
</tr>
</tbody>
</table>

B. General Webinar Instructions

To join the webinar, click on the link below and you’ll instantly be entered into the meeting through your browser.

- Go to [https://www.join.me/wswc-mtgs](https://www.join.me/wswc-mtgs)

- To join via mobile phone or tablet, go to [www.join.me/mobile](http://www.join.me/mobile) and download the app to your device.

After joining the webinar meeting, you may add your name to the participant list by clicking your bubble.

We recommend you place your phone on mute and under no circumstance place the call on hold. If you encounter troubles connecting to the audio (or other things), you may ask questions or communicate via the webinar “chat” feature.
Tab A – Schedule of Meetings – Agenda – 30-day Notice
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A. Schedule of Meetings - Agenda - 30-day Notice

B. Membership List

C. **WSWC Policy Positions**

   **Sunsetting Positions**

<table>
<thead>
<tr>
<th>Category</th>
<th>#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal</td>
<td>365</td>
<td>Preemption of State Water Law in Federal Legislation</td>
</tr>
<tr>
<td>Wat Res</td>
<td>366</td>
<td>Federal Research and Development of Updated Hydroclimate Guidance for Floods and Droughts</td>
</tr>
<tr>
<td>Wat Res</td>
<td>367</td>
<td>Reclamation Fund (asks Congress to fully appropriate the receipts and collections accruing to the Reclamation Fund)</td>
</tr>
<tr>
<td>Wat Res</td>
<td>368</td>
<td>Water Resources Research Institutes (requesting Congress to maintain the federal authorization and financial support for the state WRRI program)</td>
</tr>
<tr>
<td>Wat Qual</td>
<td>369</td>
<td>Clean Water Act Jurisdiction</td>
</tr>
<tr>
<td>Wat Qual</td>
<td>370</td>
<td>The Interpretive Rule Regarding Applicability of the Exemption from Permitting under Section 404(f)(1)(A) of the Clean Water Act to Certain Agricultural Conservation Practices</td>
</tr>
</tbody>
</table>

   **List of Current WSWC Policy Statements and Sunsetted Positions**

D. Budget

E. WSWC FY2017-2018 Draft Executive Committee Work Plan

F. WSWC FY2017-2018 Draft Legal Committee Work Plan

G. WSWC FY2017-2018 Draft Water Quality Committee Work Plan

H. WSWC FY2017-2018 Draft Water Resources Committee Work Plan

I. InSAR Land Subsidence Monitoring Project

J. 2018 President’s Budget Request

K. Water Data Development

L. Summary of WSWC Activities and Events

M. Future WSWC Meetings

Mc Council of State Governments-West

N. Clean Water Act Waters of the United States (WOTUS)

O. South Dakota’s General Concentrated Animal Feeding Operation (CAFO) Permits

P. Survey on State 401 Certification Authority

Q. WSWC Letter commenting on Proposed Rule on Use of U.S. Army Corps of Engineers Reservoir Projects for Domestic, Municipal & Industrial Water Supply

R. Water Rights Protection

S. Groundwater Recharge

T. WSWC/NARF Symposium on the Settlement of Indian Water Rights Claims

U. Legislation and Litigation Update

V. State Reports

W. Newsletter Index

XYZ. Sunsetting Positions for Fall 2017 Meetings (#372 - #377)
SCHEDULE OF MEETINGS

WESTERN STATES WATER COUNCIL
184th COUNCIL MEETINGS

Doubletree by Hilton Sonoma Wine Country
Rohnert Park, California
June 27-29, 2017

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Meeting</th>
<th>Room</th>
<th>Adjournment</th>
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<tbody>
<tr>
<td><strong>Tuesday, June 27</strong></td>
<td></td>
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<tr>
<td></td>
<td>7:30 am</td>
<td>Field Trip – <em>(see registration form on our website for details)</em></td>
<td></td>
<td>6:00 pm</td>
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<tr>
<td></td>
<td>6:00 pm</td>
<td>Management Subcommittee <em>(over dinner)</em></td>
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<tr>
<td><strong>Wednesday, June 28</strong></td>
<td></td>
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<tr>
<td></td>
<td>8:00 am</td>
<td><strong>Host State Presentations</strong></td>
<td>Sonoma/Santa Rosa</td>
<td>9:00 am</td>
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<tr>
<td></td>
<td></td>
<td>California Water – from Drought to Flood, and in the Air and Underground</td>
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<td></td>
<td></td>
<td>Sustainable Groundwater Management Act Implementation -- Jay Jasperse, Chief Engineer and Director of Groundwater Management, Sonoma County Water Agency</td>
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<tr>
<td></td>
<td></td>
<td><strong>Photo Session for the Annual Report</strong></td>
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<tr>
<td></td>
<td>9:15 am</td>
<td>Water Resources Committee</td>
<td>Sonoma/Santa Rosa</td>
<td>11:30 am</td>
</tr>
<tr>
<td></td>
<td>11:45 am</td>
<td>Executive Committee <em>(over lunch)</em></td>
<td>Redwood</td>
<td>1:15 pm</td>
</tr>
<tr>
<td></td>
<td>1:30 pm</td>
<td>Water Quality Committee</td>
<td>Sonoma/Santa Rosa</td>
<td>3:30 pm</td>
</tr>
<tr>
<td></td>
<td>3:45 pm</td>
<td>Legal Committee</td>
<td>Sonoma/Santa Rosa</td>
<td>5:45 pm</td>
</tr>
<tr>
<td></td>
<td>6:00 pm</td>
<td>WSWC Reception</td>
<td>Ballroom Foyer</td>
<td>7:00 pm</td>
</tr>
<tr>
<td><strong>Thursday, June 29</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8:00 am</td>
<td>Full Council Meeting</td>
<td>Sonoma/Santa Rosa</td>
<td>11:30 am</td>
</tr>
</tbody>
</table>

Special thanks to our meeting hosts: *Sonoma County Water Agency* and *Scripps Institution of Oceanography*
AGENDA
WATER RESOURCES COMMITTEE
Doubletree by Hilton Sonoma Wine Country
Rohnert Park, California
June 28, 2017

Called to Order at: 9:15 a.m. (Pacific Time) Room: Sonoma/Santa Rosa
Conducting: Tom Byler

1. Welcome and Introductions
2. Approval of Minutes
3. Sunsetting Positions –
   a. Federal Research and Development of Updated Hydroclimate Guidance for Floods and Droughts
   b. Reclamation Fund (asks Congress to fully appropriate the receipts and collections accruing to the Reclamation Fund)
   c. Water Resources Research Institutes (requesting Congress to maintain the federal authorization and financial support for the state WRRI program)
4. InSAR Land Subsidence Monitoring Project – Tom Farr and Cathleen Jones, NASA JPL
5. U.S. Geological Survey Water Availability and Use Science Program – Sonya Jones, Coordinator and Melinda Dalton, Deputy Program Coordinator

BREAK

6. WaDE Update and Other Water Data Developments – Sara Larsen
   a. Irrigation Management Information System (IMIS)
   b. Aspen Institute Dialogue Series on Sharing and Integrating Data for Water Sustainability
   c. Department of Energy (DOE) Energy-Water Nexus State Policy Database
   d. Reclamation Water Information System (RWIS)
7. Arizona’s Annual Water Use Reporting System – Einav Henenson, AZ Dept. of Water Resources
8. California Data Exchange Center (CDEC) – David Parker, CA Dept. of Water Res.
9. NOAA-West Activities – Roger Pierce, WestFAST Liaison
   a. NIDIS/Drought Early Warning Systems (DEWS)
10. CDWR/WSWC S2S May Workshop Report – Jeanine Jones
11. FY2017-2018 Committee Work Plan – Tom Byler
12. Sunsetting Position for 2017 Fall Meetings - #372
13. Other Matters/Adjourn
AGENDA
EXECUTIVE COMMITTEE
Doubletree by Hilton Sonoma Wine Country
Rohnert Park, California
June 28, 2017

Call to Order at: 11:45 a.m. (Pacific Time) Room: Redwood
Conducting: Jerry Rigby, Chair

**TAB**

1. **Welcome and Introductions**

2. **Approval of Minutes**

   b. WaDE/EN Grants Status Report
   c. FY2017-2018 Proposed Budget

C 4. **Sunsetting Positions** – Tony Willardson

| Legal | #365 - Preemption of State Water Law in Federal Legislation |
| Wat Res | #366 - Federal Research and Development of Updated Hydroclimate Guidance for Floods and Droughts |
| Wat Res | #367 - Reclamation Fund (asks Congress to fully appropriate the receipts and collections accruing to the Reclamation Fund) |
| Wat Res | #368 - Water Resources Research Institutes (requesting Congress to maintain the federal authorization and financial support for the state WRRI program) |
| Wat Qual | #369 - Clean Water Act Jurisdiction |
| Wat Qual | #370 - The Interpretive Rule Regarding Applicability of the Exemption from Permitting under Section 404(f)(1)(A) of the Clean Water Act to Certain Agricultural Conservation Practices |
| Executive | #371 - Water-Related Federal Rules, Regulations, Directives, Orders and Policies |

L 5. **Executive Director’s Report/WSWC Activities and Events** – Tony Willardson

6. **WSWC Strategic Planning Subcommittee Report** – Jeanine Jones

J 7. **WSWC Federal Budget Priorities** – Jeanine Jones

M 8. **Future WSWC Meetings**
   a. WSWC/NARF Indian Water Rights Settlement Symposium – August 8-10, 2017 – Great Falls, MT
   b. Fall Council Meetings – October 18-20, 2017 – Albuquerque, NM
      * Federal Non-Tribal Water Rights Workgroup – Oct 18


XYZ 10. **Fall 2017 Meeting Sunsetting Positions** (adopted October 2014)
   373   WQ  Letter commenting on the proposed rule developed by the EPA and the USACE to clarify the scope of Clean Water Act jurisdiction (combined file)
   374   L  Supports the Dividing the Waters Program
   375   L  Outlining actions Federal agencies should take to expedite State General Stream Adjudications
   376   L  Supporting Indian Water Rights Settlements
   377   WQ  Asserting state primacy on Protecting Ground Water Quality

11. **Other Matters**
AGENDA

WATER QUALITY COMMITTEE MEETING
Doubletree by Hilton Sonoma Wine Country
Rohnert Park, California
June 28, 2017

Call to Order at: 1:30 pm (Pacific Time)  Room: Sonoma/Santa Rosa
Conducting: Kent Woodmansey, Chair

TAB

1. Welcome and Introductions
2. Approval of Minutes
3. Sunsetting Position – Kent Woodmansey
   a. #369 – Clean Water Act Jurisdiction
   b. #370 – The Interpretive Rule Regarding Applicability of the Exemption from Permitting under Section 404(f)(1)(A) of the Clean Water Act to Certain Agricultural Conservation Practices

N 4. CWA WOTUS 2.0 – What’s Next?
   a. EPA Webinar and Outreach to ACWA and WSWC – Jennifer Wigal
   b. Committee Discussion
5. EPA Update – Roger Gorke
   a. Harmful Algal Blooms (HAB) Rulemaking update
   b. NPDES Rule update
   c. Tribal Baseline WQS
   d. WOTUS 2.0

O 6. Unique Features of South Dakota’s General CAFO Permits – Kent Woodmansey
7. Online Permitting in Nebraska: Doing More with Less – Jim Macy
8. Water Quality Position and Nutrients – Michelle Bushman
P 9. State Certification Authority: CWA §401 and Hydropower Licensing – Tony Willardson

G 10. FY2017-2018 Committee Work Plan – Kent Woodmansey

XYZ 11. Sunsetting Positions for 2017 Fall Meeting - #373, #377
12. Other Matters
AGENDA

LEGAL COMMITTEE MEETING
Doubletree by Hilton Sonoma Wine Country
Rohnert Park, California
June 28, 2017

Call to Order at: 3:45 pm (Pacific Time)  Room: Sonoma/Santa Rosa
Conducting: Jennifer Verleger, Chair

TAB

1. Welcome and Introductions
2. Approval of Minutes


4. Agua Caliente Case: Reserved Rights to Groundwater – Rod Walston, Of Counsel, Best, Best and Krieger

R 5. Water Rights Protection Act – Tony Willardson

6. WOTUS Litigation Update – Jennifer Verleger

S 7. Discussion: Groundwater Recharge and Storage Projects

T 8. WSWC/NARF Indian Water Rights Settlement Symposium – Michelle Bushman

9. WSWC/WestFAST Federal Non-Tribal Water Claims Workshop – Roger Pierce

U 10. Legislation and Litigation Update – Michelle Bushman

F 11. FY2017-2018 Committee Work Plan – Jennifer Verleger

12. Other Matters
AGENDA

184th COUNCIL MEETING
Doubletree by Hilton Sonoma Wine Country
Rohnert Park, California
June 29, 2017

Call to Order at: 8:00 a.m.  Room: Sonoma/Santa Rosa
Conducting: Jerry Rigby, Chair

TAB

1. Welcome and Introductions
2. Approval of Minutes
3. CSG-West Water-Related Activities – Edgar Ruiz, Executive Director
4. Committee Reports – Action Items
   C, H a. Water Resources Committee – Tom Byler
   C, E b. Executive Committee – Jeanine Jones
   C, G c. Water Quality Committee – Kent Woodmansey
   C, F d. Legal Committee – Jennifer Verleger
4. WestFAST Report and Workplan – Roger Gorke, Environmental Protection Agency, WestFAST Chair, and Roger Pierce, WestFAST Liaison
5. Farm Bill – Courses of Action
V 6. State Reports
M 7. Future Council Meetings
XYZ 8. Sunsetting Positions for Fall 2017 Meetings
9. Other Matters
MEMORANDUM

TO: Council Members
FROM: Tony Willardson, Executive Director
DATE: May 30, 2017
RE: 30-Day Notice of Summer (184th) Council Meetings in Rohnert Park, California

This memo is notification that the 184th meetings of the Western States Water Council will be held June 27-29, 2017 (Tuesday through Thursday), in Rohnert Park, California. In keeping with the WSWC rules of organization, any external policy positions to be proposed for Council consideration must be included in the 30-day notice.

The following positions are scheduled to sunset at this meeting, if no further action is taken.

Position #365 - Preemption of State Water Law in Federal Legislation
Position #366 - Federal Research and Development of Updated Hydroclimate Guidance for Floods and Droughts
Position #367 - Reclamation Fund (asks Congress to fully appropriate the receipts and collections accruing to the Reclamation Fund)
Position #368 - Water Resources Research Institutes (requesting Congress to maintain the federal authorization and financial support for the state WRRI program)
Position #369 - Clean Water Act Jurisdiction
Position #370 - The Interpretive Rule Regarding Applicability of the Exemption from Permitting under Section 404(f)(1)(A) of the Clean Water Act to Certain Agricultural Conservation Practices
Position #371 - Water-Related Federal Rules, Regulations, Directives, Orders and Policies

All sunsetting positions are attached and are also available on our website. During the meetings, we will consider revision and readoption of the sunsetting positions. We would encourage you to consult with your respective Governor’s advisor and Western Governors’ Association Staff Advisory Council (SAC) member, regarding the aforementioned policy positions.

An Executive Committee conference call to discuss the attached sunsetting positions will be held on Wednesday, June 7, at 2:00 p.m. Mountain Daylight Time (1:00 pm Pacific; 3:00 pm Central). Committee Chairs are also invited to participate. Call details will be sent separately to Executive Committee members, who may designate an alternate to join the call and engage in the discussion.

The Council’s internal policy specifies that for the purpose of the conference call and the meetings themselves, for participation by persons who are not Governor-appointed WSWC representatives, the Executive Committee member must provide written notification of any designee to act on behalf of a member. An email to Tony with the name of your designee is sufficient.

The Council meetings are being held at the Doubletree by Hilton Sonoma Wine Country, located at One Doubletree Drive, Rohnert Park, California. The group room rate is $148/night (single or double occupancy). Room reservations may be made directly through the hotel's booking site for the Western States Water Council group. Our group room block for reservations our group room block for reservations has been
extended through **June 2, 2017**. Reservations requested after this date will be accepted on a space and rate available basis. Check in time is 3:00 pm and check out time is 12 pm. Please ensure your reservations are secured early.

There is no fee to attend the regular WSWC meetings, but we would appreciate being informed in advance of your attendance, so that we may have a name badge prepared and make other appropriate arrangements. Also, as described below, there will be a field trip for which registration is required with a nominal charge.

Attached is an outline for the schedule of meetings. Also, as you may recall it has been recommended that each state submit a brief one-page report on water issues and events in your state **in advance** of the meetings, **to be included in the briefing materials**. This is intended to facilitate questions, networking and discussion and should not be an arduous task for any state. Please submit your written state reports no later than **June 14, 2017**. As usual, state reports will also be presented orally on Friday at the full Council meeting.

Our California hosts have arranged an exciting full day field trip for Council members and guests on Tuesday, June 27. The bus will depart from the Doubletree at 7:30 a.m. and lunch will be provided. The focus of the tour is water management challenges in the Lower Russian River Basin, managing for flood versus drought, and balancing competing needs of cities, high-value agriculture (premium wine grape acreage), and ESA-listed salmonids. We will hear about groundwater management and unique water rights administration challenges. We will return to the hotel around 6:00 p.m. The cost is $35.00 per person, and advance registration is requested by **June 2, 2017**. Space may be limited.

The WSWC Summer meetings will begin on Wednesday, June 28 at 8:00 am with the California host-state presentation first on the agenda. The Water Resources Committee will begin at 9:15 a.m. and our typical schedule will then follow, with the Executive Committee invited to meet over lunch from 11:45-1:15 p.m., followed by the Water Quality Committee from 1:30-3:30 pm. The schedule will conclude with the Legal Committee meeting, beginning at 3:45 pm and will end around 5:45 p.m. WSWC members and guests are invited to a reception on Wednesday evening at 6:00 p.m. at the hotel.

The Full Council meeting will commence at 8:00 a.m. on Thursday, June 29, and adjourn around 11:30 a.m. Meeting agenda will be posted on our [web site](#), and available to download. The WSWC meetings will also be accessible via teleconference and webinar. Dial-in and webinar participation information will be posted online in the coming weeks.

Briefing books will be made available for download from the [184th meetings web page](#) on June 21. If you wish to receive a hard copy of the briefing book, please contact Julie at [jgroat@wswc.utah.gov](mailto:jgroat@wswc.utah.gov) by **June 12th** so that a book may be sent to you in advance of the meetings, or made available for pick-up on site.

Please contact me at [twillardson@wswc.utah.gov](mailto:twillardson@wswc.utah.gov) if we can be of any assistance or answer any questions. We hope you are planning to join us at the meetings, and express sincere appreciation to our California hosts.

Attachments
Tab B – Membership List
WESTERN STATES WATER COUNCIL
MEMBERSHIP LIST
June 21, 2017

OFFICERS
Chair - Jerry Rigby
Vice-Chair - Jeanine Jones
Secretary-Treasurer - Tim Davis

STAFF
Executive Director - Tony Willardson
Legal Counsel - Michelle Bushman
Federal Liaison - Roger Pierce
Hydrologist/Programmer - Sara Larsen
Office Manager - Cheryl Redding
Administrative Assistant - Julie Groat

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(801) 682-2559 (fax)

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Governor of Alaska
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Chief, Water Resources Section
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(907) 465-5070  (fax)
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†Council members denoted by this symbol are listed by virtue of their office, pending receipt of a letter of appointment by their Governor.
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CALIFORNIA

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†**William Croyle, Acting Director
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(916) 653-5028  (fax)
jeanine.jones@water.ca.gov

Trisha Oeth, Administrator
Water Quality Control Commission
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WESTERN STATES WATER COUNCIL
COMMITTEE ASSIGNMENTS

**EXECUTIVE COMMITTEE**

<table>
<thead>
<tr>
<th>State</th>
<th>Representative</th>
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<tbody>
<tr>
<td>Vacant - Alaska</td>
<td>Thomas Buschatzke- Arizona</td>
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<td>William Croyle - California</td>
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<td>Jeanine Jones - California (Vice-Chair) (Alternate)*</td>
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<td>John Stulp - Colorado (Alternate)*</td>
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<td>Hal Simpson - Colorado (Alternate)*</td>
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<td>Jerry Rigby - Idaho (Chair)</td>
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<td>David Barfield - Kansas</td>
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<td>Tim Davis - Montana</td>
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<td>Jeff Fassett - Nebraska</td>
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<td>Jason King - Nevada</td>
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<td>Roland Westergard - Nevada (Alternate)*</td>
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<td>Tom Blaine - New Mexico</td>
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<td>Garland Erbele - North Dakota</td>
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<td>Julie Cunningham - Oklahoma</td>
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<td>Thomas Byler - Oregon</td>
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<td>Steve Pirner - South Dakota</td>
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<td>Kent Woodmansey - South Dakota (Alternate)*</td>
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<td>Jon Niemann - Texas</td>
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<td>Eric Millis - Utah</td>
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<td>Maia Bellon - Washington</td>
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<td>Patrick T. Tyrrell - Wyoming</td>
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</tbody>
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**Management Subcommittee**

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Jerry Rigby (Chair)</td>
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<tr>
<td>Jeanine Jones (Vice-Chair)</td>
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<tr>
<td>Tim Davis (Secretary/Treasurer)</td>
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<tr>
<td>Tony Willardson (Executive Director)</td>
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<tr>
<td>Pat Tyrrell (Former Chair)</td>
</tr>
</tbody>
</table>

**Nominating Subcommittee**

<table>
<thead>
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<th>Name</th>
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</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>Hal Simpson - Colorado</td>
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<tr>
<td>Pat Tyrrell - Wyoming</td>
</tr>
</tbody>
</table>

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*For purposes of Committee rosters, the designation as an “alternate” only reflect the person’s function on the Committee.*
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William Staudenmaier - Arizona
Cynthia Chandley - Arizona
(Alternate)*
Jeanine Jones - California
John Stulp - Colorado
Jerry Rigby - Idaho
John Simpson - Idaho
(Alternate)*

Vacant - Kansas
Jay Weiner - Montana
Jim Macy - Nebraska
Jason King - Nevada
Roland Westergard - Nevada
(Alternate)*
Maria O’Brien - New Mexico
Greg Ridgley - New Mexico
(Alternate)*
Jennifer Verleger - North Dakota
(Chair)
Rob Singletary - Oklahoma
Thomas Byler - Oregon
Kent Woodmansey - South Dakota
Jon Niemann - Texas
Norman Johnson - Utah
Alan Reichman - Washington
Chris Brown - Wyoming
(Vice-Chair)

Clean Water Act Jurisdiction

Michelle Hale - Alaska
Trisha Oeth - Colorado
Barry Burnell - Idaho
Tom Stiles - Kansas
Jennifer Verleger - North Dakota
Todd Chenoweth - Texas
Lauren Driscoll - Washington
Bill DiRienzo - Wyoming

Non-Tribal Federal Water Needs Subcommittee

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Jay Weiner - Montana
Kristen Geddy - Nevada
Susan Joseph-Taylor - Nevada
Greg Ridgley - New Mexico
Jennifer Verleger - North Dakota
Jonathan Allen - Oklahoma
Dwight French - Oregon
Jesse Ratcliff - Oregon
Todd Chenoweth - Texas
Norm Johnson - Utah
Buck Smith - Washington
Abigail Boudewyns - Wyoming
Chris Brown - Wyoming
Pat Tyrrell - Wyoming

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BLM - Paul Curtis
BOR - Becky Fulkerson
Owen Walker
DOD - Marc Kodack
Lauren Dempsey
USFS - Michael Eberle, Chris Carlson
NPS - Jeff Hughes

Tribal Reserved Water Rights Subcommittee

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Cynthia Chandley - Arizona
Jay Weiner - Montana
Greg Ridgley - New Mexico
Arianne Singer - New Mexico
Norman Johnson - Utah

WRDA/Corps Policies

Tom Stiles - Kansas
Tim Davis - Montana
Jennifer Verleger - North Dakota
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Trisha Oeth - Colorado
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Tom Stiles - Kansas
George Mathieu - Montana
Jim Macy - Nebraska
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David Glatt - North Dakota
Julie Cunningham - Oklahoma
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Kevin Frederick - Wyoming
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Jennifer Verleger - North Dakota
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Bill DiRienzo - Wyoming

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Eric Millis - Utah
Tom Loranger - Washington
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Climate Adaptation and Drought Subcommittee

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NRCS - Mike Strobel

Water Information and Data Subcommittee (WIDS)

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Lane Letourneau - Kansas
David Rodriguez - New Mexico
Julie Cunningham - Oklahoma
Ken Stahr - Oregon
Sam Hermitte - Texas
Todd Adams - Utah
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Ex-Officio Representatives

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USGS - Nancy Barber
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### Committee Assignments

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#### WATER QUALITY COMMITTEE

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- Patrick Pfaltzgraff - Colorado
  - *(Alternate)*
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- Jim Macy - Nebraska
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  - *(Alternate)*
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  - *(Alternate)*
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- Kevin Frederick - Wyoming
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  - *(Alternate)*
- Dick Wolfe - Colorado
  - *(Alternate)*
- John Simpson - Idaho
- Jerry Rigby - Idaho
  - *(Alternate)*
- David Barfield - Kansas
  - *(Alternate)*
- Tom Blaine - New Mexico
- Jerry Rigby - Idaho
  - *(Alternate)*
- David Barfield - Kansas
- Bech Bruun - Texas
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- Tom Loranger - Wyoming
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- Steve Pirner - South Dakota
  - *(Alternate)*
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  - *(Alternate)*
- Walter Baker - Utah
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  - *(Alternate)*
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  - *(Alternate)*
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- Jon Niemann - Texas
- Norman Johnson - Utah
- Alan Reichman - Washington
  - *(Alternate)*
- Todd Parfitt - Wyoming
  - *(Alternate)*
- Todd Parfitt - Wyoming
  - *(Alternate)*
- Rob Singletary - Oklahoma
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Tab C – WSWC Policy Positions
RESOLUTION
of the
WESTERN STATES WATER COUNCIL
REGARDING PREEMPTION OF STATE LAW IN FEDERAL LEGISLATION
Helena, Montana
July 18, 2014

WHEREAS, the future growth, prosperity and economic and environmental health of the West and the Nation depend upon the availability of adequate quantities of water for myriad uses; and

WHEREAS, Western states have primary authority and responsibility for the appropriation, allocation, development, conservation and protection of water resources, both groundwater and surface water, including protection of water quality, instream flows and aquatic species; and

WHEREAS, the Congress has historically deferred to state law as embodied in Section 8 of the Reclamation Act, Section 10 of the Federal Power Act, Section 101(g) and 101(b) of the Clean Water Act, and myriad other statutes; and

WHEREAS, any weakening of the deference to state water and related laws is inconsistent with over a century of cooperative federalism and a threat to water rights and water rights administration in all western states; and

WHEREAS, federal deference to state water law is based on sound principles for the protection of private property rights and the collective public interest in managing our water resources and the environment; and

WHEREAS, states are primarily responsible and accountable for their own water development, management and protection challenges, and are in the best position to identify, evaluate and prioritize their needs and plan and implement strategies to meet those needs; and

WHEREAS, any legislation related to any federal water policy, water plan or planning process must recognize, defer to and support State, tribal and local government water laws, agreements, and management processes; and

WHEREAS, the federal government should explicitly recognize and provide support for ongoing watershed and state water management efforts both in and between the states, tribes and local entities, closely consult with the states and provide appropriate technical and financial assistance; and
WHEREAS, the federal government should avoid strategies that increase unilateral mandates on state, tribal and local governments; and

WHEREAS, from time to time federal legislation and regulatory actions have been proposed that are not consistent with sound federalist principles and primary state water related laws, authorities and responsibilities; and

WHEREAS, legislation preempting or discharging requirements for compliance with state law is not consistent with a balanced federalism approach;

NOW, THEREFORE, BE IT RESOLVED, that nothing in any act of Congress should be construed as affecting or intending to affect or in any way to interfere with the laws of the respective States relating to: (a) water or watershed management; (b) the control, appropriation, use, or distribution of water used in irrigation, municipal, environmental, or any other purposes, or any vested right acquired therein; or (c) intending to affect or in any way to interfere with any interstate compact, decree or negotiated water rights agreement.

BE IT FURTHER RESOLVED, that the Administration and Congress should strive to ensure federal laws, policies, rules and regulations are consistent with the principles set forth herein.
WHEREAS, Western states continue to experience extreme flooding, droughts, or wildfires that threaten public safety, tax aging water infrastructure, and/or have significant economic consequences; and

WHEREAS, according to the National Oceanic and Atmospheric Administration (NOAA), the nation’s top ten multi-billion dollar disasters have occurred since 1980, with six of those in the last decade; and

WHEREAS, we must be prepared to effectively manage for frequent, extensive, and severe storms, floods, coastal inundation, and droughts; and

WHEREAS, Western states experienced extreme drought in 2011-2014, as well as recent floods of record in areas such as parts of the Missouri River Basin in 2011 and Colorado in 2013 Texas, and further Winter Storm Atlas in 2013; and

WHEREAS, key long-term observation networks needed for monitoring extreme events, such as U.S. Geological Survey (USGS) streamgages and the National Weather Service (NWS) Cooperative Observer network, face continued funding and programmatic challenges that threaten the continuity of crucial long-term data records; and

WHEREAS, snow water content and soil moisture monitoring are also critical for drought and flood forecasting and management, but the Natural Resources Conservation Service (NRCS) snow survey and water supply forecasting program, related SNOTEL sites, and its Soil Climate Analysis Network (SCAN) remain underfunded; and

WHEREAS, some of National Oceanic and Atmospheric Administration (NOAA)’s probable maximum precipitation estimates used by water agencies for dam safety and other analyses have not been updated since the 1960s and revisions to the federal Guidelines for Determining Flood Flow Frequency Analysis (published drafted as Bulletin 17CB) have yet to be finalized not been revised since 1981; and

WHEREAS, flood frequency analyses are used by public agencies at all levels of government to design and manage floodplains, and for construction of flood control and stormwater infrastructure, with Bulletin 17B still representing a default standard of engineering practice; and

WHEREAS, federal funding for hydrology research has waned since the 1970s-1980s, and alternative statistical methodologies for flood frequency analyses or deterministic analytical procedures are not being supported and transitioned to common engineering practice; and

WHEREAS, the Federal Emergency Management Agency has adopted a process for local communities to explicitly incorporate “future conditions hydrology” in the national flood insurance program’s flood hazards mapping; and
WHEREAS, the present scientific capability for forecasting beyond the weather time domain—beyond the ten day time horizon—and at the subseasonal to interannual timescales important for water management is not skillful enough to support water management decision-making; and

WHEREAS, the Council has co-sponsored a number of workshops on hydroclimate data and extreme events, to identify actions that can be taken at planning to operational time scales to improve readiness for extreme events; and

WHEREAS, multiple approaches have been identified at these workshops that could be employed at the planning time scale, including ensembles of global circulation models, paleoclimate analyses, and improved statistical modeling, that could be used to improve flood frequency analysis or seasonal forecasting; and

WHEREAS, advances in weather forecasting research, such as that of NOAA’s Hydrometeorological Testbed program on West Coast atmospheric rivers, demonstrate the potential for improving extreme event forecasting at the operational time scale; and

WHEREAS, WGA and NOAA signed a Memorandum of Agreement in June 2014 on improving resilience to droughts and floods;

NOW, THEREFORE, BE IT RESOLVED, that the federal government should update and revise its guidance documents for hydrologic data and methodologies—among them precipitation-frequency estimates, flood frequency analyses, and probable maximum precipitation—to include subsequently observed data and new analytical approaches.

BE IT FURTHER RESOLVED, that the federal government should place a priority on improving subseasonal and seasonal precipitation forecasting capability that would support water management decisions.

BE IT FURTHER RESOLVED, that the Western States Water Council supports development of an improved observing system for Western extreme precipitation events such as atmospheric river storms, as well as baseline and enhanced stream, snow and soil moisture monitoring capabilities.

BE IT FURTHER RESOLVED, that the federal government should sustain and expand its Hydrometeorology Testbed – West program, in partnership with states and regional centers, to build upon the initial progress made in that program for developing and installing new technologies for precipitation observations.

BE IT FURTHER RESOLVED, that the Western States Water Council urges the federal government to support and place a priority on research related to extreme events, including research on better understanding of hydroclimate processes, paleoflood analysis, design of monitoring networks, and probabilistic outlooks of climate extremes.

BE IT FURTHER RESOLVED, that the Western States Water Council will work with NOAA and WGA in supporting efforts on climate precipitation extremes, variability, and future trends.
RESOLUTION
of the
WESTERN STATES WATER COUNCIL
regarding the
THE RECLAMATION FUND
Helena, Montana
July 18, 2014

WHEREAS, in the West, water is indeed our “life blood,” a vital and scarce resource the availability of which has and continues to circumscribe growth, development and our economic well being and environmental quality of life -- the wise conservation and management of which is critical to maintaining human life, health, welfare, property and environmental and natural resources; and

WHEREAS, recognizing the critical importance of water in the development of the West, the Congress passed the Reclamation Act on June 17, 1902 and provided monies “reserved, set aside, and appropriated as a special fund in the Treasury to be known as the ‘reclamation fund,’ to be used in the examination and survey for and the construction and maintenance of irrigation works for the storage, diversion, and development of water for the reclamation of arid and semiarid land...” in seventeen western states, to be continually invested and reinvested; and

WHEREAS, then President Theodore Roosevelt stated, “The work of the Reclamation Service in developing the larger opportunities of the western half of our country for irrigation is more important than almost any other movement. The constant purpose of the Government in connection with the Reclamation Service has been to use the water resources of the public lands for the ultimate greatest good of the greatest number; in other words, to put upon the land permanent homemakers, to use and develop it for themselves and for their children and children’s children...;”¹ and

WHEREAS, the Secretary of the Interior was authorized and directed to “locate and construct” water resource projects to help people settle and prosper in this arid region, leading to the establishment of the Reclamation Service – today’s U.S. Bureau of Reclamation; and

WHEREAS, western states and the Bureau of Reclamation have worked in collaboration to meet the water-related needs of the citizens of the West, and protect the interests of all Americans, recognizing changing public values and the need to put scarce water resources to beneficial use for the “ultimate greatest good of the greatest number;” and

WHEREAS, the Bureau of Reclamation has built 3438 reservoirs with the capacity to store 245 million acre-feet of water, irrigating approximately 10 million acres of farmland that produce 60 percent of the nation’s vegetables and 25 percent of its fruits and nuts, as well as providing water to about 31 million people for municipal and industrial uses, while generating more than 40 billion kilowatt hours of energy each year from 53 hydroelectric power plants, enough to serve 3.5 million households, while providing 289 recreation areas with over 90 million visits annually, and further providing flood control, and fish and wildlife benefits; and

WHEREAS, project sponsors have and continue to repay the cost of these facilities, which also produce power receipts that annually return nearly some one billion in gross power revenues to the federal government, prevent millions in damages due to floods each year, and generate billions of dollars supports over $45 billion in economic returns from agricultural production; and supporting over 344,000 jobs; and

¹State of the Union Address, 1907
WHEREAS, the water and power resources developed under and flood control provided by the Reclamation Act over the last century supported the development and continue to be critical to the maintenance of numerous and diverse rural communities across the West and the major metropolitan areas of Albuquerque, Amarillo, Boise, Denver, El Paso, Las Vegas, Los Angeles, Lubbock, Phoenix, Portland, Reno, Sacramento, Salt Lake City, Seattle, Tucson and numerous other smaller cities; and

WHEREAS, western States are committed to continuing to work cooperatively with the Department of Interior and Bureau of Reclamation to meet our present water needs in the West and those of future generations, within the framework of state water law, as envisioned by President Roosevelt and the Congress in 1902; and

WHEREAS, according to the Administration’s FY 2018 request actual and estimated receipts and collections accruing to the Reclamation Fund are $2,046,196 billion for FY 2016, $2,002,147 billion for FY 2017, and $2,037,528 billion for FY 2018, compared to actual and estimated appropriations of $888,996 million for FY 2016, $943,141 million for FY 2017, and $913,878 million for FY 2018 and as a result the unobligated balance at the end of each year respectively is calculated to be $42,029,151.133 billion, $13,148,156.08 billion and $14,336,163.08 billion respectively; and

WHEREAS, this unobligated balance in the Reclamation Fund continues to grow at an increasing rate from an actual balance of $5.67 billion at the end of FY 2006, to the estimated $14,336,163.08 billion by the end of FY 2018, over a 15087% increase; and

WHEREAS, under the Reclamation Act of 1902, the Reclamation Fund was envisioned as the principle means to finance federal western water and power projects with revenues from western resources and its receipts are derived from water and power sales, project repayments, certain receipts from public land sales, leases and rentals in the 17 western states, as well as certain oil and mineral-related royalties – but these receipts are only available for expenditure pursuant to annual appropriation acts; and

WHEREAS, with growing receipts in part due to high energy prices and declining federal expenditures for Reclamation purposes, the unobligated figure gets larger and larger, while the money is actually spent elsewhere for other federal purposes contrary to the Congress' original intent;

NOW THEREFORE BE IT RESOLVED, that the Western States Water Council asks the Administration and the Congress to fully appropriate the receipts and collections accruing to the Reclamation Fund subsequent to the Reclamation Act and other acts for their intended purpose in the continuing conservation, development and wise use of western resources to meet western water-related needs – recognizing and continuing to defer to the primacy of western water laws in allocating water among uses – and work with the States to meet the challenges of the future.

BE IT FURTHER RESOLVED, that such “needs” may include the construction of Reclamation facilities incorporated as part of a Congressionally approved Indian water right settlement.

BE IT FURTHER RESOLVED, that the Administration and the Congress investigate the advantages of converting the Reclamation Fund from a special account to a true revolving trust fund with annual receipts to be appropriated for authorized purposes in the year following their deposit (similar to some other federal authorities and trust accounts).
RESOLUTION
of the
WESTERN STATES WATER COUNCIL
in support of the
WATER RESOURCES RESEARCH INSTITUTES
Helena, Montana
July 18, 2014

WHEREAS, in the West, water is a vital and scarce resource the availability of which has and continues to circumscribe growth, development, our economic well being and environmental quality of life; and

WHEREAS, the wise use, conservation, development and management of our water resources is critical to maintaining human life, health, safety and property; and

WHEREAS, water resources research, the dissemination and application of research results and technology transfer are increasingly important to meeting our present and future water needs; and

WHEREAS, the Water Resources Research Act of 1964 authorized a program that included the establishment of state water resources research institutes (WRRIs) or centers in each state to address our water resources challenges; and

WHEREAS, today’s institutes and centers provide a research infrastructure that uses the capabilities of universities to greatly assist and provide important support to western state water agencies in long-term planning, policy development and management of the increasingly complex challenges associated with water in the West; and

WHEREAS, these challenges are exacerbated by the uncertainty surrounding population growth, climate, and economic and environmental water demands; and

WHEREAS, the Council and its member states continue to work with the institutes/centers and the academic community to ensure research investments are relevant to our most pressing water problems and allow each state to solve its problems by methods most appropriate to its own situation; and

WHEREAS, the institutes/centers’ outreach and information transfer services and activities are very valuable to the water communities in the various western states; and

WHEREAS, this is a very worthwhile federal-state partnership that promotes collaboration, cooperation and the conservation of limited physical, financial and personnel resources;

NOW THEREFORE BE IT RESOLVED, that the Western States Water Council asks the Administration and the Congress to maintain the federal authorization and financial support for the state water resources research institutes program – requesting and appropriating funds as appropriate.
WHEREAS, the Clean Water Act (CWA) is built upon the principle of cooperative federalism in which Congress intended the states, the Environmental Protection Agency (EPA), and the U.S. Army Corps of Engineers to implement the CWA as partners, delegating co-regulator authority to the states;

WHEREAS, the CWA’s cooperative federalism framework has resulted in significant water quality improvements since the law’s enactment in 1972, and western states have made great strides in protecting water quality and coordinating water quality and water quantity decisions; and

WHEREAS, states are best positioned to manage the water within their borders because of their on-the-ground knowledge of the unique aspects of their hydrology, geology, and legal frameworks; and

WHEREAS, states have authority pursuant to their “waters of the state” jurisdiction to protect the quality of waters within their borders and such jurisdiction generally extends beyond the limits of federal jurisdiction under the CWA; and

WHEREAS, Section 101(b) supports the states’ critical role in protecting water quality by stating: “It is the policy of Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution;” and

WHEREAS, Section 101(g) of the CWA further provides that the primary and exclusive authority of each state to “allocate quantities of water within its jurisdiction shall not be superseded, abrogated, or otherwise impaired by this Act;” and

WHEREAS, current federal regulations, guidance, and programs pertaining to the CWA do not always recognize the specific conditions and needs in the West, where water can be scarce and a variety of unique waterbodies exist, including but not limited to small ephemeral washes, effluent-dependent streams, prairie potholes, playa lakes, and numerous man-made reservoirs, waterways, and water conveyance structures; and

WHEREAS, recent past federal efforts to clarify the extent of CWA jurisdiction following the U.S. Supreme Court’s decisions in SWANCC v. U.S. Army Corps of Engineers, 531 U.S. 159 (2001), and Rapanos v. United States, 547 U.S. 715 (2006), have failed to include adequate state consultation in their development, despite repeated requests from the Western States Water Council to do so; and

WHEREAS, the considerable differences in hydrology, geology, and legal frameworks that exist among the western states mean that any effort to clarify CWA jurisdiction will invariably impact each state differently, thus underscoring the need to thoroughly involve states in developing regulatory language that clearly respects and avoids conflict with state authority over the regulation and allocation of waters within their respective borders; and

WHEREAS, any efforts to redefine or clarify CWA jurisdiction have, on their face, numerous federalism implications that have the potential to significantly impact states and alter the distribution of power and responsibilities among the states and the federal government, and therefore trigger federalism consultation with the states under Executive Order 13132; and
WHEREAS, as co-regulators, states are separate and apart from the general public, and deserve a unique audience with the federal government in the development and implementation of any federal effort to clarify or redefine CWA jurisdiction; and

WHEREAS, information-sharing does not equate to meaningful consultation, and the uncertainty and differences of opinion that exist regarding CWA jurisdiction requires EPA and the Corps to develop and implement federal CWA jurisdiction efforts in authentic partnership with the states;

NOW, THEREFORE BE IT RESOLVED that Congress and the Administration should ensure that any federal effort to clarify or define CWA jurisdiction:

1. Gives as much weight and deference as possible to state needs, priorities, and concerns;

2. Includes robust and meaningful state participation and consultation in its development and implementation. Such consultation should take place as early as possible and before the publication of any proposal for public comment, when irreversible momentum may preclude effective state participation and the consideration of alternate ways of meeting federal objectives. Federal CWA jurisdiction efforts should also acknowledge their inherent federalism implications and comply with Executive Order 13132’s state consultation criteria.

3. Gives full force and effect to, and does not diminish or in any way detract from, the intent and purpose of CWA Sections 101(b) and 101(g).

4. Recognizes that Justice Kennedy’s “significant nexus” test in Rapanos requires a connection between waters that is more than speculative or insubstantial to establish jurisdiction. Federal CWA jurisdiction efforts should also quantify “significance” to ensure that the term’s usage does not extend jurisdiction to waters with a de minimis connection to jurisdictional waters.

5. Complies with the limits Congress and the U.S. Supreme Court have placed on CWA jurisdiction, while providing clear and recognizable limits to the extent of CWA jurisdiction, consistent with the plurality opinion authored by Justice Scalia in Rapanos.

6. Specifically excludes waters and features generally considered to be outside the scope of CWA jurisdiction, including:

   (a) Groundwater;

   (b) Farm ponds, stock ponds, irrigation ditches, and the maintenance of drainage ditches, as currently excluded under the CWA’s agricultural exemption;

   (c) Man-made dugouts and ponds used for stockwatering or irrigation in upland areas that are not connected to surface waters;

   (d) Dip ponds that are excavated on a temporary, emergency basis to combat wildfires and address dust abatement; and

   (e) Prairie potholes and playa lakes.

7. Acknowledges that states have authority pursuant to their “waters of the state” jurisdiction to protect excluded waters, and that excluding waters from federal jurisdiction does not mean that they will be exempt from regulation and protection.
August 11, 2014

Gina McCarthy
Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, NW (1101A)
Washington, DC 20460

Jo Ellen Darcy
Assistant Secretary of the Army (Civil Works)
108 Army Pentagon
Washington, DC 20310-0108

RE: Interpretive Rule Regarding Applicability of the Exemption from Permitting under Section 404(f)(1)(A) of the Clean Water Act to Certain Agricultural Conservation Practices

Dear Administrator McCarthy and Assistant Secretary Darcy:

On behalf of the Western States Water Council, representing 18 western states on water policy issues, I am writing to comment on the interpretive rule your agencies adopted in March regarding agricultural exemptions under Section 404(f)(1)(A) of the Clean Water Act (CWA).

On June 3, EPA and Corps officials participated in a conference call with the Council to discuss the interpretive rule. The Council greatly appreciates your agencies’ willingness to hold this call, which helped provide further clarification and insight into the intentions and motivations behind the rule. Based on the call, the Council understands that the rule is intended to identify agricultural exemptions under Section 404(f)(1)(A) that are in addition to existing agricultural exemptions under the CWA.

After further consideration, the Council believes the CWA’s agricultural exemptions are operating appropriately. Notwithstanding your agencies’ intentions, the interpretive rule has created a significant amount of confusion and uncertainty about the scope and applicability of the CWA’s agricultural exemptions and their interaction with state water quality programs. Consequently, the Council respectfully requests that your agencies withdraw the interpretive rule to remove this uncertainty.

Please also note that the Council stands ready to help facilitate further dialogue between your agencies and the western states on ways to clarify and provide further guidance on the CWA’s agricultural exemptions in a manner that creates less confusion.

Thank you for considering the Council’s views on this matter.

Sincerely,

Patrick T. Tyrrell, Chairman
Western States Water Council
RESOLUTION
of the
WESTERN STATES WATER COUNCIL
regarding
WATER-RELATED FEDERAL RULES, REGULATIONS,
DIRECTIVES, ORDERS and POLICIES
Helena, Montana
August 11, 2014

WHEREAS, Presidential Executive Order 13132, issued on August 4, 1999, requires federal agencies to “have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications…”; and

WHEREAS, an increasing number of federal regulatory initiatives and directives are being proposed that threaten principles of federalism, an appropriate balance of responsibilities, and the authority of the states to govern the appropriation, allocation, protection, conservation, development and management of the waters within their borders; and

WHEREAS, taking such actions goes beyond the intent of the applicable laws; and

WHEREAS, a number of these recent proposals have been made with little substantive consultation with State Governments; and

WHEREAS, a Western Federal Agency Support Team (WestFAST) now comprised of twelve water-related federal agencies was created pursuant to a recommendation of the Western Governors’ Association and Western States Water Council to foster cooperation and collaboration between the federal agencies and States and state agencies in addressing water resource needs; and

WHEREAS, State consultation should take place early in the policy development process, with the States as partners in the development of policies; and

WHEREAS, federal agencies have inappropriately dismissed the need to apply this requirement to their rulemaking processes and procedures; and

WHEREAS, water quantity regulation and management are the prerogatives of States, and water rights are private property, protected and regulated under State law;

NOW, THEREFORE, BE IT RESOLVED, that nothing in any federal rule, regulation, directive, order or policy should affect, erode, or interfere with the lawful government and role of the respective States relating to: (a) the appropriation and allocation of water from any and all sources within their borders; and/or (b) the withdrawal, control, use, or distribution of water; and/or (c) affect or interfere with any interstate compact, decree or negotiated water rights agreement; and/or (d) application, development and/or implementation of rules, laws, and regulations related to water.

BE IT FURTHER RESOLVED, that federal agencies with water related responsibilities fully recognize and follow the requirements of Executive Order 13132 by establishing and implementing appropriate procedures and processes for substantively consulting with States, their Governors, as elected by the people, and their appointed representatives, such as the Western States Water Council, on the implications of their proposals and fully recognize and defer to States' prerogatives.
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<td>Opposes removal of “fish and wildlife” as an authorized purpose for which the Corps can manage the Missouri River Mainstem Reservoir System</td>
</tr>
<tr>
<td>393</td>
<td>WR</td>
<td></td>
<td>7/15/2016</td>
<td>States the WSWC “…opposes any and all efforts that would diminish the primary and exclusive authority of states over the allocation of water resources used in hydraulic fracturing.”</td>
</tr>
<tr>
<td>392</td>
<td>WR</td>
<td></td>
<td>7/15/2016</td>
<td>Supports federal efforts to prepare for and respond to extreme weather events, including an expanded and enhanced west-wide extreme precipitation monitoring system.</td>
</tr>
<tr>
<td>391</td>
<td>WR</td>
<td></td>
<td>3/22/3016</td>
<td>Supports renewable hydropower development</td>
</tr>
<tr>
<td>390</td>
<td>WR</td>
<td></td>
<td>3/22/3016</td>
<td>Supporting rural water infrastructure needs and projects</td>
</tr>
<tr>
<td>389</td>
<td>WR</td>
<td></td>
<td>3/22/2016</td>
<td>Urging the Administration and the Congress to prioritize federal programs that translate science on climate and weather extremes to water resources management actions</td>
</tr>
<tr>
<td>388</td>
<td>WR</td>
<td></td>
<td>10/9/2015</td>
<td>Regarding States’ Water Rights and Natural Flows</td>
</tr>
<tr>
<td>387</td>
<td>WR</td>
<td></td>
<td>10/9/2015</td>
<td>Regarding Bureau of Reclamation Drought Response Program</td>
</tr>
<tr>
<td>386</td>
<td>WR</td>
<td></td>
<td>10/9/2015</td>
<td>Regarding Drought Preparedness, Prediction and Early Warning Programs</td>
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<tr>
<td>385</td>
<td>WR</td>
<td></td>
<td>10/9/2015</td>
<td>Regarding Federal Water and Climate Data Collection and Analysis Programs</td>
</tr>
<tr>
<td>384</td>
<td>E</td>
<td></td>
<td>10/9/2015</td>
<td>A Vision on Water</td>
</tr>
<tr>
<td>383</td>
<td>E</td>
<td></td>
<td>7/10/2015</td>
<td>A Vision on Water</td>
</tr>
<tr>
<td>382</td>
<td>WQ</td>
<td></td>
<td>7/10/2015</td>
<td>Regarding Water Transfers and National Pollutant Discharge Elimination System (NPDES) Discharge Permits</td>
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<tr>
<td>381</td>
<td>WR</td>
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<td>7/10/2015</td>
<td>Regarding the Rural Water Supply Project/Infrastructure Needs</td>
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<tr>
<td>380</td>
<td>WR</td>
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<td>4/17/2015</td>
<td>On State Primacy over Groundwater</td>
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<tr>
<td>379</td>
<td>WR</td>
<td></td>
<td>4/17/2015</td>
<td>Supporting Federal Climate Adaptation Research</td>
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<tr>
<td>377</td>
<td>WQ</td>
<td></td>
<td>10/10/2014</td>
<td>Asserting state primacy on Protecting Ground Water Quality</td>
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<tr>
<td>376</td>
<td>L</td>
<td></td>
<td>10/10/2014</td>
<td>Supporting Indian Water Rights Settlements</td>
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<tr>
<td>375</td>
<td>L</td>
<td></td>
<td>10/10/2014</td>
<td>Outlining actions Federal agencies should take to expedite State General Stream Adjudications</td>
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<td>374</td>
<td>L</td>
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<td>10/10/2014</td>
<td>Supports the Dividing the Waters Program</td>
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<td>373</td>
<td>WQ</td>
<td></td>
<td>10/10/2014</td>
<td>Letter commenting on the proposed rule developed by the EPA and the USACE to clarify the scope of Clean Water Act Jurisdiction (combined file)</td>
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<tr>
<td>370</td>
<td>WQ</td>
<td></td>
<td>8/11/2014</td>
<td>Regarding the Interpretive Rule Regarding Applicability of the Exemption from Permitting under Section 404(f)(1)(A) of the Clean Water Act to Certain Agricultural Conservation Practices</td>
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<tr>
<td>369</td>
<td>WQ</td>
<td></td>
<td>7/18/2014</td>
<td>Regarding Clean Water Act Jurisdiction</td>
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<tr>
<td>368</td>
<td>WR</td>
<td></td>
<td>7/18/2014</td>
<td>Supporting the Water Resources Research Institutes (requesting Congress to maintain the federal authorization and financial support for the state WRRI program)</td>
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<tr>
<td>367</td>
<td>WR</td>
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<td>7/18/2014</td>
<td>Regarding the Reclamation Fund (asks Congress to fully appropriate the receipts and collections accruing to the Reclamation Fund)</td>
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<tr>
<td>366</td>
<td>WR</td>
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<td>7/18/2014</td>
<td>Supporting Federal Research and Development of Updated Hydroclimate Guidance for Floods and Droughts</td>
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<tr>
<td>365</td>
<td>L</td>
<td></td>
<td>7/18/2014</td>
<td>Regarding Preemption of State Water Law in Federal Legislation</td>
</tr>
</tbody>
</table>

Policies are posted at: [http://www.westernstateswater.org/policies-2/](http://www.westernstateswater.org/policies-2/).
Sunsetted Positions

2016

#359 Opposing requiring pesticide applications for National Pollutant Discharge Elimination System (NPDES) discharge permits.  (outdated)

2015

#338 Energy and Water Integration Act of 2011.  (outdated)
#341 Letter regarding concerns with the Bureau of Reclamation’s proposed changes to the Reclamation Manual.  (outdated)

2013

#323 A Shared Vision on Water Planning and Policy.  (superceded by more recent position)

2012

#313 Letter Regarding National Water Research and Development Initiative Act.  (There is no current legislation)
#315 Letter to House Transportation and Infrastructure Committee leaders raising concerns regarding a draft bill entitled the Sustainable Watershed Planning Act.  (outdated, not reintroduced)
#317 Supporting the Bureau of Reclamation’s Field Services Program.  (outdated)
#318 Offering general comments to CEQ on the Principles and Guidelines.  (outdated)
#319 Describing principles that are important to the Western states in considering a “national vision” for water policy.  (superceded by more recent position)

2011

#297 Strong support for legislation to establish a National Drought Council to improve national drought preparedness, mitigation, and response efforts.  (There is no current legislation)
#298 In cooperation with the Interstate Council on Water Policy expressing strong support for increased funding for the Cooperative Water Program and the National Streamflow Information Program.  (superceded by more recent position statements and letters)
#299 Supporting S. 2842, the Aging Water Infrastructure and Maintenance Act.  (enacted)
#300 Regarding introduction of the Cooperative Watershed Management Act of 2008 (S. 3085).  (enacted)
#301 Commenting on H.R. 135, the “21st Century Water Commission,” specifically declaring that the WSWC be involved in the selection of members and that it include State and Native American involvement.  (Bill has not been reintroduced)
Supporting the enactment of S. 895 to provide the Bureau of Reclamation with authority to assess rural water supply needs and for sufficient funding.  *(enacted)*

Revised resolution in support of the Weather Modification Research and Technology Transfer Act.  *(No federal research program or legislation has been reintroduced)*

Urging support for full funding of the USGS National Streamflow Information Program (NSIP) and sufficient funding for the Cooperative Water Program to match non-USGS contributions.  *(outdated)*

Letter to Senator Bingaman, Senate Energy and Natural Resources Committee, expressing interest in S. 3231, the Omnibus Public Lands Management Act.  *(outdated)*

Letter to Steve Stockton offering assistance to the Corps in their water planning initiative.  *(outdated)*

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**2010**

Setting forth the Council’s past perspectives on a proposed “Twenty-First Century Water Commission.”  *(outdated - see #301 above)*

Support of the proposed Water Conservation, Efficiency and Management Act, to specifically authorize the Bureau of Reclamation’s water conservation programs.  *(separately authorized)*

Concern over the Administration’s decision to zero out funding for the U.S. Bureau of Reclamation’s Technical Assistance to States (TATS) Program.  *(outdated)*

Regarding the proposed Agricultural Water Enhancement Program.  *(enacted)*

Concern over budget request for federal funding for water and wastewater treatment, specifically EPA’s State Revolving Fund (SRF) Capitalization Grants.  *(combined with #296 and replaced with #330 – Apr 15, 2011)*

Concern with OMB directive to EPA disallowing the use of SRF revenues to repay bonds.  *(combined with #295 and replaced with #330 – Apr 15, 2011)*

---

**2009**

Urging the Congress and Administration to Continue to Recognize State Primacy Regarding Water Rights and Water Quality Certification in the Federal Licensing of Hydroelectric Projects.  *(supplanted by WGA resolution)*

Letter commending the American Indian Environmental Office of EPA for its efforts in establishing the Tribal Water Program Council and expressing a hope that it would “offer an ongoing opportunity for state-tribal cooperation on issues of mutual interest.”  *(outdated)*

Support for legislation (S. 2751 and H.R. 5136) to create a National Integrated Drought Information System within the National Oceanic and Atmospheric Administration.  *(authority enacted)*

Strong support for federal legislation, the National Drought Preparedness Act, to establish a national policy for drought and coordinate “proactive measures at all levels of government to plan,
prepare and mitigate the serious impacts of drought.”  (deferred to WGA resolution)

#281 Support for Reclamation’s Water Conservation Field Services Program and “Bridging-the-Headgate” Partnerships.  (outdated)

#282 Regarding Federal Non-Tribal Fees in General Adjudications asking the Congress to pass legislation requiring the Federal government, when a party to a general water rights adjudication, to pay fees for costs imposed by the state to conduct the proceedings to the same extent as all other users.  (deferred to WGA resolution)

#283 Reiterating strong support for maintaining a thermal band as part of the Landsat Data Continuity Mission, and the necessary funding.  (separately updated)

2008

#262 Support for the U.S. Geological Survey’s Cooperative Water Program (CWP) and opposes any effort to force the privatization of related USGS services.  (separately updated)

#268 The Western States Water Council endorses policy resolutions adopted by the Western Governors’ Association, and will allow these policies to guide the Council in matters relevant to implementation and potential reauthorization of the Clean Water Act.  (deferred to WGA resolution)

#269 Water Efficiency Standards for Plumbing Products  (subsequently enacted)

#270 Reauthorization of the Farm Bill.  (reauthorized)

#271 Support for the National Aeronautics and Space Administration’s Landsat Data Continuity Mission and calling for continued funding to include a thermal infrared sensor.  (superceded by 2009 WSWC Position No. 283)

#273 Support for the Nonpoint Source Grant program administered by the U. S. Environmental Protection Agency under Section 319 of the Clean Water Act.  (outdated)
Tab D – Budget
### W S W C Proposed FY18 Budget

<table>
<thead>
<tr>
<th>INCOME</th>
<th>FY 2016 Actual Total</th>
<th>Approved Budget FY2017</th>
<th>Estimated FY2017 Expenses/Income</th>
<th>Proposed Budget FY2018</th>
<th>% Change from FY2017 Estimated Expenditures</th>
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<td>$510,000.00</td>
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<td><strong>$747,900.00</strong></td>
<td><strong>-2.43%</strong></td>
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<table>
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<th>EXPENSE</th>
<th>FY 2016 Actual Total</th>
<th>Approved Budget FY2017</th>
<th>Estimated FY2017 Expenses/Income</th>
<th>Proposed Budget FY2018</th>
<th>% Change from FY2017 Estimated Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Symposium (Wade)</td>
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<td><strong>$665,400.00</strong></td>
<td><strong>$654,222.67</strong></td>
<td><strong>$747,900.00</strong></td>
<td><strong>14.32%</strong></td>
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| NET RESERVE GAIN(LOSS) | | (4,610.46) | 12,000.00 | 112,274.82 | - | - |

1. Full dues from 17 states
2. Management subcommittee approved change to biannual audit
## Western States Water Council

### Pro Forma Profit & Loss Budget Performance

#### June 2017

<table>
<thead>
<tr>
<th>Income/Expense</th>
<th>Jun 17</th>
<th>Budget</th>
<th>Jul '16 - Jun 17</th>
<th>YTD Budget</th>
<th>Annual Budget</th>
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<td><strong>Income</strong></td>
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<td>4000 - Revenues</td>
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<td>4800 - Interest Income</td>
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<td>74,632.78</td>
<td>56,449.99</td>
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<td><strong>Expense</strong></td>
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<td>6490 - Payroll Taxes &amp; Benefits</td>
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<td></td>
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<td></td>
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<tr>
<td>6500 - Benefits</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6510 - Dental Insurance</td>
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<td>6600 - Taxes</td>
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<tr>
<td>6610 - FICA/E</td>
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**Gross Profit**

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<th></th>
<th>Jun 17</th>
<th>Budget</th>
<th>Jul '16 - Jun 17</th>
<th>YTD Budget</th>
<th>Annual Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ordinary Income/Expense</strong></td>
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<tr>
<td><strong>Income</strong></td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Expense</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Total</strong></td>
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<td><strong>Gross Profit</strong></td>
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### Jun 17

<table>
<thead>
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<th>Jun 17</th>
<th>Budget</th>
<th>Jul '16 - Jun 17</th>
<th>YTD Budget</th>
<th>Annual Budget</th>
</tr>
</thead>
<tbody>
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<td>6810 · Accounting</td>
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<td>8,200.00</td>
<td>8,200.00</td>
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<td>6850 · Rent</td>
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<td>14,186.91</td>
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<td>6890 · Reports &amp; Publications</td>
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<td>7020 · Telephone</td>
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<td>7040 · Travel</td>
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### Other Income/Expense

#### Other Expense

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<th>Jun 17</th>
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<th>Jul '16 - Jun 17</th>
<th>YTD Budget</th>
<th>Annual Budget</th>
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</thead>
<tbody>
<tr>
<td>9100 · Symposium Expenses</td>
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<tr>
<td>9140 · NARF</td>
<td>11.42</td>
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<td>97,274.82</td>
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# Western States Water Council

**Pro Forma Balance Sheet**

**As of June 30, 2017**

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<thead>
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<th>Jun 30, 17</th>
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<td><strong>Current Assets</strong></td>
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<td>Checking/Savings</td>
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<td>1000 · Cash</td>
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<tr>
<td>1030 · Wells Fargo</td>
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<td>1050 · Petty Cash</td>
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<tr>
<td>1300 · Prepaid Expenses</td>
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<td>1310 · Insurance</td>
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<td>1320 · Postage</td>
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<td><strong>Total 1300 · Prepaid Expenses</strong></td>
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<td>1500 · Fixed Assets</td>
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<td>1505 · Purchase amount</td>
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<td>1510 · Accumulated Depreciation</td>
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<td>1800 · Deposits</td>
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<td>1900 · Amt for Compensated Absences</td>
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<td><strong>Total Other Assets</strong></td>
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<td><strong>TOTAL ASSETS</strong></td>
<td>908,733.69</td>
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LIABILITIES & EQUITY

Liabilities
Current Liabilities
Accounts Payable
2000 · Accounts Payable
(154.42)

Total Accounts Payable
(154.42)

Other Current Liabilities
2200 · Payroll Liabilities
2220 · FICA
835.04
2230 · FICA-E
835.64
2240 · FITW
2,172.00
2260 · MEDI
195.28
2270 · MEDIE
195.28
2280 · SITW
1,410.00
2290 · SUTA
115.58
2310 · AD&D
23.88
2330 · Dental
308.00
2340 · Disability
163.71
2350 · Life
372.50
2360 · Medical
6,383.78
2370 · Pension
4,639.69
2380 · Pension Loans
327.03
2390 · PrePaid P/R Liabilities
(4,878.66)
2395 · Workers Comp Ins
95.63

Total 2200 · Payroll Liabilities
13,194.38

2400 · Pre-Billed Revenue
81,710.70

Total Other Current Liabilities
94,905.08

Total Current Liabilities
94,750.66

Long Term Liabilities
2500 · Oblig for Compensated Absences
134,428.78
2550 · HRA - Willardson
400.57

2600 · Investment in Fixed Asset
2605 · Current value
37,143.51
2610 · Adjust for depreciation
(30,342.45)

Total 2600 · Investment in Fixed Asset
6,801.06
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<td>TOTAL LIABILITIES &amp; EQUITY</td>
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Tab E – Draft FY2017-2018
Executive Committee Work Plan
1. WGA/WSWC COORDINATION and COLLABORATION

Work to date: The Western Governors’ Association (WGA) has adopted two comprehensive policy statements, one focused on water quantity, Water Resource Management in the West (2015-08) and the other on water quality, Water Quality in the West (2017-04), as well as other policy statements with water-related implications.

The Council has worked closely with WGA on various regulatory and other issues, especially the EPA’s proposed and final rules related to Clean Water Act jurisdiction and the definition of Waters of the United States, as well as the U.S. Forest Service’s proposed groundwater directive, which was subsequently withdrawn in part due to the WGA’s and Council’s concerns.

2017/18: The Council and the Committee will continue to coordinate and consult with the WGA on matters that come before the Council, and assist as requested in the development and implementation WGA water-related policies. WGA staff are invited to attend and participate in our meetings, workshops and symposia. WGA and WSWC staff collaborate on a continuing basis.

As in the past, the Council may propose policy resolutions for WGA consideration. Further, the WSWC Chair and/or Executive Director will participate in WGA meetings as appropriate. Working with the WGA, the Council will also coordinate Western Federal Agency Support Team (WestFAST) activities and needs.

Subcommittee: Management Subcommittee

Time Frame: ongoing

2. WESTFAST

Work to date: WestFAST’s creation in 2008 has had many benefits. It is a unique forum for addressing western (and national) water issues that has brought together over a dozen federal agencies to collaborate with each other and state agencies with water-related responsibilities. WestFAST addresses issues raised with the Council and WGA (which in turn support development and implementation of related federal policies and programs). WestFAST and the Council have also discussed collaborative federalism principles to guide federal/state working relationships. WestFAST is now in its tenth year.

2017/18: The Executive Committee will continue to oversee the Council’s work with WestFAST. Further, the Committee will work to ensure participating agencies realize the real and potential benefits of WestFAST, helping to build a sound foundation for continuing collaboration. The WSWC will meet with WestFAST principals, and will continue to seek building closer ties with WestFAST principals.
3. FEDERAL ADMINISTRATION and CONGRESSIONAL VISITS/CONTACTS

Work to date: In an ongoing effort to promote WSWC and WGA positions and priorities, Council officers, members and staff travel often to Washington, D.C. to visit with Administration officials and Congressional members and staff. WSWC members and staff have also previously hosted or presented at briefings for congressional staff on the importance federal data gathering activities, including the Landsat thermal data, U.S. Geological Survey streamgaging programs, National Oceanic and Atmospheric Administration programs (including the National Integrated Drought Information System, River Forecast Centers, and Regional Integrated Science and Assessments), as well as Indian water rights settlements. Some of the feedback from these meetings has suggested a need for greater contact and communication between the Council and federal and congressional policymakers. Of note, the Council is often invited to testify on proposed legislation. Further, the Council also distributes policy positions adopted at its meetings to House and Senate members of western state delegations, as well as key committee leadership and staff.

2017/18: The Council’s officers, members and staff again plan visits during the Council’s Spring 2018 meetings in the Washington, D.C. area to make Administration and Congressional contacts and advise them on major national water issues from the perspective of western states. The WestFAST Liaison Officer and WestFAST members will assist with and participate in visits with Executive Branch agencies. The WSWC will meet with WestFAST principals. Other trips and visits may be made as needed. The Council staff and members will also communicate our external positions as the need arises and continue to respond to requests for testimony, briefings and information from the Congress and the Administration.

Subcommittee: Management Subcommittee

Time frame: Ongoing

4. REGULAR COUNCIL MEETINGS

Work to date: The first meeting of the Council was held in Stateline, Nevada in 1965, and regular meetings have been held since. Currently, the Council meets three times per year, rotating among the member states, which host the meetings at a location of their choice. Guest speakers and topics for discussion are scheduled according to members’ interests and needs. External policy positions for consideration are noticed 30-days before the Council meets and are distributed not only to members, but also to WGA staff and the governors’ staff. Any position statement not noticed may be brought before the Council for consideration at a meeting by unanimous consent, but if approved, must be sent to WGA for review prior to distribution consistent with mutually agreed upon WGA and WSWC procedures for policy coordination.

2017/2018: The Fall 2017 meetings will be held in Spring Albuquerque, New Mexico and the Spring 2018 meetings in Washington, D.C. including our biennial Washington, D.C.
Roundtable, sponsored in cooperation with the Interstate Council on Water Policy (ICWP). The Summer 2018 meetings are scheduled for Oregon.

5. NEWSLETTER

Work to date: Western States Water provides members and others with accurate and timely information on various water resources topics at state, regional and national levels. It is provided as a free service to members, governors and their staff, member state water resource agencies, state water users associations, selected multi-state organizations, key Congressmen and their staffs, and top federal administration officials. Other public and private agencies and individuals may subscribe for a fee. It is primarily distributed via email, and is posted on our website, with password protection (for recent issues).

2017/18: Along with the Council’s regular meetings, the newsletter requires our most significant commitment of staff resources, though that is usually ancillary to other efforts. The response from members and others receiving the newsletter has been consistently positive. The Council will continue to provide this service weekly via email, except for those who request a hard copy.

Time Frame: Ongoing

6. WATER MANAGEMENT SYMPOSIA

Work to date: An annual WSWC Water Management Symposium has traditionally been held under the auspices of the Executive Committee. However, the Committee has usually asked one of the other committees to take the lead. This includes a biennial Indian Water Rights Settlement Symposia cosponsored with the Native American Rights Fund. The next Council and NARF Symposium will be held in Great Falls, Montana on August 8-10, 2018.

In 2012, the Council held a symposium in November in Phoenix, Arizona in collaboration with relevant federal agencies, multiple stakeholders, and public and private experts on Western State Water Resources Infrastructure Needs & Strategies. It explored state financing authorities, policies, programs and projects, as well as public-private financing and cost sharing resources, with a goal of identifying common interests and promoting partnerships.

The Committee considers hosting symposia on any topic related to tribal issues, data issues, or other topics and issues as their importance merits.

2017/18: The Water Resources Committee, under the direction of the Executive Committee, will plan and host a symposium on infrastructure needs, strategies, and federal and state programs.

Time Frame – Winter-Spring 2017/2018
7. **ANNUAL REPORT**

**Work to date:** Since its organization in 1965, the Council has prepared and published an annual report, with a brief discussion of the Council’s formation and a detailed summary of its current membership and activities. It is a report of the Council’s meetings, and provides an explanation of resolutions and positions and other actions taken by the Council. Further, it includes a description of workshops, seminars and symposia sponsored by the Council, as well as other important activities and events. It also describes the Council’s involvement in major current water policy issues. Lastly, biennially, it includes an audit of the Council’s finances, and current rules of organization. Recently, electronic copies have been distributed.

**Time frame:** July-December
EXECUTIVE COMMITTEE  
WORK PLAN  
2016/2017/2018

1. WGA/WSWC COORDINATION and COLLABORATION

Work to Date: The publication of the WGA/WSWC report(s) entitled “Water Needs and Strategies for a Sustainable Future,” raised awareness of the challenges facing the West. The WGA adopted the 2006 and 2008 reports as policy, and the Council has worked to implement their recommendations, many of which have been completed. In June 2010, the Council completed and the WGA accepted a Progress Report summarizing implementation activities. In 2011, The Western Governors’ Association (WGA) has adopted two comprehensive policy statements, one focused on water quantity, Water Resource Management in the West (2015-08) and the other on water quality, Water Quality in the West (2017-04), as well as other policy statements with water-related implications, which the WGA revised and readopted in December 2013, and will reconsider in 2016.

Of particular note, a priority recommendation was establishment of the Western States Federal Agency Support Team (WestFAST) and the hiring of a liaison officer in the Council’s offices. Both of which were accomplished in 2008 and continued.

The Council has worked closely with WGA on various regulatory and other issues, especially the EPA’s proposed and final rules related to Clean Water Act jurisdiction and the definition of Waters of the United States, as well as the U.S. Forest Service’s proposed groundwater directive, which was subsequently withdrawn in part due to the WGA’s and Council’s concerns.

2017/18: The Council and the Committee will continue to coordinate and consult with the WGA on matters that come before the Council, and assist as requested in the development and implementation of WSWC and WGA water-related policies. WGA staff will be invited to attend and participate in our meetings, workshops and symposia. WGA and WSWC staff collaborate on a continuing basis.

As in the past, the Council may propose policy resolutions for WGA consideration. Further, the WSWC Chair and/or Executive Director will participate in WGA meetings as appropriate. Working with the WGA, the Council will also coordinate Western Federal Agency Support Team (WestFAST) activities and needs.

Subcommittee: Management Subcommittee

Time Frame: ongoing

2. WESTFAST

Work to date: WestFAST’s creation in 2008 has had many benefits. It is a unique forum for addressing western (and national) water issues that has brought together over a dozen federal agencies to collaborate with each other and state agencies with water-related responsibilities.
WestFAST addresses issues raised and discussed with the Council and WGA (which in turn support development and implementation of related federal policies and programs). WestFAST and the Council have also discussed collaborative federalism principles to guide federal/state working relationships. WestFAST is now in its eighteenth year.

2017/18: The Executive Committee will continue to oversee the Council’s work with WestFAST. Further, the Committee will work to ensure participating agencies realize the real and potential benefits of WestFAST, and working to build a sound foundation for continuing collaboration. The WSWC will meet with WestFAST principals on March 24, 2016, and will continue to seek building closer ties with WestFAST principals.

Time Frame: Ongoing

3. FEDERAL ADMINISTRATION and CONGRESSIONAL VISITS/CONTACTS

Work to date: The WSWC’s members, officers and staff continue to meet with key members of Congress, and the Administration on issues of interest to the Council.

On December 14-15, 2015, the WSWC Executive Director attended a White House Roundtable on Water Innovation (by invitation) and a related Office of Science and Technology Policy (OSTP) follow up discussion session. WSWC member J.D. Strong of Oklahoma was invited to attend the second in a series of White House OSTP Water, Technology and Innovation discussions on February 1, 2016. WSWC Chairman Pat Tyrrell of Wyoming, members John Tubbs of Montana, James Eklund of Colorado, and J.D. were invited to a White House Water Summit in D.C. on March 22, 2016—World Water Day.

In an ongoing effort to promote WSWC and WGA positions and priorities, Council officers, members and staff travel regularly—often—to Washington, D.C. and make visits with Administration officials and Congressional members and staff—officers. Native-American Rights Fund (NARF) staff join WSWC members and staff in many of the visits. WSWC members and staff have also previously hosted or presented at briefings for congressional staff on the importance federal data gathering activities, including the Landsat thermal data, U.S. Geological Survey streamgaging programs, National Oceanic and Atmospheric Administration programs (including the National Integrated Drought Information System, River Forecast Centers, and Regional Integrated Science and Assessments), as well as Indian water rights settlements. Some of the feedback from these meetings has suggested a need for greater contact and communication between the Council and federal and congressional policymakers. Of note, the Council is often invited to testify on proposed legislation. Further, the Council also distributes policy positions adopted at its meetings to all House and Senate members of western state delegations, as well as key committee leadership and staff.

2017/18: The Council’s Officers, members and staff again planned visits during the Council’s Spring 2018 meetings in the Washington, D.C. area to make Administration and Congressional contacts and advise them on major national water issues from the perspective of western states. WSWC members and staff will also schedule visits with individual congressional offices. The WestFAST Liaison Officer and WestFAST members will assist with and participate in these visits with Executive Branch agencies. The WSWC will meet with WestFAST principals on
March 24, 2016. Other trips and visits may be made as needed. The Council staff and members will also communicate our external positions as the need arises and continue to respond to requests for testimony, briefings and information from the Congress and the Administration.

**Subcommittee:** Management Subcommittee

**Time frame:** Ongoing

4. **REGULAR COUNCIL MEETINGS**

**Work to Date:** The first meeting of the Council was held in Stateline, Nevada in 1965, and regular meetings have been held since. Currently, the Council meets three times per year, rotating among the member states, which host the meetings at a location of their choice. Guest speakers and topics for discussion are scheduled according to members’ interests and needs. External policy positions for consideration are noticed 30-days before the Council meets and are distributed not only to members, but also to WGA staff and the governors’ staff. Any position statement not noticed may be brought before the Council for consideration at a meeting by unanimous consent, but if approved, must be sent to WGA for review prior to distribution consistent with mutually agreed upon WGA and WSWC procedures for policy coordination.

**Nevada hosted the 50th Anniversary Summer 2015 meetings in Stateline on July 8-10.** Several former members attended, as well as numerous guest dignitaries.

**2017/2018:** The Fall 2017 meetings will be held in Spring Albuquerque, New Mexico and the Spring 2018 meetings were held in Washington, D.C. on March 22-24. This included the including our biennial Washington, D.C. Roundtable, which was sponsored in cooperation with the Interstate Council on Water Policy (ICWP). The Summer 2018 meetings are scheduled for Oregon will be held on July 13-15, in Bismarck, North Dakota, and the Fall meetings are scheduled for September 28-30, in St. George, Utah.

5. **NEWSLETTER**

**Work to date:** Western States Water provides members and others with accurate and timely information on various water resources topics at state, regional and national levels. It is provided as a free service to members, governors and their staff, member state water resource agencies, state water users associations, selected multi-state organizations, key Congressmen and their staffs, and top federal administration officials. Other public and private agencies and individuals may subscribe for a fee. It is primarily distributed via email, and is posted on our website, with password protection (for recent issues).

**2017/18:** Along with the Council’s regular meetings, the newsletter requires our most significant commitment of staff resources, though that is usually ancillary to other efforts. The response from members and others receiving the newsletter has been consistently positive. The Council will continue to provide this service weekly via email, except for those who request a hard copy.
Time Frame: Ongoing

6. WATER MANAGEMENT SYMPOSIA

Work to date: An annual WSWC Water Management Symposium has traditionally been held under the auspices of the Executive Committee. However, the Committee has usually asked one of the other committees to take the lead. In odd numbered years, this includes a biennial Indian Water Rights Settlement Symposium cosponsored with the Native American Rights Fund. Last year the next Council and NARF sponsored an Indian Water Rights Settlement Symposium in Reno, Nevada on August 25-27, 2015. Symposium will be held in Great Falls, Montana on August 8-10, 2018.

In 2012, the Council held a symposium in November in Phoenix, Arizona in collaboration with relevant federal agencies, multiple stakeholders, and public and private experts on Western State Water Resources Infrastructure Needs & Strategies. It explored state financing authorities, policies, programs and projects, as well as public-private financing and cost sharing resources, with a goal of identifying common interests and promoting partnerships.

The Committee will consider hosting symposia on any topic related to tribal issues, data issues, or other topics and issues as their importance merits.

2017/18: The Water Resources Committee, under the direction of the Executive Committee, will plan and host a symposium on infrastructure needs, strategies, and federal and state programs.

Time Frame – Winter-Spring 2017/2018

7. ANNUAL REPORT

Work to date: Since its organization in 1965, the Council has prepared and published an annual report. The annual report includes a brief discussion of the Council’s formation and a detailed summary of its current membership and activities. It is a report of the Council’s meetings, and provides an explanation of resolutions and positions and other actions taken by the Council. Further, it includes a description of workshops, seminars and symposia sponsored by the Council, as well as other important activities and events. It also describes the Council’s involvement in major current water policy issues. Lastly, biennially, it includes an audit of the Council’s finances, and current rules of organization. Recently, electronic copies have been distributed.

Time frame: July-December
Tab F – Draft FY2017-2018
Legal Committee Work Plan
1. **STATE AND FEDERAL COLLABORATION REGARDING THE ADJUDICATION OF FEDERAL NON-TRIBAL WATER RIGHTS**

**Work-to-Date:** The Committee created a Federal Non-Tribal Water Claims Subcommittee to evaluate ways the WSWC and WestFAST can improve the effective resolution of federal non-tribal water rights claims. The Subcommittee consists of WSWC members and WestFAST members, who serve in an *ex officio* capacity.

On July 15-16, 2014, the WSWC and WestFAST held a workshop in Helena, Montana to discuss ways to improve the resolution of federal non-tribal water rights claims and to begin the process of developing a clearinghouse of information that states and tribes can use to resolve these claims. The WSWC and WestFAST subsequently created a joint state-federal workgroup to help develop the clearinghouse and implement the other recommendations that emerged from the workshop. On November 10, 2015, the workgroup held a webinar presentation on state and federal perspectives of the McCarran Amendment. On July 13, 2016, the workgroup held a workshop in Bismark, North Dakota on Groundwater and Meeting Federal Water Needs.

**2017-2018:** The Committee will work to carry out the recommendations and next steps that emerged from the workshops and webinar. Under the direction of the Committee, the workgroup will hold calls on a quarterly basis to discuss the development of the clearinghouse and to serve as a forum for information sharing and relationship building. The Workgroup will also advise the Committee about potential future actions the WSWC and WestFAST may take to address federal water needs and may hold webinars on specific topics of interest. The workgroup will hold a workshop on hypothetical or actual examples of how adjudicated or decreed federal water rights will be administered by states, and how state and federal agencies would approach situations like curtailments under the current laws.

**Time Frame:** Ongoing

Federal Non-Tribal Water Claims Subcommittee: David Schade (AK), Jay Weiner (MT), Greg Ridgley (NM), Jennifer Verleger (ND), Dwight French (OR), Todd Chenoweth (TX), Norm Johnson (UT), Buck Smith (WA), and Pat Tyrrell and Chris Brown (WY). WestFAST members and agency staff participating in the Subcommittee in an *ex officio* capacity include: Jana Wilcox (Bureau of Land Management), Marc Kodack (Department of Defense), Andrew Hautzinger (U.S. Fish and Wildlife Service), Donald Anderson and Becky Fulkerson (Bureau of Reclamation), Jeff Hughes (National Park Service) and Chris Carlson (U.S. Forest Service). Other *ex officio* members of the Subcommittee include Kristen Geddes and Susan Joseph-Taylor (NV), Jonathan Allen (OK), Jesse Ratcliff (OR), and Abigail Boudewyns (WY).
2. **CWA JURISDICTION***

**Work-to-Date:** In 2011, the EPA and the U.S. Army Corps of Engineers released draft guidance intended to provide clearer, more predictable guidelines for determining which water bodies are subject to Clean Water Act (CWA) jurisdiction, consistent with the U.S. Supreme Court’s decisions in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001), and *Rapanos v. United States*, 547 U.S. 715 (2006). This was followed by the WOTUS Rule, finalized on June 29, 2015 (80 FR 37054). Many of our member states filed lawsuits challenging the WOTUS Rule in federal court. Subsequent motions centered primarily on the issue of which courts had jurisdiction to hear the lawsuits, and the procedural matter is now before the U.S. Supreme Court.

WSWC adopted positions #369 and #373 regarding CWA rulemaking efforts and state-federal collaboration.

On February 28, 2017, the Trump Administration issued an Executive Order, *Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the “Waters of the United States” Rule*, directing the EPA and Corps to review the WOTUS Rule for consistency with the stated policy of keeping the navigable waters free of pollution while also promoting economic growth, reducing regulatory uncertainty, and respecting the roles of Congress and the States. The EO specifically directs the agencies to interpret “navigable waters” consistent with the opinion of Justice Scalia in the *Rpanos* case. On March 6, 2017, the agencies published a *Notice of Intention to Review and Rescind or Revise the Clean Water Rule* in the Federal Register, 82 FR 12532.

**2017-2018:** The Committee will continue to work with the Water Resources and Water Quality Committees through the Workgroup to follow and comment on federal actions regarding CWA jurisdiction in accordance with the WSWC’s and WGA’s positions.

**Time Frame:** Ongoing

CWA Rulemaking Workgroup: Michelle Hale (AK), Trisha Oeth (CO), Barry Burnell (ID), Tom Stiles (KS), Jennifer Verleger (ND), Julie Cunningham (OK), Todd Chenoweth (TX), ___ (UT), Laura Driscoll (WA), and Bill DiRienzo (WY).

*See Item 3(a) of the Water Quality Committee Workplan*

3. **AD HOC GROUP ON RESERVED INDIAN WATER RIGHTS**

**Work-to-Date:** The Western Governors’ Association (WGA) and WSWC have long supported the negotiated resolution of Indian water rights claims (WSWC Position #376). As a result, the WGA and WSWC have worked with the Native American Rights Fund (NARF) for over thirty years as part of an Ad Hoc Group on Reserved Indian Water Rights to promote negotiated settlements.

Over the years, the Ad Hoc Group has carried out a number of activities to support the negotiated settlement of Indian reserved water rights claims, including frequent trips to Washington, D.C. to support policies that facilitate settlements and a biennial symposium on settlements that the
WSWC and NARF hold every odd year. The Group has also worked to highlight the need to secure a permanent funding mechanism for authorized settlements and to identify alternative funding sources to help ensure that settlements authorized by Congress and approved by the President will be implemented.

In recent years, the WSWC and NARF have established regular meetings with the Deputy Secretary of the Interior’s Office, the Secretary of the Interior’s Indian Water Rights Office, and other Interior officials engaged in Interior’s Indian water rights efforts. The WSWC and NARF have also held regular meetings with the White House Office of Management and Budget and other White House officials to support the WSWC’s settlement policies.

**2017-2018:** The Committee will oversee WSWC’s Ad Hoc Group efforts in the following areas: (1) activities to gather support for an appropriate remedy to settlement funding issues, including the development of a permanent settlement funding mechanism, the identification of other possible funding sources, and funding for federal assessment, negotiation, and implementation teams; (2) continue meeting with the Administration via the quarterly conference calls and other face-to-face opportunities to discuss key issues associated with Indian water rights settlements, including possible modifications to the Criteria & Procedures; and (3) hold the 2017 Symposium on the Settlement of Indian Reserved Water Rights Claims in partnership with the Native American Rights Fund.

**Time Frame:** Ongoing

Reserved Rights Subcommittee: Bill Staudenmaier (AZ); Cindy Chandley (AZ); Jay Weiner (MT), Greg Ridgley (NM), and Norman Johnson (UT). NARF members participating in the Subcommittee in an ex officio capacity include: John Echohawk, Joel Williams, Heather Whiteman Runs Him, Steve Moore, and David Gover. Other ex officio members include Susan Cottingham, Nathan Bracken, Stanley Pollack, David Mullon, Ryan Smith, Michael Bogert, Pamela Woodies, and Arianne Singer.

**4. WRDA/CORPS POLICIES**

**Work to date:** The Council has in the past supported regular passage of a Water Resources Development Act (WRDA), and has addressed a number of specific policy issues, while not taking any position on specific project authorizations. The Council has raised concerns with the Corps’ approach to identifying and regulating the use of “surplus waters” and Corps drought authorities related to Corps projects. The Council also worked to exclude irrigation water supply canals from any new safety levee safety program.

**2017-2018:** The Council will continue to work with the Congress and Corps on WRDA and Corps-related issues, including the treatment of irrigation canals under the proposed new levee safety program. Further, the Council will continue to work to ensure that state water rights and prerogatives are protected, specifically as it relates to natural flows, Corps storage and other issues.

**Subcommittee:** Jennifer Verleger (ND); Tracy Streeter (KS); and Tim Davis (MT)
A. CORPS SURPLUS WATER RULEMAKING

Work to date: On December 16, 2016, the Corps published its proposed surplus water rule, *Use of U.S. Army Corps of Engineers Reservoir Projects for Domestic, Municipal & Industrial Water Supply*. The Flood Control Act of 1944 specifically declared the policy of Congress to recognize the interests and rights of the Missouri River Basin States in determining the development of the watersheds within their borders and likewise their interests and rights in water use and control, and to preserve and protect to the fullest extent established and potential uses of the rivers’ natural flows, those flows that would pass through the states in the absence of the Corps of Engineers dams. The federal government has long recognized the right to use water as determined under the laws of the various states. However, the Corps has indicated that all waters entering its Missouri River mainstem reservoirs are stored waters to be allocated and controlled by the federal agency and does not recognize the States’ right to access natural flows, separate from the captured floodwaters stored within those reservoirs.

In October 2015, the Council adopted a resolution (#388) urging the Corps to recognize the legal rights of the States’ to allocate water, wrote the Assistant Secretary of the Army for Civil Works regarding its concerns, and has met with Corps officials on different occasions, as well as discussed legislative clarifications with congressional staff. The Council has also surveyed its member states regarding their definition of stored waters and related storage rights. On May 12, 2017, the Council sent a letter to the Corps expressing the states’ concerns with the proposed rule.

2017-2018: The Committee will continue to work to address this issue and explore alternative solutions, including both administrative and congressional action.

5. Groundwater

There are a number of ongoing groundwater issues that pertain to WSWC policies or are otherwise of interest that the Committee will monitor and address on an as-needed basis.

A. Reserved Water Rights

Background: On March 7, the 9th Circuit upheld the California District Court’s summary judgment from Phase I of the trifurcated case, *Agua Caliente Band of Cahuilla Indians v. Coachella Valley Water District* (No. 15-55896). The 9th Circuit decision holds that the United States implicitly reserved a right to water when it created the Agua Caliente Reservation, and that the Tribe’s reserved water right extends to the groundwater underlying the Reservation. The court acknowledged that it was unable to find any controlling federal appellate authority explicitly holding that the federal reserved water rights doctrine in *Winters v. United States*, 207 U.S. 564 (1908), extends to groundwater. Instead, it pointed to *United States v. Cappaert*, 426 U.S. 128 (1976) and *In re General Adjudication of All Rights to Use Water in Gila River System and Source*, 989 P.2d 739 (Ariz. 1999) as persuasive and implied authority for its decision, emphasizing that *Winters* does not distinguish between surface and groundwater or prohibit the inclusion of groundwater among the reserved rights. “Apart from the requirement that the primary purpose of the reservation must intend water use, the other main limitation of the reserved rights doctrine is that the unappropriated water must be ‘appurtenant’ to the
reservation.” The court determined that as long as the waters are attached to the reservation, it does not matter whether that water is above or below the ground. The court also held that federal reserved water rights preempt conflicting state law. The water district argued that the Tribe does not need a federal reserved right to prevent the purpose of the reservation from being defeated, because (1) the Tribe has a correlative right to groundwater under California law; (2) the Tribe has not historically used groundwater; and (3) the Tribe is entitled to surface water under the Whitewater River Decree. The court rejected these arguments, noting that state water entitlements do not affect the analysis of the Tribe’s federally reserved water right, and that states do not have power to dispose of reserved rights. The water district is appealing the decision to the U.S. Supreme Court.

Given that the federal agencies have relied on tribal water rights cases in the past to press for reserved water rights to groundwater, the implications of the 9th Circuit decision could be far reaching, not only for states and tribes outside the 9th Circuit’s jurisdiction, but also for federal agencies seeking to control groundwater appurtenant to federal lands.

As one example, the Forest Service issued a proposed groundwater directive May 6, 2014. Although the Forest Service asserted that the directive would not infringe on state-issued water rights or change how state groundwater and surface water quality regulations affect federal lands, the proposed directive would have: (1) required application of “…the Reservation or Winters Doctrine to groundwater, as well as surface water, consistent with the purposes of the Organic Administration Act, the Wild and Scenic Rivers Act, and the Wilderness Act;” (2) required the Forest Service to evaluate all applications to states for water rights on lands adjacent to NFS lands; and (3) would have presumed that groundwater and surface water are connected unless proven otherwise. The Forest Service later withdrew this proposed directive.

WSWC position #380 notes that no federal court has recognized a federal reserved water right to groundwater, and opposes “…efforts that would establish a federal ownership interest in groundwater or diminish the primary and exclusive authority of States over groundwater.”

2017-2018: The Committee will continue to work to ensure that state water rights and prerogatives are protected, specifically as they relate to tribal and non-tribal federal water rights and state authority over groundwater.

B. Groundwater Storage Projects

Background: In 1983, Congress passed the High Plains States Ground Water Demonstration Project Act, authorizing the Bureau of Reclamation to undertake a westwide groundwater recharge program. In 1989, WSWC and Reclamation entered a cooperative agreement to prepare a number of case studies to evaluate project effectiveness, identify economic and institutional problems such as the allocation of project costs and requisite legal authorities, and recommend alternative solutions to improve public policymaking with respect to future groundwater programs and projects. As a result of this agreement, WSWC prepared two reports in 1991 and 1998, titled Ground Water Recharge Projects in the Western United States. Among other recommendations to encourage recharge opportunities, the 1998 report suggested that each state examine its own legal and institutional systems to assure that they adequately address
groundwater recharge, amending statutes as necessary to recognize it as a beneficial use, and reasonably protect the right to recover recharged waters.

2017-2018: In coordination with the Water Resources Committee, the Legal Committee will work on updating the 20-year-old report. The Committee will query the states to review and update their relevant laws on groundwater storage, particularly as they relate to groundwater banking or Aquifer Storage Recovery projects.
1. STATE AND FEDERAL COLLABORATION REGARDING THE ADJUDICATION OF FEDERAL NON-TRIBAL WATER RIGHTS

Work-to-Date: The Committee has created a Federal Non-Tribal Water Claims Subcommittee to evaluate ways the WSWC and WestFAST can improve the effective resolution of federal non-tribal water rights claims. The Subcommittee consists of WSWC members and WestFAST members, who serve in an ex officio capacity.

The Subcommittee issued a questionnaire in 2012 to WSWC member states, the Bureau of Land Management, the Bureau of Reclamation, the Department of Defense, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the U.S. Forest Service. The questionnaire sought information on ways the WSWC and WestFAST could address the issues and challenges that involve federal non-tribal water right claims, as well as examples of successful state and federal efforts to resolve these claims. Responses indicated a broad consensus that the WSWC and WestFAST could develop a clearinghouse of information to assist states and federal agencies in the effective resolution of federal non-tribal water rights claims.

On July 15-16, 2014, the WSWC and WestFAST held a workshop in Helena, Montana to discuss ways to improve the resolution of federal non-tribal water rights claims and to begin the process of developing a clearinghouse of information that states and tribes can use to resolve these claims. The WSWC and WestFAST subsequently created a joint state-federal workgroup to help develop the clearinghouse and implement the other recommendations that emerged from the workshop. On November 10, 2015, the workgroup held a webinar presentation on state and federal perspectives of the McCarran Amendment. On July 13, 2016, the workgroup held a workshop in Bismark, North Dakota on Groundwater and Meeting Federal Water Needs.

2017-2018: The Committee will work to carry out the recommendations and next steps that emerged from the workshops and webinar. Under the direction of the Committee, the workgroup will hold calls on a quarterly basis to discuss the development of the clearinghouse and to serve as a forum for information sharing and relationship building. The Workgroup will also advise the Committee about potential future actions the WSWC and WestFAST may take to address federal water needs and may hold webinars on specific topics of interest. The workgroup will hold a workshop on (1) identifying state and federal perspectives of groundwater rights, with case studies as examples of how they’ve been handled in the past through adjudications, settlements, compacts or statutes; (2) hypothetical or actual examples of how adjudicated or decreed federal water rights will be administered by states, and how state and federal agencies would approach situations like curtailments under the current laws.

Footnote:

4. For the purposes of the questionnaire, the term “federal non-tribal water right claim” encompassed federal reserved right claims, federal state-based claims, and claims relating to the aforementioned federal agencies that do not involve water right claims made by a tribe.
Time Frame: Ongoing

Federal Non-Tribal Water Claims Subcommittee: David Schade (AK), Jay Weiner (MT), Greg Ridgley (NM), Jennifer Verleger (ND), Dwight French (OR), Todd Chenoweth (TX), Norm Johnson (UT), Buck Smith (WA), and Pat Tyrrell and Chris Brown (WY). WestFAST members and agency staff participating in the Subcommittee in an *ex officio* capacity include: Jana Wilcox (Bureau of Land Management), Marc Kodack (Department of Defense), Andrew Hautzinger (U.S. Fish and Wildlife Service), Donald Anderson and Becky Fulkerson (Bureau of Reclamation), Jeff Hughes (National Park Service) and Chris Carlson Jean Thomas (U.S. Forest Service). Other *ex officio* members of the Subcommittee include Kristen Geddes and Susan Joseph-Taylor (NV), Jonathan Allen (OK), Jesse Ratcliff (OR), and Abigail Boudewyns (WY).

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WSWC adopted positions #369 and #373 regarding CWA rulemaking efforts and state-federal collaboration.

On February 28, 2017, the Trump Administration issued an Executive Order, *Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the “Waters of the United States” Rule*, directing the EPA and Corps to review the WOTUS Rule for consistency with the stated policy of keeping the navigable waters free of pollution while also promoting economic growth, reducing regulatory uncertainty, and respecting the roles of Congress and the States. The EO specifically directs the agencies to interpret “navigable waters” consistent with the opinion of Justice Scalia in the *Rapanos* case. On March 6, 2017, the agencies published a *Notice of Intention to Review and Rescind or Revise the Clean Water Rule* in the Federal Register, 82 FR 12532.

In September 2013, the EPA and Corps withdrew the draft guidance. At the same time, the agencies announced that they had submitted a draft rule to clarify the extent of CWA jurisdiction to the Office of Management and Budget (OMB) for interagency review.

In 2013, the WSWC wrote EPA and the Corps a series of five letters requesting greater state consultation in the development of the rule. In addition, the WSWC created a CWA Rulemaking Workgroup to gather information on the WSWC member states’ perspectives regarding the rulemaking and to identify further areas of consensus among the western states. In March 2014, the workgroup developed a letter that the WSWC sent to EPA and the Corps, setting forth a list of additional consensus comments on the rulemaking. The Western Governors’ Association (WGA) sent a subsequent letter on March 25, 2014, that cited the WSWC’s March 10 letter and
urged the agencies to consult with the states individually and through the WGA before taking further action on the rulemaking.

On April 21, 2014, EPA and the Corps published a proposed rule in the Federal Register with an initial 90-day public comment period that was later extended to October 20, 2014, following requests from the WGA and other organizations for an extension. Following the rule’s publication, EPA and the Corps engaged in a series of calls with the WSWC to discuss the states’ questions and concerns about the rulemaking. WSWC Water Quality Committee Chair J.D. Strong of Oklahoma also testified on behalf of the WSWC and the WGA before the House Transportation and Infrastructure Committee regarding the rule on June 11, 2014.

The WSWC adopted Position #369 regarding CWA rulemaking efforts on July 18, 2014, during its summer meetings in Helena, Montana. The resolution replaces WSWC Position #330.5 and served as the basis of a comment letter the WSWC sent to EPA and the Corps on October 15, 2014, Position #373. That letter called for the creation of a state-federal workgroup to refine and revise the rule and set forth a number of requested changes.

On June 29, 2015, the EPA and the Corps published their final rule in the Federal Register. The final rule incorporates some of the changes requested in Position #373.

**2017-2018:** The Committee will continue to work with the Water Resources and Water Quality Committees through the Workgroup to follow and comment on the implementation of the jurisdictional rule and other federal actions regarding CWA jurisdiction in accordance with the WSWC’s and WGA’s positions.

**Time Frame:** Ongoing

CWA Rulemaking Workgroup: Michelle Hale (AK), Trisha Oeth (CO), Barry Burnell (ID), Tom Stiles (KS), Jennifer Verleger (ND), J.D. Strong Julie Cunningham (OK), Todd Chenoweth (TX), Walt Baker (UT), Laura Driscoll (WA), and Bill DiRienzo (WY).

*See Item 3(a) of the Water Quality Committee Workplan

### 3. AD HOC GROUP ON RESERVED INDIAN WATER RIGHTS

**Work-to-Date:** The Western Governors’ Association (WGA) and WSWC have long supported the negotiated resolution of Indian water rights claims (WSWC Position #376). As a result, the WGA and WSWC have worked with the Native American Rights Fund (NARF) for over thirty years as part of an Ad Hoc Group on Reserved Indian Water Rights to promote negotiated settlements.

Over the years, the Ad Hoc Group has carried out a number of activities to support the negotiated settlement of Indian reserved water rights claims, including frequent trips to Washington, D.C. to support policies that facilitate settlements and a biennial symposium on settlements that the WSWC and NARF hold every odd year. The Group has also worked to highlight the need to secure a permanent funding mechanism for authorized settlements and to identify alternative funding sources to help ensure that settlements authorized by Congress and approved by the President will be implemented.
In recent years, the WSWC and NARF have established regular meetings with the Deputy Secretary of the Interior’s Office, the Secretary of the Interior’s Indian Water Rights Office, and other Interior officials engaged in Interior’s Indian water rights efforts. The WSWC and NARF have also held regular meetings with the White House Office of Management and Budget and other White House officials to support the WSWC’s settlement policies.

2017-2018: The Committee will oversee WSWC’s Ad Hoc Group efforts in the following areas:
(1) activities to gather support for an appropriate remedy to settlement funding issues, including the development of a permanent settlement funding mechanism, the identification of other possible funding sources, and funding for federal assessment, negotiation, and implementation teams; (2) continue meeting with the Administration via the quarterly conference calls and other face-to-face opportunities to discuss key issues associated with Indian water rights settlements, including possible modifications to the Criteria & Procedures; and (3) hold the 2017 Symposium on the Settlement of Indian Reserved Water Rights Claims in partnership with the Native American Rights Fund.

Time Frame: Ongoing

Reserved Rights Subcommittee: Bill Staudenmaier (AZ); Cindy Chandley (AZ); Jay Weiner (MT), Greg Riddley (NM), and Norman Johnson (UT). NARF members participating in the Subcommittee in an ex officio capacity include: John Echohawk, Joel Williams, Heather Whiteman Runs Him, Steve Moore, and David Gover. Other ex officio members include Susan Cottingham, Nathan Bracken, Stanley Pollack, David Mullon, Ryan Smith, Michael Bogert, Pamela Woodies, and Arianne Singer.

4. U.S. FOREST SERVICE PROPOSED GROUNDWATER DIRECTIVE

Work-to-Date: On May 6, 2014, the U.S. Forest Service published a proposed directive in the Federal Register that would create a “comprehensive direction” for the agency’s management of groundwater on National Forest System (NFS) land. In particular, the directive is intended to: (1) provide for consideration of groundwater resources in Forest Service activities; (2) encourage source water protection and water conservation; (3) establish procedures for reviewing new proposals for groundwater withdrawals on NFS land; (4) require the evaluation of potential impacts from groundwater withdrawals on NFS natural resources; and (5) provide for measurement and reporting to help build the agency’s understanding of groundwater resources on NFS land. Comments on the proposed directive are due August 4, 2014.

According to the Forest Service, the directive will not infringe on state-issued water rights or change how state groundwater and surface water quality regulations affect federal lands. However, while the directive would require the agency to comply with state law when filing groundwater use claims in state adjudications and administrative proceedings, it would, among other things: (1) require application of “…the Reservation or Winters Doctrine to groundwater, as well as surface water, consistent with the purposes of the Organic Administration Act, the Wild and Scenic Rivers Act, and the Wilderness Act;” (2) require the Forest Service to evaluate all applications to states for water rights on lands adjacent to NFS lands; and (3) would presume that groundwater and surface water are connected unless proven otherwise.
WSWC position #380 notes that no federal court has recognized a federal reserved water right to groundwater, and opposes “...efforts that would establish a federal ownership interest in groundwater or diminish the primary and exclusive authority of States over groundwater.” Similarly, WGA Resolution #2015-08, paragraph B(1)(a) states: “While the Western Governors acknowledge the important role of federal laws such as the Clean Water Act, the Endangered Species Act, and the Safe Drinking Water Act, nothing in any act of Congress or Executive Branch regulatory action should be construed as affecting or intending to affect states’ primacy over the allocation and administration of their water resources.”

On July 2, 2014, the WGA wrote Secretary of Agriculture Tom Vilsack to express concern that the directive “could have significant implications for our states and our groundwater resources.” WGA’s letter also asked Vilsack to respond to a series of questions regarding the directive. The WSWG subsequently sent a letter to the USFS on October 3, 2014 (Position #372) that outlined a number of questions and concerns about the directive, including: (1) its potential to infringe on state water management, (2) questions about the legal basis for the directive; and (3) the lack of state consultation in the development of the directive.

In December 2014, USFS Chief Tom Tidwell indicated that the USFS will not move forward with the directive until agency personnel have engaged with states and other stakeholders to better understand their concerns. After the USFS has completed this engagement, it will publish a revised directive in the Federal Register for public comment.

At the WSWG’s request, the USFS met with the WSWG on February 13, 2015 to discuss the WSWG’s concerns regarding the directive. The meeting identified a number of conceptual, consensus-based changes that may be able to address some of the WSWG’s concerns.

On June 19, 2015, the USFS published a Notice of Withdrawal of the Proposed Directive in the Federal Register. The USFS acknowledged the States’ concerns that the Proposed Directive would exceed USFS authority and infringe on States’ authority to allocate water. The withdrawal will allow USFS to engage in further conversations with the States. USFS intends to use the input from States and others to develop new directives that create a consistent approach to evaluating and monitoring the effects on groundwater resulting from actions on USFS lands.

2016-2017: The Committee will use the results of the WSWG’s February 2015 meeting with the USFS to develop consensus changes to the directive that could form the basis of potential comments for the WSWG to submit once the USFS re-publishes the directive for public comment. The Committee will also continue to monitor this issue and engage with the USFS as appropriate under the supervision of the WSWG and in close coordination with the WGA.

Time Frame: Ongoing

45. WRDA/CORPS POLICIES

Work to date: The Council has in the past supported regular passage of a Water Resources Development Act (WRDA), and has addressed a number of specific policy issues, while not taking any position on specific project authorizations. The Council has raised concerns with the Corps’ approach to identifying and regulating the use of “surplus waters” and Corps drought
authorities related to Corps projects. The Council also worked to exclude irrigation water supply canals from any new safety levee safety program.

2017-2018: The Council will continue to work with the Congress and Corps on WRDA and Corps-related issues, including the treatment of irrigation canals under the proposed new levee safety program. Further, the Council will continue to work to ensure that state water rights and prerogatives are protected, specifically as it relates to natural flows, Corps storage and other issues.

Subcommittee: Jennifer Verleger (ND); Tracy Streeter (KS); and Tim Davis (MT)

A. CORPS SURPLUS WATER RULEMAKING

Work to date: A draft Corps surplus water rulemaking is pending. On December 16, 2016, the Corps published its proposed surplus water rule, *Use of U.S. Army Corps of Engineers Reservoir Projects for Domestic, Municipal & Industrial Water Supply*. The Flood Control Act of 1944 specifically declared the policy of Congress to recognize the interests and rights of the Missouri River Basin States in determining the development of the watersheds within their borders and likewise their interests and rights in water use and control, and to preserve and protect to the fullest extent established and potential uses of the rivers’ natural flows, those flows that would pass through the states in the absence of the Corps of Engineers dams. The federal government has long recognized the right to use water as determined under the laws of the various states. However, the Corps has indicated that all waters entering its Missouri River mainstem reservoirs are stored waters to be allocated and controlled by the federal agency and does not recognize the States’ right to access natural flows, separate from the captured floodwaters stored within those reservoirs.

In October 2015, the Council adopted a resolution (#388) urging the Corps to recognize the legal rights of the States’ to allocate water, wrote the Assistant Secretary of the Army for Civil Works regarding its concerns, and has met with Corps officials on different occasions, as well as discussed legislative clarifications with congressional staff. The Council has also surveyed its member states regarding their definition of stored waters and related storage rights. On May 12, 2017, the Council sent a letter to the Corps expressing the states’ concerns with the proposed rule.

2017-2018: The Committee will continue to work to address this issue and explore alternative solutions, including both administrative and congressional action.

5. Groundwater

There are a number of ongoing groundwater issues that pertain to WSWC policies or are otherwise of interest that the Committee will monitor and address on an as-needed basis.

A. Reserved Water Rights

Background: On March 7, the 9th Circuit upheld the California District Court’s summary judgment from Phase I of the trifurcated case, *Agua Caliente Band of Cahuilla Indians v.*
Coachella Valley Water District (No. 15-55896). The 9th Circuit decision holds that the United States implicitly reserved a right to water when it created the Agua Caliente Reservation, and that the Tribe’s reserved water right extends to the groundwater underlying the Reservation. The court acknowledged that it was unable to find any controlling federal appellate authority explicitly holding that the federal reserved water rights doctrine in Winters v. United States, 207 U.S. 564 (1908), extends to groundwater. Instead, it pointed to United States v. Cappaert, 426 U.S. 128 (1976) and In re General Adjudication of All Rights to Use Water in Gila River System and Source, 989 P.2d 739 (Ariz. 1999) as persuasive and implied authority for its decision, emphasizing that Winters does not distinguish between surface and groundwater or prohibit the inclusion of groundwater among the reserved rights. “Apart from the requirement that the primary purpose of the reservation must intend water use, the other main limitation of the reserved rights doctrine is that the unappropriated water must be ‘appurtenant’ to the reservation.” The court determined that as long as the waters are attached to the reservation, it does not matter whether that water is above or below the ground. The court also held that federal reserved water rights preempt conflicting state law. The water district argued that the Tribe does not need a federal reserved right to prevent the purpose of the reservation from being defeated, because (1) the Tribe has a correlative right to groundwater under California law; (2) the Tribe has not historically used groundwater; and (3) the Tribe is entitled to surface water under the Whitewater River Decree. The court rejected these arguments, noting that state water entitlements do not affect the analysis of the Tribe’s federally reserved water right, and that states do not have power to dispose of reserved rights. The water district is appealing the decision to the U.S. Supreme Court.

Given that the federal agencies have relied on tribal water rights cases in the past to press for reserved water rights to groundwater, the implications of the 9th Circuit decision could be far reaching, not only for states and tribes outside the 9th Circuit’s jurisdiction, but also for federal agencies seeking to control groundwater appurtenant to federal lands.

As one example, the Forest Service issued a proposed groundwater directive May 6, 2014. Although the Forest Service asserted that the directive would not infringe on state-issued water rights or change how state groundwater and surface water quality regulations affect federal lands, the proposed directive would have: (1) required application of “...the Reservation or Winters Doctrine to groundwater, as well as surface water, consistent with the purposes of the Organic Administration Act, the Wild and Scenic Rivers Act, and the Wilderness Act;” (2) required the Forest Service to evaluate all applications to states for water rights on lands adjacent to NFS lands; and (3) would have presumed that groundwater and surface water are connected unless proven otherwise. The Forest Service later withdrew this proposed directive.

WSWC position #380 notes that no federal court has recognized a federal reserved water right to groundwater, and opposes “...efforts that would establish a federal ownership interest in groundwater or diminish the primary and exclusive authority of States over groundwater.”

2017-2018: The Committee will continue to work to ensure that state water rights and prerogatives are protected, specifically as they relate to tribal and non-tribal federal water rights and state authority over groundwater.

B. Groundwater Storage Projects
**Background:** In 1983, Congress passed the High Plains States Ground Water Demonstration Project Act, authorizing the Bureau of Reclamation to undertake a westwide groundwater recharge program. In 1989, WSWC and Reclamation entered a cooperative agreement to prepare a number of case studies to evaluate project effectiveness, identify economic and institutional problems such as the allocation of project costs and requisite legal authorities, and recommend alternative solutions to improve public policymaking with respect to future groundwater programs and projects. As a result of this agreement, WSWC prepared two reports in 1991 and 1998, titled Ground Water Recharge Projects in the Western United States. Among other recommendations to encourage recharge opportunities, the 1998 report suggested that each state examine its own legal and institutional systems to assure that they adequately address groundwater recharge, amending statutes as necessary to recognize it as a beneficial use, and reasonably protect the right to recover recharged waters.

**2017-2018:** In coordination with the Water Resources Committee, the Legal Committee will work on updating the 20-year-old report. The Committee will query the states to review and update their relevant laws on groundwater storage, particularly as they relate to groundwater banking or Aquifer Storage Recovery projects.
Tab G – Draft FY2017-2018
Water Quality Committee Work Plan
1. **WATER QUALITY/QUANTITY NEXUS**

**Work-to-Date:** Paragraph (B)(3) of WGA Resolution #2015-08 states: “Western Governors believe effective solutions to water resource challenges require an integrated approach among states and with federal, tribal and local partners. Federal investments should assist states in implementing state water plans designed to provide water for municipal, rural, agricultural, industrial and habitat needs, and should provide financial and technical support for development of watershed and river basin water management plans when requested by states. Integrated water management planning should also account for flood control, water quality protection, and regional water supply systems. Water resource planning must occur within a framework that preserves states’ authority to manage water through policies which recognize state law and the financial, environmental and social values of the water resource to citizens of the western states today and in the future.” (emphasis added)

On October 6-7, 2015, the Water Quality Committee held a workshop in conjunction with the WSWC’s 2015 fall meetings in Manhattan, Kansas. The workshop provided insights on: (1) how state water quantity and quality regulations interact with each other; (2) how states can protect water quality within the existing framework of the prior appropriation doctrine; and (3) the proper relationship between federal environmental protections and the states’ primary and exclusive authority over the allocation of water resources. WSWC staff prepared a preliminary report of the meeting, which included recommendations for WSWC next steps.

**2017-2018:** The Committee will produce findings and policy options from the WQ2 workshop for the WSWC to consider as it supports WGA Resolution #2015-08. The Committee will also follow up on the next steps recommended in the WQ2 workshop, including: (1) create a nexus Toolbox of useful and accessible information, including interagency MOUs, instream flow legislation, case studies, and reports of additional workshops, to provide a resource for the states seeking to learn from each other’s experiences; (2) create a subcommittee to provide a more focused review of the 1997 WSWC report on Water Quantity/Water Quality Interrelationships: Western State Perspectives; and (3) identify and coordinate with federal agencies and other technical or national organizations with common interests to co-host educational workshops or symposia on relevant nexus topics, both to develop better relationships and to find additional potential solutions to nexus problems, (4) provide updated information from states on current water quality-water quantity issues at Council meetings.

**Time Frame:** Ongoing

WQ2 Nexus Workgroup: Kent Woodmansey (SD), Tom Stiles (KS)

2. **CLEAN WATER ACT ISSUES**

There are a number of ongoing Clean Water Act (CWA) issues that pertain to WSWC policies or are otherwise of interest that the Committee will monitor and address on an as needed basis. These issues are listed below in order of priority.
a. **CWA Jurisdiction**

**Background:** In 2011, the EPA and the U.S. Army Corps of Engineers released draft guidance intended to provide clearer, more predictable guidelines for determining which water bodies are subject to Clean Water Act (CWA) jurisdiction, consistent with the U.S. Supreme Court’s decisions in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001), and *Rapanos v. United States*, 547 U.S. 715 (2006). This was followed by the WOTUS Rule, finalized on June 29, 2015 (80 FR 37054). Many of our member states filed lawsuits challenging the WOTUS Rule in federal court. Subsequent motions centered primarily on the issue of which courts had jurisdiction to hear the lawsuits, and the procedural matter is now before the U.S. Supreme Court.

On February 28, 2017, the Trump Administration issued an Executive Order, Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the “Waters of the United States” Rule, directing the EPA and Corps to review the WOTUS Rule for consistency with the stated policy of keeping the navigable waters free of pollution while also promoting economic growth, reducing regulatory uncertainty, and respecting the roles of Congress and the States. The EO specifically directs the agencies to interpret “navigable waters” consistent with the opinion of Justice Scalia in the Rapanos case. On March 6, 2017, the agencies published a *Notice of Intention to Review and Rescind or Revise the Clean Water Rule* in the Federal Register, 82 FR 12532.

On May 8, Scott Pruitt, the Environmental Protection Agency (EPA) Administrator, and Douglas Lamont, Senior Official for the U.S. Army Corps of Engineers (Corps), sent a letter to governors seeking input from the states on a new definition of “waters of the United States” protected under the Clean Water Act (CWA), including how each state “might respond to a reduced scope of federal jurisdiction under the [CWA].” The letter notes that consulting with state and local government officials—or their representative national organizations--before proposing regulations with federalism implications is a priority for this Administration. “We hope to keep the states at the forefront of our mission[,] and your input during the federalism process will enable us to do that effectively.”

As a first step, the agencies are “re-codifying the regulation that was in place prior to the issuance of the Clean Water Rule,” which is what the agencies are currently implementing under the 6th Circuit’s nationwide stay of the rule. The second step for the agencies is to propose a new definition of protected waters that is consistent with the opinion of Justice Scalia in *Rapanos v. United States*, 547 U.S. 715 (2006). The agencies note that the federalism consultation began with an initial meeting on April 19, with state and local government associations. “In addition to discussions our respective staffs will have with associations and individual state environmental agencies, we are reaching out to you directly to ensure we received the benefit of your particular state’s experiences and
expertise. The agencies are soliciting written comments from state and local governments until June 19, 2017.” Following that will be a public notice-and-comment rulemaking.

**Work-to-Date:** In 2013, the WSWC wrote EPA and the Corps a series of five letters requesting greater state consultation in the development of the rule. In March 2014, the WSWC sent another letter to EPA and the Corps, setting forth a list of additional consensus comments on the rulemaking. The Western Governors’ Association (WGA) sent a subsequent letter on March 25, 2014, that cited the WSWC’s letter and urged the agencies to consult with the states individually and through the WGA before taking further action on the rulemaking.

The WSWC adopted Position #369 regarding CWA rulemaking efforts on July 18, 2014, during its summer meetings in Helena, Montana. The resolution served as the basis of a comment letter the WSWC sent to EPA and the Corps on October 15, 2014. That letter called for the creation of a state-federal workgroup to refine and revise the rule and set forth a number of requested changes.

**2017-2018:** The Committee will continue to work with the Water Resources and Legal Committees through the Workgroup to follow and comment on the further development and/or implementation of the jurisdictional rule and other federal actions regarding CWA jurisdiction in accordance with the WSWC’s positions.

**Time Frame:** Ongoing

CWA Rulemaking Workgroup: Michelle Hale (AK), Trisha Oeth (CO), Barry Burnell (ID), Tom Stiles (KS), Jennifer Verleger (ND), Julie Cunningham (OK), Todd Chenoweth (TX), Laura Driscoll (WA), and Bill DiRienzo (WY).

*See Item 2 of the Legal Committee Workplan

**b. State Revolving Funds (SRFs) and Infrastructure Financing**

**Background:** Over the years, some budget requests from the Administration have proposed cuts to the SRF programs. Various acts of Congress have also authorized or retained a number of limitations on the use of SRF funds, including but not limited to: (1) “Buy American” provisions for iron and steel; (2) requirements that between 20% and 30% of SRF funds be used for principal forgiveness, negative interest loans, or grants subject to additional provisions; and (3) requirements that states use at least 10% of their SRF funds for green infrastructure, water or energy efficiency improvements, or other “environmentally innovative” activities.

On April 10, 2017, the Water Infrastructure Finance and Innovation Act (WIFIA) program closed its first selection round for credit assistance. EPA received 43 letters of interest from entities seeking loans to fund water infrastructure projects located all around the country. In this round, EPA will make available the up to $17 million of budget
authority appropriated to provide approximately $1 billion in credit assistance. Prospective borrowers requested more than $6 billion in credit assistance to support over $12 billion in total infrastructure investment press release.

WSWC Position #404 urges the Administration and Congress to provide greater flexibility and fewer restrictions on state SRF management and stable and continuing appropriations to the SRF capitalization grants at funding levels that are adequate to help states address their water infrastructure needs. WGA resolution 2017-04, Water Quality in the West, also supports the SRFs as “important tools” and requests greater flexibility and fewer restrictions on state SRF management.

2017-2018: The Committee will support the WGA and WSWC positions. In particular, WSWC staff will continue to update the Committee on developments within Congress and the Administration that have the potential to impact the SRFs. As needed, Committee members and WSWC staff will also meet with the Administration and Congress to further the objectives of the WGA and WSWC positions. Some topics for discussion include state experiences with Buy American and Davis-Bacon, whether there are otherwise eligible entities, and how many, that are walking away from SRFs because of these restrictions, the right of first refusal of the SRF prior to funding projects by WIFIA, and first round funded WIFIA projects in member states.

Time Frame: Ongoing

c. EPA’s Water Transfers Rule

Background: On January 18, 2017, the 2nd Circuit upheld the EPA’s Water Transfers Rule, 40 CFR §122.3(i), in Catskills Mountains Chapter of Trout Unlimited v. EPA, No. 14-01991. The Court of Appeals reversed the decision of the U.S. District Court for the Southern District of New York, which previously vacated the EPA’s rule.

Paragraph B(2)(c) of WGA Resolution #2017-04 and WSWC Position #382 generally support EPA’s Water Transfers Rule (40 C.F.R. § 122.3(i)), which clarifies that water transfers from one “navigable” water to another are exempt from National Pollutant Discharge Elimination System (NPDES) permitting under Section 402 of the CWA. The rule states that transfers do not require NPDES permits if they do not add pollutants and if there is no intervening municipal, industrial, or commercial use between the diversion and the discharge of the transferred water.

Efforts are underway to codify the Water Transfers Rule, seeking support from WGA, WSWC, and other state organizations.

2017-2018: The Committee and WSWC staff will: (1) continue to support the WGA and WSWC positions; (2) monitor any and all activities impacting EPA’s rule, including but not limited to the Second Circuit litigation and possible efforts by EPA to reconsider the
rule; (3) inform the WSWC of ongoing developments; and (4) take any other actions needed to support the WGA/WSWC positions regarding the rule.

**Time Frame:** Ongoing

d. **Nutrients**

**Background:** EPA’s Office of Water released the Nancy Stoner memo *Working in Partnership with States to Address Phosphorus and Nitrogen Pollution through Use of a Framework for State Nutrient Reductions* on March 16, 2011, and the Joel Beauvais memo *Renewed Call to Action to Reduce Nutrient Pollution and Support for Incremental Actions to Protect Water Quality and Public Health* on September 22, 2016.

The Beauvais memo highlights the continued need for action by states and other stakeholders to reduce the threat of nutrients to water quality and public health by

- Reducing impacts to public health from nitrates in sources of drinking water and from nitrogen and phosphorus pollution contributing to harmful algal blooms;
- Reducing nutrients from point and nonpoint sources;
- Prioritizing watersheds and setting load reductions;
- Strengthening water quality standards;
- Highlighting high priority incremental actions of states;
- Issuing biennial reports that assess progress and provide accountability, and
- EPA continuing to provide support and financial assistance.

**Work-to-Date:** The Committee and WSWC staff have followed and updated the WSWC on EPA efforts involving nutrients. Various Committee meetings have also featured presentations from EPA and state officials on federal and state nutrient management efforts.

Paragraph B(3)(b) of WGA Resolution #2017-04 states that “…nutrients …should not be treated like other pollutants that have clear and consistent thresholds over a broad range of aquatic systems and conditions.” The WGA’s resolution further states that states should have “sufficient flexibility” to utilize their own incentives and authorities to establish standards and control strategies to address nutrient pollution, rather than “being forced to abide by one-size-fits-all federal numeric criteria.” According to the WGA’s resolution, successful tools currently in use by states include best management practices, nutrient trading, and controlling other water quality parameters, among other “innovative” approaches.

**2017-2018:**
The Committee and WSWC staff will monitor any changes to EPA’s nutrient efforts under the current administration, including those related to Harmful Algae Blooms (HABs)/ EPA cyanotoxin criteria and inform members of ongoing developments. Each state is encouraged to develop its own strategy to control nutrient pollution. The Committee will ask states with a strategy to share highlights from their nutrient and
HABs strategies and efforts that they think could benefit other Council members with the Committee.

The Association of Clean Water Administrators has a Nutrient Working Group developing a Nutrients Reduction Progress Tracker. The Committee’s efforts will complement those of the ACWA Working Group, but may include information from ACWA’s efforts of interest to Committee members.

**Time Frame:** Ongoing

e. **Tribal Treatment as States Background:** In 2016, EPA finalized two separate but related rulemaking efforts regarding the tribes’ ability to obtain “treatment as states” (TAS) status under CWA §518, necessary for delegation of regulatory programs to the tribes. The first involved an interpretive rule regarding inherent authority of tribes, considering CWA §518 an express delegation of authority from Congress. The second rule sets forth a regulatory process for TAS status to operate impaired listing and total maximum daily load (TMDL) programs. WSWC and various states sent letters commenting on concerns with how the programs would implemented.

EPA also engaged in a pre-rulemaking outreach to states, tribes, and other stakeholders, soliciting input on setting federal baseline water quality standards for tribes without TAS status. WSWC submitted comments in December 2016, and the proposed rulemaking continues on EPA’s regulatory agenda in 2017.

**2017-2018:** The Committee will continue to monitor these rulemakings and their implementation and engage with EPA as appropriate.

**Time Frame:** Ongoing

f. **Abandoned Hardrock Mine Remediation**

**Background:** A number of Good Samaritan bills have been introduced in Congress over the years, including legislation introduced by Senator Mark Udall (D-CO). These bills have been unsuccessful due to concerns about the potential impacts of amending the CWA and perceptions that sufficient protections already exist under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). However, considerable uncertainty exists as to whether CERCLA and other existing authorities provide Good Samaritans with sufficient protection from third party lawsuits for sites in which there is a continuing discharge of pollutants as defined by the CWA.

In December 2012, the Environmental Protection Agency (EPA) issued a memorandum to clarify administrative protections for Good Samaritans. EPA’s regulations require operators of sites that continue to discharge pollution after cleanup to obtain NPDES permits under the CWA. The memorandum clarifies that Good Samaritans who complete cleanup efforts pursuant to EPA policies will not be considered “operators” responsible for obtaining NPDES permits if they lack: (1) access and authority to enter the site; (2) an
ongoing contractual agreement or relationship with the site owner to control discharges; (3) power or responsibility to make timely discovery of changes to the discharges; (4) power or responsibility to direct persons who control the mechanisms, if any, causing the discharges; and (5) power or responsibility to prevent and abate the environmental damage caused by the discharges. Nevertheless, the memorandum states that it “...does not address or resolve all potential liability associated with discharges from abandoned mines.”

**Work-to-Date:** The WGA and WSWC have long supported legislation to amend the Clean Water Act (CWA) to protect authorized third parties, or “Good Samaritans,” who voluntarily clean up abandoned hardrock mines, from inheriting perpetual liability for the site under the CWA (WGA Policy Resolution #2016-07).

Over the past several years, the Committee has worked to support Good Samaritan legislation and other efforts to clean up abandoned hardrock mines, including multiple visits with Congress and the Administration, Congressional testimony in support of such legislation, and involvement in a WGA-organized Task Force focused on crafting an exemption for Good Samaritan activities by state governments.

**2017-2018:** The Committee will coordinate with the WGA and encourage efforts to clean up abandoned hardrock mines, including but not limited to enactment of Good Samaritan legislation and efforts to support utilization of EPA’s 2012 memorandum. As part of this effort, the Committee will work with key Congressional members/staff, Administration officials, and other stakeholders to develop and support efforts to clean up abandoned hardrock mines in accordance with the WGA’s policies, including the possible development of a workgroup and/or workshop to bring together interested stakeholders to identify ways to facilitate abandoned hardrock mine remediation.

In addition to the above actions, the Committee will: (1) work with the Administration and Congress to provide liability protections to Good Samaritans under existing authorities; and (2) evaluate the prospects for Good Samaritan legislation.

**Time Frame:** Ongoing

3. **HYDRAULIC FRACTURING**

**Background:** In June 2015, the Environmental Protection Agency (EPA) published a study on the relationship between hydraulic fracturing and drinking water, titled “Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources.” In March 2015, the Bureau of Land Management (BLM) issued a final rule for hydraulic fracturing on public lands, which includes a variance process that would allow states to propose their own standards if they can prove that their regulations meet or exceed the requirements in BLM’s rule. In addition, EPA, the Department of Energy (DOE), and the Department of the Interior (DOI) agreed in April 2012 to develop a “Multi-Agency Unconventional Oil and Gas Research Program” to support policy decision by relevant state and federal agencies. The effort is intended to help support the White House’s March 2011 “Blueprint for a Secure Energy Future.”

The Western Governors’ Association (WGA) Resolution #2017-4 and WSWC Position #393 state that: (1) federal efforts involving hydraulic fracturing should leverage state knowledge, experience, policies, and regulations; (2) such efforts should be limited, based upon sound science, and driven by states; and (3) that both organizations oppose any and all efforts that would diminish the primary and exclusive authority of states over the allocation of water resources used in hydraulic fracturing.

**2017-2018:** The Committee will work with the Water Resources and Legal Committees to support the WGA and WSWC positions, and will continue to monitor and update the WSWC on developments involving hydraulic fracturing, including but not limited to EPA’s study, BLM’s rule, and the EPA/DOE/DOI research program.

The Committee will also work in collaboration with the Water Resources and Legal Committees to prepare a summary of the applicable WSWC states’ experiences with hydraulic fracturing. The summary will complement previous reports by the Groundwater Protection Council and others that describe how state programmatic elements and regulations ensure that hydraulic fracturing does not impair water resources and environmental values. Examples of the types of information sought for the summary include but are not limited to: (1) the impacts of hydraulic fracturing on water quality, if any; (2) examples of how state regulations and other efforts protect water quality; (3) the economic benefits of hydraulic fracturing; (4) water supplies and amounts used for hydraulic fracturing; (5) state interaction with federal agencies involving hydraulic fracturing; and (6) the degree to which states utilize oil and gas taxes and other revenue related to hydraulic fracturing to fund water-related efforts, including but not limited to water planning, water management, and water regulation and protection. WSWC staff will prepare the summary under the direction of the Committees, and will gather the necessary information through independent research and focused telephone interviews with select staff from the applicable WSWC state agencies. WSWC staff will also coordinate with other relevant state associations and organizations to avoid duplicating prior efforts. It is envisioned that the full WSWC will review the summary.

**Time Frame:** 2016-2018, pending available staff time and resources.
1. WATER QUALITY/QUANTITY NEXUS

**Work-to-Date:** Paragraph (B)(3) of WGA Resolution #2015-08 states: “Western Governors believe effective solutions to water resource challenges require an integrated approach among states and with federal, tribal and local partners. Federal investments should assist states in implementing state water plans designed to provide water for municipal, rural, agricultural, industrial and habitat needs, and should provide financial and technical support for development of watershed and river basin water management plans when requested by states. Integrated water management planning should also account for flood control, water quality protection, and regional water supply systems. Water resource planning must occur within a framework that preserves states’ authority to manage water through policies which recognize state law and the financial, environmental and social values of the water resource to citizens of the western states today and in the future.” (emphasis added)

On October 6-7, 2015, the Water Quality Committee held a workshop in conjunction with the WSWC’s 2015 fall meetings in Manhattan, Kansas. The workshop provided insights on: (1) how state water quantity and quality regulations interact with each other; (2) how states can protect water quality within the existing framework of the prior appropriation doctrine; and (3) the proper relationship between federal environmental protections and the states’ primary and exclusive authority over the allocation of water resources. WSWC staff prepared a preliminary report of the meeting, which included recommendations for WSWC next steps.

**2017-2018:** The Committee will produce findings and policy options from the WQ2 workshop for the WSWC to consider as it supports WGA Resolution #2015-08. The Committee will also follow up on the next steps recommended in the WQ2 workshop, including: (1) create a nexus Toolbox of useful and accessible information, including interagency MOUs, instream flow legislation, case studies, and reports of additional workshops, to provide a resource for the states seeking to learn from each other’s experiences; (2) create a subcommittee to provide a more focused review of the 1997 WSWC report on Water Quantity/Water Quality Interrelationships: Western State Perspectives; and (3) identify and coordinate with federal agencies and other technical or national organizations with common interests to co-host educational workshops or symposia on relevant nexus topics, both to develop better relationships and to find additional potential solutions to nexus problems. (4) provide updated information from states on current water quality-water quantity issues at Council meetings.

**Time Frame:** Ongoing

WQ2 Nexus Workgroup: Walt Baker (UT), Kent Woodmansey (SD), Tom Stiles (KS)

2. CLEAN WATER ACT ISSUES

There are a number of ongoing Clean Water Act (CWA) issues that pertain to WSWC policies or are otherwise of interest that the Committee will monitor and address on an as needed basis. These issues are listed below in order of priority.
a. **CWA Jurisdiction**

**Background:** In 2011, the EPA and the U.S. Army Corps of Engineers released draft guidance intended to provide clearer, more predictable guidelines for determining which water bodies are subject to Clean Water Act (CWA) jurisdiction, consistent with the U.S. Supreme Court’s decisions in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001), and *Rapanos v. United States*, 547 U.S. 715 (2006). This was followed by the WOTUS Rule, finalized on June 29, 2015 (80 FR 37054). Many of our member states filed lawsuits challenging the WOTUS Rule in federal court. Subsequent motions centered primarily on the issue of which courts had jurisdiction to hear the lawsuits, and the procedural matter is now before the U.S. Supreme Court.

On February 28, 2017, the Trump Administration issued an Executive Order, *Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the “Waters of the United States” Rule*, directing the EPA and Corps to review the WOTUS Rule for consistency with the stated policy of keeping the navigable waters free of pollution while also promoting economic growth, reducing regulatory uncertainty, and respecting the roles of Congress and the States. The EO specifically directs the agencies to interpret “navigable waters” consistent with the opinion of Justice Scalia in the Rapanos case. On March 6, 2017, the agencies published a *Notice of Intention to Review and Rescind or Revise the Clean Water Rule* in the Federal Register, 82 FR 12532.

On May 8, Scott Pruitt, the Environmental Protection Agency (EPA) Administrator, and Douglas Lamont, Senior Official for the U.S. Army Corps of Engineers (Corps), sent a letter to governors seeking input from the states on a new definition of “waters of the United States” protected under the Clean Water Act (CWA), including how each state “might respond to a reduced scope of federal jurisdiction under the [CWA].” The letter notes that consulting with state and local government officials—or their representative national organizations—before proposing regulations with federalism implications is a priority for this Administration. “We hope to keep the states at the forefront of our mission[,] and your input during the federalism process will enable us to do that effectively.”

As a first step, the agencies are “re-codifying the regulation that was in place prior to the issuance of the Clean Water Rule,” which is what the agencies are currently implementing under the 6th Circuit’s nationwide stay of the rule. The second step for the agencies is to propose a new definition of protected waters that is consistent with the opinion of Justice Scalia in *Rapanos v. United States*, 547 U.S. 715 (2006). The agencies note that the federalism consultation began with an initial meeting on April 19, with state and local government associations. “In addition to discussions our respective staffs will have with associations and individual state environmental agencies, we are reaching out to you directly to ensure we received the benefit of your particular state’s experiences and
expertise. The agencies are soliciting written comments from state and local governments until June 19, 2017.” Following that will be a public notice-and-comment rulemaking.

In September 2013, the EPA and Corps withdrew the draft guidance. At the same time, the agencies announced that they had submitted a draft rule to clarify the extent of CWA jurisdiction to the Office of Management and Budget (OMB) for interagency review. On April 21, 2014, EPA and the Corps published a proposed rule in the Federal Register with an initial 90-day public comment period that was later extended to October 20, 2014.

Work-to-Date: In 2013, the WSWC wrote EPA and the Corps a series of five letters requesting greater state consultation in the development of the rule. In addition, the WSWC created a CWA Rulemaking Workgroup to gather information on the WSWC member states’ perspectives regarding the rulemaking and to identify further areas of consensus among the western states. In March 2014, the workgroup developed a letter that the WSWC sent another letter to EPA and the Corps, setting forth a list of additional consensus comments on the rulemaking. The Western Governors’ Association (WGA) sent a subsequent letter on March 25, 2014, that cited the WSWC’s letter and urged the agencies to consult with the states individually and through the WGA before taking further action on the rulemaking.

The 90-day public comment period was extended to October 20, 2014, following requests from the WGA and other organizations for an extension. Following the rule’s publication, EPA and the Corps engaged in a series of calls with the WSWC to discuss the states’ questions and concerns about the rulemaking. WSWC Water Quality Committee Chair J.D. Strong of Oklahoma also testified on behalf of the WSWC and the WGA before the House Transportation and Infrastructure Committee regarding the rule on June 11, 2014.

The WSWC adopted Position #369 regarding CWA rulemaking efforts on July 18, 2014, during its summer meetings in Helena, Montana. The resolution replaces WSWC Position #330.5 and served as the basis of a comment letter the WSWC sent to EPA and the Corps on October 15, 2014. That letter called for the creation of a state-federal workgroup to refine and revise the rule and set forth a number of requested changes.

On June 29, 2015, the EPA and the Corps published their final rule in the Federal Register.

2017-2018: The Committee will continue to work with the Water Resources and Legal Committees through the Workgroup to follow and comment on the further development and/or implementation of the jurisdictional rule and other federal actions regarding CWA jurisdiction in accordance with the WSWC’s positions.

Time Frame: Ongoing

CWA Rulemaking Workgroup: Michelle Hale (AK), Trisha Oeth (CO), Barry Burnell (ID), Tom Stiles (KS), Jennifer Verleger (ND), J.D. Strong, Julie Cunningham (OK), Todd Chenoweth (TX), Walt Baker (UT), Laura Driscoll (WA), and Bill DiRienzo (WY).

*See Item 2 of the Legal Committee Workplan
b. State Revolving Funds (SRFs) and Infrastructure Financing

**Background:** Over the years, some budget requests from the Administration have proposed cuts to the SRF programs. Various acts of Congress have also authorized or retained a number of limitations on the use of SRF funds, including but not limited to: (1) “Buy American” provisions for iron and steel; (2) requirements that between 20% and 30% of SRF funds be used for principal forgiveness, negative interest loans, or grants subject to additional provisions; and (3) requirements that states use at least 10% of their SRF funds for green infrastructure, water or energy efficiency improvements, or other “environmentally innovative” activities.

On April 10, 2017, the Water Infrastructure Finance and Innovation Act (WIFIA) program closed its first selection round for credit assistance. EPA received 43 letters of interest from entities seeking loans to fund water infrastructure projects located all around the country. In this round, EPA will make available the up to $17 million of budget authority appropriated to provide approximately $1 billion in credit assistance. Prospective borrowers requested more than $6 billion in credit assistance to support over $12 billion in total infrastructure investment press release.

For FY 2017, the President’s budget request seeks $2B for the Clean Water and Drinking Water SRFs. Legislation introduced in the 114th Congress (H.R. 4653) would reauthorize the SRF, with spending of up to $3.1 billion for FY2017, increasing to $5.5 billion in FY2021. The SRF authorization expired in 2003, but Congress has continued to fund the program, appropriating $863 million in last year’s spending bill.

**Work to Date:** WSWC Position #404364 urges the Administration and Congress to provide greater flexibility and fewer restrictions on state SRF management and stable and continuing appropriations to the SRF capitalization grants at funding levels that are adequate to help states address their water infrastructure needs. WGA resolution 2014-2017-04, Water Quality in the West, also supports the SRFs as “important tools” and requests greater flexibility and fewer restrictions on state SRF management.

2017-2018: The Committee will support the WGA and WSWC positions. In particular, WSWC staff will continue to update the Committee on developments within Congress and the Administration that have the potential to impact the SRFs. As needed, Committee members and WSWC staff will also meet with the Administration and Congress to further the objectives of the WGA and WSWC positions. Some topics for discussion include state experiences with Buy American and Davis-Bacon, whether there are otherwise eligible entities, and how many, that are walking away from SRFs because of these restrictions, the right of first refusal of the SRF prior to funding projects by WIFIA, and first round funded WIFIA projects in member states.

**Time Frame:** Ongoing

c. EPA’s Water Transfers Rule
**Background:** On January 18, 2017, the 2nd Circuit upheld the EPA’s Water Transfers Rule, 40 CFR §122.3(i), in *Catskills Mountains Chapter of Trout Unlimited v. EPA*, No. 14-01991. The Court of Appeals reversed the decision of the U.S. District Court for the Southern District of New York, which previously vacated the EPA’s rule.

On March 28, 2014, the U.S. District Court for the Southern District Court of New York (SDNY) vacated the rule in *Catskills Mountain Chapter of Trout Unlimited v. EPA (Catskills II)*, 2014 U.S. Dist. LEXIS 42545 (S.D.N.Y., March 2014). Among other things, the court reasoned that many of the types of conveyances contemplated by the rule would not be considered navigable waters under the jurisdictional standards set forth in the U.S. Supreme Court’s *Rapanos* decision. The SDNY court further opined that language in the CWA regarding state rights and state primacy over water allocation support an interpretation that allows for a federal role in water allocation. EPA has appealed this decision to the Second Circuit Court of Appeals, along with 11 western states* and a number of western water providers that have intervened in the action to uphold the rule. California has also filed an amicus brief in support of the rule.

On August 21, 2015 a Ninth Circuit panel affirmed (on other grounds) a district court decision in *Oregon Natural Resources Center Action v. U.S. Bureau of Reclamation* that the Bureau of Reclamation was not required to obtain a Clean Water Act (CWA) §402 permit for waters transferred through a drain as part of the Klamath Irrigation Project. The lower court held that the Bureau of Reclamation was exempt from the permit requirement under the Environmental Protection Agency’s (EPA) Water Transfers Rule, 40 CFR §122.3(i). The 9th Circuit panel relied instead on a subsequent “meaningfully distinct” test from a 2013 U.S. Supreme Court decision in *Los Angeles County Flood Control District v. Natural Resources Defense Council*, 133 S. Ct. 710. In that case, the Supreme Court held that “no pollutants are ‘added’ to a body of water when water is merely transferred between different portions of that water body.” The panel found this a “simpler path” than deciding whether the Water Transfers Rule is properly within EPA’s authority, as is the issue currently before the 2nd Circuit in *Catskills Mountains Chapter of Trout Unlimited v. EPA*, No. 14-01991.

**Work to Date:** Paragraph B(2)(c) of WGA Resolution #2017-04 and WSWC Position #342 generally support the WGA’s Water Transfers Rule (40 C.F.R. § 122.3(i)), which clarifies that water transfers from one “navigable” water to another are exempt from National Pollutant Discharge Elimination System (NPDES) permitting under Section 402 of the CWA. The rule states that transfers do not require NPDES permits if they do not add pollutants and if there is no intervening municipal, industrial, or commercial use between the diversion and the discharge of the transferred water.

Efforts are underway to codify the Water Transfers Rule, seeking support from WGA, WSWC, and other state organizations.

**2017-2018:** The Committee and WSWC staff will: (1) continue to support the WGA and WSWC positions; (2) monitor any and all activities impacting EPA’s rule, including but

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* The 11 intervening states include: Alaska, the Arizona Department of Water Resources, Colorado, Idaho, Nebraska, Nevada, North Dakota, New Mexico, Texas, Utah, and Wyoming.
not limited to the Second Circuit litigation and possible efforts by EPA to reconsider the rule; (3) inform the WSWC of ongoing developments; and (4) take any other actions needed to support the WGA/WSWC positions regarding the rule.

**Time Frame:** Ongoing

d. **Nutrients**

**Background:** EPA’s Office of Water is working to carry out a National Nutrient Strategy to accelerate state adoption of numeric water quality standards while building the scientific and technical infrastructure needed to develop new criteria to address nitrogen and phosphorus pollution.

On March 16, 2011, then EPA Acting Assistant Administrator for Water Nancy Stoner issued a memo to EPA’s Regional Administrators to synthesize key principles regarding the agency’s technical assistance and collaboration with states. The memo urged the regions to place new emphasis on working with states to achieve near-term reductions in nutrient loadings. Most notably, the memo provided a “Recommended Elements of a State Nutrients Framework” to serve as a tool to “…guide ongoing collaboration between EPA regions and states in their joint effort to make progress on reducing nitrogen and phosphorus pollution.” It also asked each region to use the framework as a basis for discussions with interested and willing states, the goal of which would be to tailor the framework to particular state circumstances.

**Background:** EPA’s Office of Water released the Nancy Stoner memo *Working in Partnership with States to Address Phosphorus and Nitrogen Pollution through Use of a Framework for State Nutrient Reductions* on March 16, 2011, and the Joel Beauvais memo *Renewed Call to Action to Reduce Nutrient Pollution and Support for Incremental Actions to Protect Water Quality and Public Health* on September 22, 2016.

The Beauvais memo highlights the continued need for action by states and other stakeholders to reduce the threat of nutrients to water quality and public health by:

- Reducing impacts to public health from nitrates in sources of drinking water and from nitrogen and phosphorus pollution contributing to harmful algal blooms;
- Reducing nutrients from point and nonpoint sources;
- Prioritizing watersheds and setting load reductions;
- Strengthening water quality standards;
- Highlighting high priority incremental actions of states;
- Issuing biennial reports that assess progress and provide accountability, and
- EPA continuing to provide support and financial assistance.

**Work-to-Date:** The Committee and WSWC staff have followed and updated the WSWC on EPA efforts involving nutrients. Various Committee meetings have also featured presentations from EPA and state officials on federal and state nutrient management efforts.

Paragraph B(3)(b) of WGA Resolution #2017-04 states that “…nutrients produced by non-point sources fall outside of NPDES jurisdiction and…should not be treated like

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**Comment [M2]:** Walt: noted that WGA’s statement seems to juxtapose permitting concerns with water quality nutrient criteria and standards. He recommended that WGA modify this statement to say “…excessive nutrients should not be treated like other pollutants that have clear and consistent thresholds over a broad range of aquatic systems and conditions”

Tony: We can send modification to WGA, noting that it will strengthen their resolution

Walt (email): I believe the WGA and WSWC positions should be to encourage each state to develop its own strategy to control nutrient pollution, as each sees fit. Further, it would be appropriate for the Committee to undertake putting together a separate and brief white paper on each WSWC members’ strategy (where one exists) for the purpose of other member states benefitting from approaches that others are employing.
other pollutants that have clear and consistent thresholds over a broad range of aquatic systems and conditions.” The WGA’s resolution further states that states should have “sufficient flexibility” to utilize their own incentives and authorities to establish standards and control strategies to address nutrient pollution, rather than “being forced to abide by one-size-fits-all federal numeric criteria.” According to the WGA’s resolution, successful tools currently in use by states include best management practices, nutrient trading, and controlling other water quality parameters, among other “innovative” approaches.

2017-2018: The Committee and WSWC staff will monitor EPA’s nutrient efforts and inform the WSWC of ongoing developments. It will also ensure that the WSWC’s efforts do not duplicate those of the Association of Clean Water Administrators. The Committee and WSWC staff will monitor any changes to EPA’s nutrient efforts under the current administration, including those related to Harmful Algae Blooms (HABs)/EPA cyanotoxin criteria and inform members of ongoing developments. Each state is encouraged to develop its own strategy to control nutrient pollution. The Committee will ask states with a strategy to share highlights from their nutrient and HABs strategies and efforts that they think could benefit other Council members with the Committee.

The Association of Clean Water Administrators has a Nutrient Working Group developing a Nutrients Reduction Progress Tracker. The Committee’s efforts will complement those of the ACWA Working Group, but may include information from ACWA’s efforts of interest to Committee members.

Time Frame: Ongoing

e. Tribal Treatment as States Rulemaking Efforts

Background: In 2016, EPA finalized two separate but related rulemaking efforts regarding the tribes’ ability to obtain “treatment as states” (TAS) status under CWA §518, necessary for delegation of regulatory programs to the tribes. The first involved an interpretive rule regarding inherent authority of tribes, considering CWA §518 an express delegation of authority from Congress. The second rule sets forth a regulatory process for TAS status to operate impaired listing and total maximum daily load (TMDL) programs. WSWC and various states sent letters commenting on concerns with how the programs would implemented.

EPA also engaged in a pre-rulemaking outreach to states, tribes, and other stakeholders, soliciting input on setting federal baseline water quality standards for tribes without TAS status. WSWC submitted comments in December 2016, and the proposed rulemaking continues on EPA’s regulatory agenda in 2017.

Background: EPA is engaged in two separate, but related rulemaking efforts regarding the tribes’ ability to obtain “treatment as states” (TAS) status under Section 518 of the CWA, which is needed for tribes to operate certain CWA regulatory programs.
The first effort involves the development of a possible interpretive rule that could do away with current requirements that tribes must demonstrate that they have inherent authority to operate CWA regulatory programs. EPA has indicated that such a reinterpretation would consider Section 518 to be an express delegation of authority from Congress. EPA conducted pre-proposal outreach with the states, including the WSWC in August 2014, and intends to publish an interpretive rule for public comment in mid to late 2015.

The second effort involves the development of a formal rule that will set forth the regulatory process by which tribes can obtain TAS status to operate the impaired water listing and total daily maximum daily load (TMDL) programs. EPA has indicated that Section 518 requires the development of the rule. The agency has also conducted pre-proposal outreach with the states, including the WSWC in October 2014, and intends to publish a draft rule for public comment in mid to late 2015.

2017-2018: The Committee will continue to monitor these rulemakings and their implementation and engage with EPA as appropriate.

Time Frame: Ongoing

f. Abandoned Hardrock Mine Remediation

Background: A number of Good Samaritan bills have been introduced in Congress over the years, including legislation introduced by Senator Mark Udall (D-CO). These bills have been unsuccessful due to concerns about the potential impacts of amending the CWA and perceptions that sufficient protections already exist under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). However, considerable uncertainty exists as to whether CERCLA and other existing authorities provide Good Samaritans with sufficient protection from third party lawsuits for sites in which there is a continuing discharge of pollutants as defined by the CWA.

In December 2012, the Environmental Protection Agency (EPA) issued a memorandum to clarify administrative protections for Good Samaritans. EPA’s regulations require operators of sites that continue to discharge pollution after cleanup to obtain NPDES permits under the CWA. The memorandum clarifies that Good Samaritans who complete cleanup efforts pursuant to EPA policies will not be considered “operators” responsible for obtaining NPDES permits if they lack: (1) access and authority to enter the site; (2) an ongoing contractual agreement or relationship with the site owner to control discharges; (3) power or responsibility to make timely discovery of changes to the discharges; (4) power or responsibility to direct persons who control the mechanisms, if any, causing the discharges; and (5) power or responsibility to prevent and abate the environmental damage caused by the discharges. Nevertheless, the memorandum states that it “…does not address or resolve all potential liability associated with discharges from abandoned mines.”

Work-to-Date: The WGA and WSWC have long supported legislation to amend the Clean Water Act (CWA) to protect authorized third parties, or “Good Samaritans,” who
voluntarily clean up abandoned hardrock mines, from inheriting perpetual liability for the site under the CWA (WGA Policy Resolution #20164-075).

Over the past several years, the Committee has worked to support Good Samaritan legislation and other efforts to clean up abandoned hardrock mines, including multiple visits with Congress and the Administration, Congressional testimony in support of such legislation, and involvement in a WGA-organized Task Force focused on crafting an exemption for Good Samaritan activities by state governments.

2017-2018: The Committee will coordinate with the WGA and encourage efforts to clean up abandoned hardrock mines, including but not limited to enactment of Good Samaritan legislation and efforts to support utilization of EPA’s 2012 memorandum. As part of this effort, the Committee will work with key Congressional members/staff, Administration officials, and other stakeholders to develop and support efforts to clean up abandoned hardrock mines in accordance with the WGA’s policies, including the possible development of a workgroup and/or workshop to bring together interested stakeholders to identify ways to facilitate abandoned hardrock mine remediation.

In addition to the above actions, the Committee will: (1) work with the Administration and Congress to provide liability protections to Good Samaritans under existing authorities; and (2) evaluate the prospects for Good Samaritan legislation.

**Time Frame:** Ongoing

3. **HYDRAULIC FRACTURING**

**Background:** In June 2015, the Environmental Protection Agency (EPA) published a study on the relationship between hydraulic fracturing and drinking water, titled “Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources.” In March 2015, the Bureau of Land Management (BLM) issued a final rule for hydraulic fracturing on public lands, which includes a variance process that would allow states to propose their own standards if they can prove that their regulations meet or exceed the requirements in BLM’s rule. In addition, EPA, the Department of Energy (DOE), and the Department of the Interior (DOI) agreed in April 2012 to develop a “Multi-Agency Unconventional Oil and Gas Research Program” to support policy decision by relevant state and federal agencies. The effort is intended to help support the White House’s March 2011 “Blueprint for a Secure Energy Future.”


**Work-to-Date:** The Western Governors’ Association (WGA) Resolution #20174-4 and WSWC Position #353-393 state that: (1) federal efforts involving hydraulic fracturing should leverage state knowledge, experience, policies, and regulations; (2) such efforts should be limited, based upon sound science, and driven by states; and (3) that both organizations oppose any and all efforts that would diminish the primary and exclusive authority of states over the allocation of water resources used in hydraulic fracturing.
**2017-2018:** The Committee will work with the Water Resources and Legal Committees to support the WGA and WSWC positions, and will continue to monitor and update the WSWC on developments involving hydraulic fracturing, including but not limited to EPA’s study, BLM’s rule, and the EPA/DOE/DOI research program.

The Committee will also work in collaboration with the Water Resources and Legal Committees to prepare a summary of the applicable WSWC states’ experiences with hydraulic fracturing. The summary will complement previous reports by the Groundwater Protection Council and others that describe how state programmatic elements and regulations ensure that hydraulic fracturing does not impair water resources and environmental values. Examples of the types of information sought for the summary include but are not limited to: (1) the impacts of hydraulic fracturing on water quality, if any; (2) examples of how state regulations and other efforts protect water quality; (3) the economic benefits of hydraulic fracturing; (4) water supplies and amounts used for hydraulic fracturing; (5) state interaction with federal agencies involving hydraulic fracturing; and (6) the degree to which states utilize oil and gas taxes and other revenue related to hydraulic fracturing to fund water-related efforts, including but not limited to water planning, water management, and water regulation and protection. WSWC staff will prepare the summary under the direction of the Committees, and will gather the necessary information through independent research and focused telephone interviews with select staff from the applicable WSWC state agencies. WSWC staff will also coordinate with other relevant state associations and organizations to avoid duplicating prior efforts. It is envisioned that the full WSWC will review the summary.

**Time Frame:** 2016-2018, pending available staff time and resources.
Tab H – Draft 2017-2018
Water Resources Committee
Work Plan
1. WATER AVAILABILITY & USE - WATER DATA EXCHANGE (WaDE)

Work to date: The Council continues to work with member states and federal agencies through the Western States Federal Agency Support Team (WestFAST) to build on efforts undertaken previously. A common WaDE portal has been created, with a link on the WSWC website, and a “live” version has been released with fourteen states already sharing some data via WaDE. Alaska, Montana and North Dakota are evaluating the resources required for them to participate.

These data are important for a number of applications. Some examples include, but are certainly not limited to: (a) state and regional water planning; (b) local watershed and urban planning and development; (c) siting of electric power generation and other energy production facilities; and (d) enabling a better understanding of the links between energy, water quantity and water quality.

WaDE will better enable the western states to share water use, water allocation, and water planning data with one another and with the federal government. It will also seek to improve the sharing of Federal data that supports state water planning efforts.

WaDE is consistent with and is seeking to collaborate with and integrate other national efforts, including the National Water Availability and Use Assessment (the Water Census), which is led by the U.S. Geological Survey (USGS), as well as federal open water data initiatives. WaDE will support these efforts by laying the groundwork for exchanging the core state data that may be used to support these studies, and in the future seek to incorporate into the WaDE portal available federal data.

Council staff are also working as part of a USGS Ad Hoc Group on a National Water Assessment to develop a strategic plan to improve the acquisition, storage and dissemination of data on existing surface and ground water supplies and uses, both consumptive and non-consumptive, identifying trends and common themes, including changing demographics, environmental policies, energy demands, and climate, etc.

Data collection, management, distribution and visualization are critical for sound decisionmaking, but related programs are often underappreciated and underfunded. The Council has a long history of working to support federal programs to maintain and improve the measurement, monitoring and management of western water resources and related data, including related Interior, NASA, NOAA and USDA programs (see Position #385 October 9, 2015 and # 396 September 30, 2016).

2017/2018: WSWC staff will continue working to help individual members states build their capacity to connect to and share data through WaDE. The Council will continue working with member states, USGS and various federal agencies to gather and disseminate water resources data using WaDE and other resources. The Council will also partner with USGS on facilitating funding to states for water data. The Committee, through a Subcommittee and various work groups, will continue to gather information on state water availability and use data and
summarize existing state capabilities. Work to help states to develop, disseminate, visualize and review data on water availability will continue. The WSWC is seeking other resources to assist states.

The Council will also communicate the critical need for federal water data related programs and will revise and renew its message to better bring attention to water data needs and develop strategies to meet those needs. Consistent reliable future funding will be one major focus. There are a number of items under this functional area. Part of this effort will be to highlight critical measuring and monitoring “tools” for any water management “toolbox,” and communicating their value for enhancing our ability to wisely manage water resources.

Subcommittee: Jeanine Jones (CA); David Barfield (KS); Tim Davis (MT); J.D. Strong (OK); Tom Byler (OR); Dr. Robert Mace (TX); and Eric Millis (UT). Dr. Mace also represents the WSWC on the federal Advisory Committee on Water Information (ACWI).

Timeframe: Ongoing

2. CDWR/WSWC S2S & IMIS WORKSHOPS

Work to date: The Western States Water Council (WSWC) and California Department of Water Resources (CDWR) entered into an agreement to assist in implementing Governor Jerry Brown’s emergency drought proclamation regarding improving agricultural water use efficiency and water conservation, through scoping efforts to improve subseasonal to seasonal (S2S) forecasting skill (2 weeks to one year) and identifying and describing Irrigation Management Information Systems (IMIS) and weather station networks, looking towards possible expansion of the California Irrigation Management Information System (CIMIS) into interstate watersheds, beginning with the Colorado River System, but also the Klamath River, as well as the Truckee Carson and Walker Rivers (California-Nevada group).

With regard to S2S forecasting, two workshops were held in 2015. Two additional workshops were held in 2016, one in College Park, Maryland at NOAA headquarters on April 29, and a final workshop June 6-9, in San Diego, California. The Council prepared a report on these meetings and an outreach publication with recommendations to NOAA on improvements regarding sub-seasonal to seasonal precipitation forecasting. Similarly, the Council coordinated an August 25-26 workshop on IMIS and prepared a summary report, completing our agreement with CDWR. The Council also coordinated an S2S workshop in San Diego on May 17-19, and is preparing a report.

2017/2018: Future S2S workshops are anticipated, as is work to support federal efforts to improve our predictive capabilities and skill. (Position #399, April 14, 2017)

Subcommittee:

Timeframe:
3. ENERGY & WATER RESOURCES – INTEGRATED MANAGEMENT

Work to date: The increase in demands for water to meet energy needs is raising interest in the interrelationship between water and power resources, including opportunities to better understand the energy-water nexus and maximize efficiencies. The Council has addressed various aspects of energy issues as they relate to water resources as part of its regular meetings, including the demand for water resources created by new energy development. Hydraulic fracturing is a current issue and long standing practice with which the states have considerable experience. (See Water Quality Committee workplan.) The use of water produced by energy development has also been discussed.

The Council has also urged the Administration and Congress to support Department of Energy hosted energy-water programs conducted at national laboratories (Position #395, July 15, 2016).

2017/2018: The Council actively participates with the Western Electric Coordinating Council (WECC) and related State Provincial Steering Group and Environmental Data Work Group. As resources permit, the Council will continue to compile existing information through WaDE addressing water availability and anticipated demands for energy resources development (and the implications for water use in the West). Further, the Council will consider and evaluate any federal legislation and other potential collaborative efforts in addressing energy and water needs. The Council will evaluate as appropriate specific energy and water related issues as they arise, such as hydraulic fracturing and other practices. Lastly, WECC/WSWC collaboration will continue.

Subcommittee:

Timeframe: Ongoing

4. DROUGHT, NIDIS and EXTREME WEATHER EVENTS

Work to Date: Drought is a recurring natural phenomenon, the effects of which can be minimized through appropriate planning and preparedness activities. The Council has expressed its support for federal applied research and hydroclimate data collection programs to assist water agencies at all levels of government in adapting to weather extremes and climate variability and change (Position #379, April 17, 2015 and #385 October 9, 2015). The Council also supports development of an improved western observing system for extreme precipitation events and research to better understand hydroclimate processes (Position #366, July 18, 2014). The Council’s Executive Director serves as Co-Chair of the National Integrated Drought Information System (NIDIS) Executive Council with NOAA.

2017/2018: The Committee will continue working to improve preparedness and response to drought, floods and other extreme events in cooperation with member states, the WGA and WestFAST. The Council will also continue to support and advise WGA and NOAA with respect to NIDIS, and other weather/climate monitoring and adaptation efforts (including RISAs work). The Council will work to evaluate proposed climate, drought and weather legislation and drought related authorities of federal agencies.

Subcommittee:
Time Frame: Ongoing

5. WESTERN WATER INFRASTRUCTURE PROJECTS AND PROGRAM FUNDING

Work to date: Many western states face overwhelming infrastructure financing needs, as well as declining budgets for ongoing services. The Council’s origins are associated with challenges to augment and better manage the West’s water supply. Augmenting the West’s water supply continues to be a priority. The Council has in the past prepared reports on state water resources programs and project cost sharing and financing and analyzed state water use fees. The Council has also convened symposia and summarized the proceeding. The Council also began compiling an updated summary of western state infrastructure financing authorities, funding sources, policies and programs (which has not been completed). The Council has also supported expenditures from the Reclamation Fund for authorized project purposes, including specifically authorized rural water supply projects and authorized projects as part of negotiated Indian water rights settlements.

2017/2018: The Council will continue to call on the Congress to ensure that revenues raised from the development of western resources, specifically revenues accruing to the Reclamation Fund, are appropriated and expended as intended for the development and management of western water resources (consistent with Position #367, July 18, 2014). The Council will otherwise support efforts to secure adequate federal funding to meet growing western water demands, and work to develop a strategy to communicate important infrastructure needs. The Council will include a focus on developing public-private partnerships to support this effort. The Council will sponsor a symposium on infrastructure needs, strategies, and federal and state programs.

Time Frame: Ongoing

6. STATE GROUNDWATER RECHARGE PROJECT PROGRAMS & POLICIES

Work to Date: The Council has in the past addressed groundwater management programs and policies, including recharge and aquifer storage and recovery projects. The Council prepared a number of reports covering financial feasibility, legal and institutional issues, and water reuse for recharge (1990-2012). Much of the work is now dated, and many changes have taken place.

2017/2018: Working with the Legal Committee and the Council, the Committee will update past reports on state groundwater management programs and especially efforts to promote conjunctive use of surface and groundwater resources through artificial aquifer storage and recovery projects.
1. WATER AVAILABILITY & USE - WATER DATA EXCHANGE (WaDE)

Work to date: The Council continues to work with member states and federal agencies through the Western States Federal Agency Support Team (WestFAST) to build on efforts undertaken previously. A common WaDE portal has been created, with a link on the WSWC website, and a “live” version has been released with fourteen states already sharing some data via WaDE. Beta version is being tested with data from California, Colorado, Idaho, Kansas, Utah and Wyoming. Sixteen states have been interviewed regarding their existing data systems. Oklahoma and Oregon will soon provide data, and work in Nebraska, Nevada, South Dakota, Texas and Washington is in progress. Moreover, a mapping tool has been created to allow states to review data. Alaska, Arizona, New Mexico, Montana and North Dakota and Washington are evaluating the resources required for them to participate.

These data are important for a number of applications. Some examples include, but are certainly not limited to: (a) state and regional water planning; (b) local watershed and urban planning and development; (c) siting of electric power generation and other energy production facilities; and (d) enabling a better understanding of the links between energy, water quantity and water quality.

WaDE will better enable the western states to share water use, water allocation, and water planning data with one another and with the federal government. It will also seek to improve the sharing of Federal data that supports state water planning efforts.

WaDE is consistent with and is seeking to collaborate with and integrate other national efforts, including the National Water Availability and Use Assessment (the Water Census), which is led by the U.S. Geological Survey (USGS), as well as federal open water data initiatives. WaDE will support these efforts by laying the groundwork for exchanging the core state data that may be used to support these studies, and in the future seek to incorporate into the WaDE portal available federal data.

Council staff are also working as part of a USGS Ad Hoc Group on a National Water Assessment to develop a strategic plan to improve the acquisition, storage and dissemination of data on existing surface and ground water supplies and uses, both consumptive and non-consumptive, identifying trends and common themes, including changing demographics, environmental policies, energy demands, and climate, etc.

Data collection, management, distribution and visualization are critical for sound decisionmaking, but related programs are often underappreciated and underfunded. The Council has a long history of working to support federal programs to maintain and improve the measurement, monitoring and management of western water resources and related data, including related Interior, NASA, NOAA and USDA programs (see Position #385 October 9, 2015 and #396 September 30, 2016 #345, October 12, 2012, and Position #357, October 3, 2013).
**2016/2017/2018**: WSWC staff will continue working to help individual members states build their capacity to connect to and share data through WaDE. This will entail some site visits, as well as regular communication among members and state information technology staff to gather, input and manage data, testing the schema and refining products for presenting consumptive use and water availability information for decisionmaking. The Council will continue working with member states, USGS and various federal agencies to gather and disseminate water resources data using WaDE and other resources. The Council will also partner with USGS on facilitating funding to states for water data. The Committee, through a Subcommittee and various work groups, will continue to gather information on state water availability and use data and summarize existing state capabilities. Work to help states to develop, disseminate, visualize and review data on water availability will continue. The WSWC is seeking other resources to assist states.

The Council will also communicate the critical need for federal water data related programs and will revise and renew its message to better bring attention to water data needs and develop strategies to meet those needs. Consistent reliable future funding will be one major focus. There are a number of items under this functional area. Part of this effort will be to highlight critical measuring and monitoring “tools,” for any water management “toolbox,” and communicating their value for enhancing our ability to wisely manage water resources.

**Subcommittee**: Jeanine Jones (CA); James Eklund (CO); David Barfield (KS); Tim Davis (MT); J.D. Strong (OK); Tom Byler (OR); Dr. Robert Mace (TX); and Eric Millis (UT). Dr. Mace also represents the WSWC on the federal Advisory Committee on Water Information (ACWI).

**Timeframe**: Ongoing

### 2. CDWR/WSWC S2S & IMIS WORKSHOPS

**Work to date**: The Western States Water Council (WSWC) and California Department of Water Resources (CDWR) entered into an agreement to assist in implementing Governor Jerry Brown’s emergency drought proclamation regarding improving agricultural water use efficiency and water conservation, through scoping efforts to improve subseasonal to seasonal (S2S) forecasting skill (2 weeks to one year) and identifying and describing Irrigation Management Information Systems (IMIS) and weather station networks, looking towards possible expansion of the California Irrigation Management Information System (CIMIS) into interstate watersheds, beginning with the Colorado River System, but also the Klamath River, as well as the Truckee Carson and Walker Rivers (California-Nevada group).

With regard to S2S forecasting, two workshops were held in 2015. Two additional workshops were held in 2016, one in College Park, Maryland at NOAA headquarters on April 29, and a final workshop June 6-9, in San Diego, California. The Council coordinated the meetings and will provide prepared a report on these meetings and an outreach publication to CDWR to include with recommendations to NOAA on improvements regarding sub-seasonal to seasonal precipitation forecasting. Similarly, the Council coordinated an August 25-26 workshop on IMIS and is preparing to a summary report, completing our agreement with CDWR.
Council also coordinated an S2S workshop in San Diego on May 17-19, and is preparing a report.

A number of preliminary scoping and planning calls have been held to perform an initial assessment of potential partner networks. An initial workshop will be held in Southern California’s Colorado River service area. Based on the outcome of the initial workshop, follow-up workshops will be scheduled in 2016.

2016/2017/2018: Future S2S workshops are anticipated, as is work to support federal efforts to improve our predictive capabilities and skill. (Position #399, April 14, 2017) Seasonal Precipitation Forecasting Workshops: April 29, 2016 and June 6-9, 2016. CIMIS Workshop: August 25-26, 2016. Summary reports and recommendations, deliverable in June and December.

Subcommittee:

Timeframe:

3. ENERGY & WATER RESOURCES – INTEGRATED MANAGEMENT

Work to date: The increase in demands for water to meet energy needs is raising interest in the interrelationship between water and power resources, including transportation fuels, and opportunities to better understand the energy-water nexus and maximize efficiencies. The Council has addressed various aspects of energy issues as they relate to water resources as part of its regular meetings, including the demand for water resources created by new energy development. Hydraulic fracturing is a current issue and long standing practice with which the states have considerable experience. (See Water Quality Committee workplan.) The use of water produced by energy development has also been discussed.

Since 2009, the Council has worked with the WGA to look at present and future water needs related to renewable and traditional energy production, and related impacts on water supplies. The Council has also urged the Administration and Congress to support Department of Energy hosted energy-water programs conducted at national laboratories (Position #395, July 15, 2016 #355, June 26, 2013).

In 2012, the Council completed a review of the water requirements for concentrated solar power development in the Southwest and related institutional issues and permitting requirements, which has been published by the National Renewable Energy Lab (NREL).

2016/2017/2018: The Council actively participates with the Western Electric Coordinating Council (WECC) and related State Provincial Steering Group and Environmental Data Work Group. As resources permit, the Council will continue to compile existing information through WaDE addressing water availability and anticipated demands for energy resources development (and the implications for water use in the West). Further, the Council will consider and evaluate any federal legislation and other potential collaborative efforts in addressing energy and water needs. The Council will evaluate as appropriate specific
energy and water related issues as they arise, such as hydraulic fracturing and other practices. Lastly, WECC/WSWC collaboration will continue.

Subcommittee:

Timeframe: Ongoing

4. DROUGHT, NIDIS and EXTREME WEATHER EVENTS

Work to Date: Drought is a recurring natural phenomenon, the effects of which can be minimized through appropriate planning and preparedness activities. The Council has expressed its support for federal applied research and hydroclimate data collection programs to assist water agencies at all levels of government in adapting to weather extremes and climate variability and change (Position #379, April 17, 2015 and #385 October 9, 2015). The Council also supports development of an improved western observing system for extreme precipitation events and research to better understand hydroclimate processes (Position #366, July 18, 2014). Since 2006, the Council has held a number of workshops related to climate adaptation and extreme events, including future drought and floods. The Council’s Executive Director serves as Co-Chair of the National Integrated Drought Information System (NIDIS) Executive Council with NOAA.

In May 2014, the Council collaborated with the National Oceanic and Atmospheric Administration (NOAA) to prepare and present a congressional briefing on the importance of atmospheric research and monitoring programs. In June 2014, the Council held a Hydroclimate Monitoring & Data Workshop in cooperation with California Department of Water Resources (CDWR) in San Diego, followed by a series of workshops in 2015-2016 on seasonal precipitation forecasting.

2016/17/2017/2018: The Council’s Executive Director has been asked to Co-Chair the National Integrated Drought Information System (NIDIS) Executive Council with NOAA. The Committee will continue working to improve preparedness and response to drought, floods and other extreme events in cooperation with member states, the WGA and WestFAST. The Council will also continue to support and advise WGA and NOAA with respect to NIDIS, and other weather/climate monitoring and adaptation efforts (including RISAs work). The Council will also continue to assist California’s DWR in an ongoing series of workshops. The Council will work to evaluate proposed climate, drought and weather legislation and drought related authorities of federal agencies.

Subcommittee:

Time Frame: Ongoing
5. WESTERN WATER INFRASTRUCTURE PROJECTS AND PROGRAM FUNDING

Work to date: Many western states face overwhelming infrastructure financing needs, as well as declining budgets for ongoing services. The Council’s origins are associated with challenges to augment and better manage the West’s water supply. Augmenting the West’s water supply continues to be a priority. The Council has in the past prepared reports on state water resources programs and project cost sharing and financing and analyzed state water use fees. In November 2010, the Council has also convened a symposium and summarized the proceeding in “Western Water Resources Infrastructure Strategies: Identifying, Prioritizing and Financing Needs.” The latest in the series of symposia was held in November 2012 in Phoenix, Arizona. The Council also began compiling an updated summary of western state infrastructure financing authorities, funding sources, policies and programs (which has not been completed). The Council has also supported expenditures from the Reclamation Fund for authorized project purposes, including specifically authorized rural water supply projects and authorized projects as part of negotiated Indian water rights settlements.

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6. STATE GROUNDWATER RECHARGE PROJECT PROGRAMS & POLICIES

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Tab I – InSAR Land Subsidence Monitoring Project
Droughts are accompanied by a host of troubles. The reduced surface water capture and supply results in more groundwater withdrawal, which in turn leads to ground subsidence that can impact infrastructure and even exacerbate future flooding in the very areas hardest hit by the drought.

Recent Drought in the United States

Drought is the consequence of abnormally low precipitation, reducing the surface water supply. In 2016 ~22% of the continental U.S. experienced moderate to extreme drought, and much of California was classified in the even more severe ‘exceptional’ drought category [U.S. Drought Monitor]. Although the western U.S. was hardest hit, droughts are by no means exclusive to the western states. The northeast, areas of the south, and parts of northern Georgia experienced the same exceptional drought in 2016 that plagued California. In fact, most of the southern states have experienced drought in recent years. Many areas, including the Georgia and California, have imposed water restrictions to safeguard dwindling water supplies. Agriculture is often hit hard by drought, because supplying drinking water is the highest priority.

Drought and Groundwater Withdrawal

During droughts, surface water flow declines, rivers run low, streams dry up, and reservoir inventories decline. Faced with little or no supply of water from runoff and snow melt, communities and businesses turn to an alternative source: aquifers, i.e., the underground reservoirs of water stored in water-boring rock.

The NISAR Mission – Reliable, Consistent Observations

The NASA-ISRO Synthetic Aperture Radar (NISAR) mission, a collaboration between the National Aeronautics and Space Administration (NASA) and the Indian Space Research Organization (ISRO), will provide all-weather, day/night imaging of nearly the entire land and ice masses of the Earth repeated 4-6 times per month. NISAR’s orbiting radars will image at resolutions of 5-10 meters to identify and track subtle movement of the Earth’s land and sea ice, and even provide information about what is happening below the surface. Its repeated set of high resolution images can inform resource management and be used to detect small-scale changes before they are visible to the eye. Products are expected to be available 1-2 days after observation, and within hours in response to disasters, providing actionable, timely data for many applications.

The water in the aquifers, called groundwater, is an extremely valuable resource, like a water savings account that can be drawn on when times are hard. The water in the aquifers originally was precipitation that made its way down through the soil and rock via cracks and pores. All aquifers are not created equal: aquifers can hold small or vast amounts of water and recharge, or replenish, quickly or slowly depending upon the type of rock, both in and above the aquifer. For example, clays hold very little water and water transfers very slowly through them, so layers of clay will separate aquifers which have very different recharging rates. In fact, it is common for an area to have multiple aquifers at different depths. Shallow aquifers of saturated soil and rock in contact with the surface are called unconfined aquifers, and their water store depends upon recent activities, i.e., sources (e.g., rainfall) and sinks (e.g., pumping via wells, drainage to streams). Recharge is slow in deeper aquifers that are isolated from the surface by less permeable material. These confined aquifers collect water mainly around the edges of or through holes in the overlying rock. For these aquifers, recharge can take hundreds to thousands of years.

Groundwater is a valuable and renewable source of water that can be tapped through wells, rechargeable by rain and surface water runoff. However, pumping can have both immediate and long term impact. The pumping can cause ground subsidence that leads to cracks in roads and bridges, lower levee walls, and can even change the path of runoff, leaving the area at higher risk of flooding. Over-pumping can cause collapse of the aquifer pores, permanently reducing the water storage capacity. For slowly recharging aquifers, the effective water supply is reduced simply because it takes so long for surface water to reach the aquifer. In this case, restoration is possible, simply not on the scale that is needed for a practical water supply. Consequences can be a devastating loss of land viability for agricultural or habitation.

Sustainable, low impact groundwater extraction is possible, though, given information about the aquifer and the surface changes associated with pumping. This is where imaging by satellite radars capable of measuring changes in surface elevation, like NISAR, has immediate and practical value. NISAR will image global land areas on repeated orbits, providing a time series of the surface uplift and subsidence. This information shows both the long-term decline in surface elevation, which corresponds to unrecoverable loss or slow recharge of groundwater, and a seasonal cycle of uplift and subsidence that correlates to a sustainable balance between precipitation and withdrawals. Armed with this information, users can protect this valuable renewable water asset over the long term, avoiding the terrible consequences of permanent loss of water supply.

Unintended Consequences: Drought Impact to the California Aqueduct

The California Aqueduct supplies water originating in northern California and the central California mountain ranges to residents and businesses throughout much of central and southern California. The over 400-mile long water conveyance system is a cornerstone of California’s water system, sustaining its populace and economy.

In 2014, as California entered the second year of extreme drought, groundwater pumping increased to replace the missing surface water. The figure to the right shows the cone of depression typical of new pumping from deep confined aquifers. In this case, the subsidence bowl extended across the California Aqueduct, which at its nearest is 0.5 mi from the center of the depression. The extensive subsidence caused the closest parts of the structure to sink more than 12".

Radar-derived map of ground subsidence in the Central Valley, California, associated with groundwater pumping [Farr et al., 2015]. UAVSAR, an airborne prototype of the NISAR instrument, was used for the study.
NISAR: The NASA-ISRO SAR Mission

Subsidence and a Sinking Landscape

Subsidence often goes unnoticed until the damage is done. Because land sinks too slowly or over too broad an area to be visible to the eye, the effects of subsidence are rarely recognized when they begin. Those same changes in land elevation can be detected from spaceborne synthetic aperture radar.

Subsidence: How Low Will It Go?

Subsidence, or the gradual sinking of the land surface, affects land, buildings and roads throughout the U.S. Even the Washington Monument has been affected. The iconic structure, built on the marshy shores of the Potomac River, has subsided by around 3 inches since its construction.

Subsidence occurs naturally in areas with high organic matter content in the soil through a combination of compaction and oxidation. For this reason, subsidence is often associated with swampy and coastal areas. However, the range of underlying causes is much more diverse, and includes geological factors, e.g., faults or sinkholes, plus a host of causes related to man’s use of land and resources. Regardless of the cause, the consequences can be severe: cracked foundations, warped roads and bridges, and more frequent flooding of cities and towns, all of which take an economic and sometimes personal toll on people.

A Sinking Feeling

Land subsidence frequently occurs at a very slow rate, much too slowly to be identified visually and often only detectable by advanced sensors. It often goes unnoticed until the consequences become manifestly evident – buckling bridges, cracked foundations, the too-frequent occurrence of 100-year (or more) floods. Often at that point the processes causing the ground to sink are well underway, and damage continues to accrue before they can be stopped. This insidious hazard is both difficult to identify and costly if not discovered.

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Subsidence is a problem that exists at different scales in numerous locations around the world. The sinking of San Francisco's Millennium Tower and across the city of New Orleans are just two examples. Decreased land elevation, the cumulative effect of long-term subsidence, has resulted in more frequent and deeper flooding. This can cause tidal waters or rainfall to generate nuisance flooding and even dangerously high water in some low-lying coastal cities. Knowledge of the extent and rate of the problem can help in making better choices for infrastructure investment and restoration activities that protect people and property. However, at the most basic level, improving resiliency and dealing with subsidence requires understanding the underlying processes driving the change, which will inform both immediate action and better modeling of future subsidence, flood risk, and ways to halt or reverse the sinking.

The sinking can be caused both by natural events and human actions, so elevation change at any given location depends on a unique set of local and regional conditions. Many measurements, spread across a broad scale and extending for a long time, are needed to tease out the relative contributions when multiple processes are involved. Human activities are often the primary contributor, including oil and gas extraction, groundwater pumping, and even drainage projects intended to reduce standing water. All of these activities can be performed in ways that do not cause damage, given proper information about the relationship between the activity and the ground movement.

Modern radar remote sensing methods can revolutionize the way that land is monitored, significantly increasing the number of areas where subsidence rates are measured. Instead of costly in-ground instruments, satellite-based instruments can detect changes in elevation of the ground and structures across large areas via a technique called synthetic aperture radar interferometry (InSAR). InSAR relies upon repeat imaging of an area from the same vantage point in space to measure changes in the distance between the radar antenna and the ground. To measure slow subsidence, a large number of repeated images collected at regular intervals for several years is needed. Space-based Earth observing radar instruments are able to measure subsidence hazards across a large enough region to encompass all at-risk cities in the United States. NASA's NISAR radar will be able to collect the needed images, and its products will be open access, available through the Alaska Satellite Facility.

Localized Land Subsidence Seen by Radar

New Orleans is one of the most endangered cities in the world. A large portion of the metropolitan area lies below mean sea level, while its location on the Mississippi River delta also puts it at risk of flooding from both gulf waters pushed inland during hurricanes and tropical storms, and from high water in the Mississippi River during springtime floods. Knowledge of subsidence 'hot spots' and their probable cause is particularly critical because, if undetected, unexpected flooding can endanger residents and property.

High resolution radar instruments can be used to identify the areas that are subsiding most rapidly, and can also identify subsiding or deforming structures, such as in a residential neighborhood shown at the right. In this example, radar interferometry (InSAR) shows that houses in the most recently developed area (yellow to orange) are subsiding more rapidly than houses in adjacent neighborhoods built in earlier years. This type of change could be normal consolidation of material added during construction, which would stop after a few years, or could indicate deeper, longer-lasting processes at work. Sustained, multi-year observations will provide the information needed to determine the cause.

Map showing subsidence in a suburb of New Orleans, Louisiana, produced using data from the NASA UAVSAR instrument [C. Jones et al., 2016]. UAVSAR is an airborne prototype for the upcoming NISAR mission, which will provide regularly repeated images of cities such as New Orleans.
The NISAR satellite mission will provide high-resolution ground movement maps on a global basis with weekly sampling. Observations will be uninterrupted by weather and facilitate safe resource development by improving understanding of processes that impact regions undergoing active extraction or injection of subsurface fluids.

**Managing Resources Underfoot**

The NISAR satellite mission will provide high-resolution ground movement maps on a global basis with weekly sampling. Observations will be uninterrupted by weather and facilitate safe resource development by improving understanding of processes that impact regions undergoing active extraction or injection of subsurface fluids.

**Fluid injection and extraction – finding the balance**

Efforts to utilize subsurface resources, including water, oil, and gas, necessarily involve the extraction and injection of large volumes of fluid from the ground – often in areas that also host valuable infrastructure and large population centers. Recent increases in earthquake activity in the central United States underscore the need to better understand how to manage the rates and volumes of fluid extraction and injection.

Observations of how the ground surface rises and falls above a fluid reservoir illuminate the changing environment at depth and enable informed management choices.

Image Credits: Kinematics seismograph by Yamaguchi; traffic by Leoboudv; pumpjack by Ficelloguy; Highway 302 by USGS

**Tracking the ground’s ups and downs**

Management of subsurface fluid reservoirs is critically important to the economic and environmental health of our society. Fluids such as oil, gas and water all must be extracted from the subsurface at considerable effort and expense. Fluids are also injected into the subsurface for a range of purposes, including disposal of wastewater byproducts from oil production, or to further stimulate the reservoir (oil, gas, or geothermal). These activities all occur deep underground, challenging our ability to determine the state of the resource. The relative inaccessibility of these resources means that the effects of management decisions can be difficult to assess.

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The past decade has seen a substantial increase in the number of earthquakes triggered by both injection and production of subsurface fluids, with Oklahoma now experiencing more earthquakes each year than California. Globally, radar imagery has already been used to characterize the extent of reservoir depletion around oil, gas and water wells, with renewed efforts by researchers to understand the complex networks of faults surrounding the areas of exploitation. The pattern of subsidence or uplift is a window into the pattern of fluid flow below – whether the activity is concentrated near the well as expected, or if it jumps into a neighboring region can be an important indicator of stability or problems to come.

The increased frequency of earthquakes in regions such as the central United States affects regional populations and infrastructure. Operations managers at individual well sites, insurance companies and disaster responders all require information about the probabilities of strong shaking and aftershocks after a large event to inform the public and manage disasters. Characterizing the current patterns of earthquakes we are experiencing will help us understand how to anticipate and mitigate future damage.

The energy needs of the world’s population will continue to grow, requiring new and innovative ways of meeting them. Satellites that provide synoptic views of the globe from space can aid us in monitoring and characterizing the effects of these efforts. The upcoming NISAR mission will have a dependable observation plan to collect high resolution images of 90% of the Earth’s land surfaces at regular intervals (12-day repeat orbits), which contrasts with monitoring by existing radar satellites, which typically focus only on areas of interest to the specific government or scientific agency that launched the mission. For instance, the oil fields in Texas and the central United States were not observed frequently, if at all, by most previous missions. The observations made over the lifetime of NISAR will be a giant step forward in our understanding of subsurface fluid flow and associated seismicity, and will inform the next generation of methods for characterizing and managing these resources.

**Increasing rates of earthquakes in the central United States.**

Recent advances in the technology used in hydrocarbon production, including enhanced oil recovery, are associated with a dramatic increase in earthquakes felt in the central United States since the mid-2000s. Damaging earthquakes only appear to be related to a small fraction of wells, but there is not yet enough data to definitively determine in advance the safety of operations at a particular site.

Earthquake locations derived from seismic data (see figure at right) illuminate part of the picture. New research shows that induced earthquakes may behave in slightly different ways than “natural” events, providing a potential pathway to better understanding and managing them. However, seismic data is blind to the slow, longer term deformation of the ground surface associated with pumping, injection and even slow, creeping movement on faults that will eventually rupture in a more damaging earthquake. NISAR can provide the missing link to this puzzle, complementing the available seismic data and helping to track how patterns of fluid flow beneath the surface relate to patterns of observed earthquakes.

**Seismic surge in Oklahoma**

![Seismic surge in Oklahoma](image)

Number of earthquake sequences each year that contain at least one magnitude 3 or larger earthquake, since 1973. From McGarr et al., 2015, in the journal Science.
Oil fields and aquifers imaged from space:

Monitoring changes in shallow aquifer systems and understanding the geologic controls on their basic configuration is rapidly becoming an essential challenge, as society attempts to respond to increased pressures on water resources. These challenges are present globally in arid regions, with the impacts acutely felt throughout the western United States, and especially in southern California. Historically, understanding regional aquifer systems has relied on monitoring wells that are sparsely distributed across impacted areas.

Satellite-based radar imagery, when available, can be used to characterize how the Earth’s surface warps and deforms above actively-managed oil and water reservoirs. However, these observations cannot be made when the ground surface changes significantly between image acquisitions – growth of crops, tilling of fields, trees shedding their leaves are all processes that degrade data quality. The regions in California shown below have had some of the best radar coverage available worldwide, but still contain areas with rapid change where the time interval between images is too long. Other regions, such as the Central United States, have had far less data coverage.

NISAR data would be acquired almost 3 times more frequently than the data used in the examples below, and would be acquired regularly over the entire United States. This would allow imaging of areas in Oklahoma, Texas and Kansas that experience both active agriculture and hydrocarbon/water resource development.

Examples:

Right: Rate of ground subsidence in Central California imaged using the European Space Agency's ENVISAT satellite, averaged over the time period 2008-2010 (color), overlain on Landsat imagery (grayscale). Both the results of extraction (red) and injection (blue) can be seen. Gray areas are regions where the ground surface changed significantly between images, due to crop growth and tilling of fields. Roads and cities still yield high-quality results.

Left: NISAR data will permit systematic mapping and monitoring of shallow aquifers. Both long term and seasonal changes cause movement of the surface. In many cases, mapping the timing of the maximum seasonal surface uplift or subsidence can delineate the boundaries of the subsurface aquifers with fine detail.

In this example, taken from the greater Los Angeles Metropolitan area in Southern California, color indicates the time during the year when peak motion occurs. The aquifer is characterized by sharp boundaries, some associated with faults that have ruptured in earthquakes.
FOR MORE INFORMATION:

General introduction:
https://earthquake.usgs.gov/research/induced/
http://nisar.jpl.nasa.gov/

Community reports


Relevant scientific papers.

Yang, Qi., et al. (2015), InSAR monitoring of ground deformation due to CO2 injection at an enhanced oil recovery site, West Texas, International Journal of Greenhouse Gas Control 41; doi: 10.1016/j.ijggc.2015.06.016.


Keranen, K. M. et al. (2014), Sharp increase in central Oklahoma seismicity since 2008 induced by massive wastewater injection, Science, 345; doi: 10.1126/science.1255802.


National Aeronautics and Space Administration

For more information, visit http://nisar.jpl.nasa.gov/applications

Jet Propulsion Laboratory / California Institute of Technology / Pasadena, California / www.jpl.nasa.gov

Landslides and other geologic hazards kill dozens of people and cause several billion dollars of damage every year in the United States. Landslides can also cause significant environmental damage and societal disruption.

### Landslides Can Move Slowly or Fail Catastrophically

Landslides and related slope movements can begin and move in a wide variety of ways, depending on the geology, soil and ground-water conditions, vegetation cover, and weather. Some landslides move at rates of a fraction of an inch per year and can remain active for periods of decades or longer, slowly causing damage to buildings, highways and other structures. Others fail catastrophically and travel at rates of tens of miles per hour, causing loss of infrastructure and life. Landslide sizes also vary greatly, from small shallow slumps and slides that are only a couple yards across to large deep-seated slides and flows that can reach lengths of several miles. Many landslides move multiple times, so reactivation is often a concern.

*Right: The La Conchita landslide that buried many houses in 2005, when a pre-existing landslide was reactivated and rapidly moved downslope (from USGS Open File Report 2005-1067).*

### Monitoring Ground Movement Associated with Landslides

Landslides occur in soil or rock when the gravitational force on a hillslope exceeds the strength of the rock or soil. Most often this occurs in areas with steep slopes, during or following heavy rainfall or snowmelt, and from shaking due to earthquakes.

### The NISAR Mission – Reliable, Consistent Observations

The NASA–ISRO Synthetic Aperture Radar (NISAR) mission, a collaboration between the National Aeronautics and Space Administration (NASA) and the Indian Space Research Organization (ISRO), will provide all-weather, day/night imaging of nearly the entire land and ice masses of the Earth repeated 4-6 times per month. NISAR’s orbiting radars will image at resolutions of 5-10 meters to identify and track subtle movement of the Earth’s land and its sea ice, and even provide information about what is happening below the surface. Its repeated set of high resolution images can inform resource management and be used to detect small-scale changes before they are visible to the eye. Products are expected to be available 1-2 days after observation, and within hours in response to disasters, providing actionable, timely data for many applications.
Landslides in the last few years have caused widespread fatalities and major damage in the United States. During a two-year period between 2014 and 2016, 61 people were killed, including 43 in the Oso landslide in Washington State (Coe, 2016). Globally, between 2000 and 3000 people are killed by landslides every year (Petley, 2017). NISAR will be able to measure ground surface movement directly through repeat imaging of landslide prone regions and processing the sequence of images using synthetic aperture radar interferometry (InSAR), which can measure changes in the distance between the radar antenna and the ground at the scale of a fraction of an inch. One major advantage of InSAR is that it can be used to measure surface deformation directly across large areas (hundreds of miles) with far greater accuracy than is possible with other commonly used remote sensing or ground-based monitoring techniques (e.g., GPS surveying). Radar has additional advantages over ground-based and optical methods, the most significant of which is the ability to see through clouds, smoke, and haze, and the ability to image the ground surface during day or night without relying on solar illumination. All NISAR data products, including the products showing surface movement, will be freely available through a web portal. This way, the nation’s investment in land surveys remotely acquired from space can be widely used by a variety of agencies and individuals to detect landslide movement when it begins to happen, and potentially prevent further landslide movement from causing human and economic disasters.

Monitoring Landslide Motion with Radar

Some landslides move slowly over a long time, gradually damaging roads, pipes, and other infrastructure. One example is shown at the right, where ground movement of landslides in the Berkeley Hills of California between 2008 and 2010 was captured using UAVSAR, NASA’s airborne prototype for the NISAR space mission. In this type of map, called an interferogram, the colors show contours of ground movement.

A regular schedule of radar imaging with NISAR, which will image all the land in the United States and nearly all land globally, will enable detection of slow-moving landslides, so damage can be avoided, and potentially provide forewarning of rapid landslides in the weeks to months prior to their catastrophic failure. As a result, these relatively common and highly destructive geologic hazards will be identified more quickly, efficiently, and economically, helping scientists, engineers, and policy makers protect lives and property.

National Aeronautics and Space Administration

For more information, visit http://nisar.jpl.nasa.gov/applications

Jet Propulsion Laboratory / California Institute of Technology / Pasadena, California / www.jpl.nasa.gov

February 8, 2017

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**NASA Report: San Joaquin Valley Land Continues to Sink**

*Groundwater Pumping Causes Subsidence, Damages Water Infrastructure*

**SACRAMENTO** – New NASA radar satellite maps prepared for the California Department of Water Resources (DWR) show that land continues to sink rapidly in certain areas of the San Joaquin Valley, putting state and federal aqueducts and flood control structures at risk of damage.

“The rates of San Joaquin Valley subsidence documented since 2014 by NASA are troubling and unsustainable,” said DWR Director William Croyle. “Subsidence has long plagued certain regions of California. But the current rates jeopardize infrastructure serving millions of people. Groundwater pumping now puts at risk the very system that brings water to the San Joaquin Valley. The situation is untenable.”

A prior August 2015 NASA report prepared for DWR documented record rates of subsidence in the San Joaquin Valley, particularly near Chowchilla and Corcoran, as farmers pumped groundwater in the midst of historic drought. The report released today shows that two main subsidence bowls covering hundreds of square miles grew wider and deeper between spring 2015 and fall 2016. Subsidence also intensified at a third area, near Tranquillity in Fresno County, where the land surface has settled up to 20 inches in an area that extends seven miles.

Additional aircraft-based NASA radar mapping was focused on the California Aqueduct, the main artery of the State Water Project, which supplies 25 million Californians and nearly 1 million acres of farmland. The report shows that subsidence caused by groundwater pumping near Avenal in Kings County has caused the Aqueduct to drop more than two feet. As a result of the sinking, the Aqueduct at this stretch can carry a flow of only 6,650 cubic feet per second (cfs) – 20 percent less than its design capacity of 8,350 cfs. To avoid overtopping the concrete banks of the Aqueduct in those sections that have sunk due to subsidence, water project operators must reduce flows.

The California Department of Water Resources (DWR), which operates the State Water Project, is analyzing whether the subsidence-created dip in the Aqueduct will affect deliveries to Kern County and Southern California water districts. If the State Water Project allocation is 85 percent or greater, delivery may be impaired this year due to the cumulative impacts of subsidence in the Avenal-Kettleman City area.

The NASA analysis also found subsidence of up to 22 inches along the Delta-Mendota Canal, a major artery of the Central Valley Project (CVP), operated by the U.S. Bureau of Reclamation. The CVP supplies water to approximately three million acres of farmland and more than two million Californians.

Also of concern is the Eastside Bypass, a system designed to carry flood flow off the San Joaquin River in Fresno County. The Bypass runs through an area of subsidence where the land surface has fallen between 16
inches and 20 inches since May 2015 – on top of several feet of subsidence measured between 2008 and 2012. DWR is working with local water districts to analyze whether surface deformation may interfere with flood-fighting efforts, particularly as a heavy Sierra snowpack melts this spring. A five-mile reach of the Eastside Bypass was raised in 2000 because of subsidence, and DWR estimates that it may cost in the range of $250 million to acquire flowage easements and levee improvements to restore the design capacity of the subsided area.

There are thousands of groundwater wells near state infrastructure that could be contributing to the subsidence recorded by NASA.

In response to the new findings, and as part of an ongoing effort to respond to the effects of California’s historic drought, state officials said they will investigate any legal options available to protect state infrastructure. DWR also will investigate measures for reducing subsidence risk to infrastructure, including groundwater pumping curtailment, creation of groundwater management zones near critical infrastructure, and county ordinance requirements.

DWR is conducting its own study of the effects of subsidence along the 444-mile-long California Aqueduct and other State Water Project features and in coming months will identify potential actions to remediate damage. A comprehensive rehabilitation to restore the full California Aqueduct to its original design capacity would likely cost in the hundreds of millions of dollars. A focused triage to address conveyance losses in the most affected portions of the canal may cost tens of millions of dollars per location.

In addition, DWR will work with local water managers to identify specific actions to reduce long-term subsidence risk and consider whether to incorporate further emphasis on reduction of subsidence risk into the ongoing implementation of the Sustainable Groundwater Management Act (SGMA).

An historic package of laws enacted by the Governor in September 2014, SGMA requires local governments to form sustainable groundwater agencies that will regulate pumping and recharge to better manage groundwater supplies. The Act requires groundwater-dependent regions to halt overdraft and bring basins into sustainable levels of pumping and recharge by the early 2040s. Groundwater supplies between 30 percent and 60 percent of the water Californians use in any year. Bringing basins into balance will eliminate the worst effects of overpumping, including subsidence and the dewatering of streams.

San Joaquin Valley land subsidence due to groundwater extraction was observed as early as the 1920s. The most extensive monitoring and research related to subsidence in the Valley was carried out in the 1950s through the 1970s because of concerns about subsidence-related damage to the state and federal water projects. The SWP’s 444-mile-long California Aqueduct was designed to take into account subsidence risk. Since the 1960s, subsidence has required repairs such as the raising of canal linings, bridges, and water control structures on the Aqueduct and on the CVP’s Delta-Mendota and Friant-Kern canals.

Besides aqueducts, the increased subsidence rates have the potential to damage levees, bridges, and roads.

Long-term subsidence already has destroyed thousands of public and private groundwater well casings in the San Joaquin Valley. Over time, subsidence can permanently reduce the underground aquifer’s water storage capacity.

There has been no comprehensive estimation of damage costs associated with subsidence. Due to the gradual nature of the impacts, costs will often be covered as part of normal operations and maintenance. Subsidence-related repairs have cost the SWP and CVP an estimated $100 million since the 1960s.

Aqueduct before and after subsidence

Aqueduct Before Subsidence:

Aqueduct After Subsidence:

maximum water level as designed

danger of overtopping if flow is not reduced

maximum water level as designed
West Washington Road where it crosses the Eastside Bypass, a constructed floodway for the San Joaquin River.

###

Every Californian should take steps to conserve water. Find out how at [SaveOurWater.com](http://SaveOurWater.com).
Decades of overpumping groundwater have irreversibly altered layers of clay beneath California’s Central Valley, permanently reducing the aquifer's ability to store water, finds a new satellite remote sensing study by scientists at Stanford University, Stanford, California; and NASA's Jet Propulsion Laboratory in Pasadena, California.

The study, published online in the journal Water Resources Research, reveals that overpumping caused land in the state's San Joaquin Valley to sink almost 3 feet (85 centimeters) during a recent drought from 2007 to 2010. As a result, the aquifer permanently lost between 336,000 and 606,000 acre-feet of natural water storage capacity. An acre-foot is equal to 326,000 gallons. In comparison, the Hetch Hetchy Reservoir that stores the primary water supply for the San Francisco Bay area has a capacity of about 360,000 acre-feet.
The San Joaquin Valley is one of the largest U.S. agricultural hubs, producing an estimated $17 billion of crops a year. The new findings come just as the state is experiencing its wettest season in years following an extended, record-setting drought.

"California is getting all of this rain, but in the Central Valley, there has been a loss of space to store it," said study coauthor Rosemary Knight, George L. Harrington professor at Stanford's School of Earth, Energy & Environmental Sciences.

Knight and her colleagues used data acquired with a satellite technology called Interferometric Synthetic Aperture Radar (InSAR) collected by the Phased-Array L-band Synthetic Aperture Radar (PALSAR) instrument on the Japan Aerospace Exploration Agency's Advanced Land Observing Satellite to measure centimeter-scale changes in elevation in the San Joaquin Valley between 2007 and 2010. The scientists compared multiple satellite InSAR images of Earth’s surface to calculate how much the land subsided (sank).

"Our work is a good example of the use of Earth-observing satellites to answer down-to-Earth questions about the sustainability of water resources," said JPL research scientist and study coauthor Tom Farr.

Subsidence happens when the water pressure in the subsurface dips below a critical level when too much groundwater is removed, causing the sediments to compact.

"As you pump groundwater out of an aquifer, the water pressure in the tiny pores of the sediment drops," said study first author Ryan Smith, a doctoral candidate in Knight's lab. "That reduces the ability of the aquifer to hold up the ground above it and causes it to collapse. That collapse is manifested at the surface as subsidence."

If too much water is extracted, particularly from clay layers, the compaction becomes irreversible, and the soil's ability to retain water is permanently diminished. "When too much water is taken out of clay, its structure is rearranged at the microscopic level and it settles into a new configuration that has less storage space," said Knight, who is also affiliated with the Stanford Woods Institute for the Environment.

This not only makes it more difficult to store water in the future, but also makes it harder to draw any existing water out of the ground today. "It's like trying to suck water from a really thin straw," Knight said. "The pressure that needs to be exerted to pull the water out gets greater and greater as the clay structure collapses."
The scientists only examined InSAR data collected during the drought period between 2007 and 2010. Since then, California has experienced a more severe drought, from 2012 to 2016. "Although our paper didn't deal with the most recent drought, I think it's safe to say that the latest drought may have caused at least as much, or even more, subsidence and permanent compaction in the region than the last one," Smith said. "This is because the rate of water decline increased during that period, causing the groundwater to drop to historically low levels. Recent InSAR studies by JPL, not included in this study, also demonstrate that subsidence continued at a similar, and in some cases even greater, rate compared with what we saw from 2007 to 2010."

One way farmers in the region could alleviate the problem, Knight said, is to avoid drawing water from clay layers and instead pump groundwater from more shallow sand and gravel layers, which are more easily recharged and are less susceptible to permanent compaction.

Until recently, however, distinguishing clay layers from sand and gravel from the surface required drilling expensive wells. But Knight's group is testing a novel geophysical electromagnetic method that involves flying a helicopter equipped with instruments capable of imaging the subsurface from the air to create a three-dimensional map of clay, sand and gravel deposits.

"With the right geophysical tool," Knight said, "we can not only better understand the composition of the subsurface, but also help guide pumping and groundwater recharge efforts."

Other study coauthors include Howard Zebker, Jessica Reeves and Jingyi Chen from Stanford University and Zhen Liu at JPL. Funding for the study was provided by the S.D. Bechtel Jr. Foundation, NASA's Terrestrial Hydrology Program and the National Science Foundation.

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**NASA Data Show California's San Joaquin Valley Still Sinking**

**Fast Facts:**

- For nearly a century, groundwater pumping from Central California wells has caused some land to subside.

- Subsidence is an ongoing issue for state water managers.

- JPL is using radar remote sensing to identify areas that are subsiding fastest.

**Groundwater Pumping Causing Subsidence, Damaging Water Infrastructure**

Since the 1920s, excessive pumping of groundwater at thousands of wells in California's San Joaquin Valley has caused land in sections of the valley to subside, or sink, by as
much as 28 feet (8.5 meters). This subsidence is exacerbated during droughts, when farmers rely heavily on groundwater to sustain one of the most productive agricultural regions in the nation.

Long-term subsidence is a serious and challenging concern for California's water managers, putting state and federal aqueducts, levees, bridges and roads at risk of damage. Already, land subsidence has damaged thousands of public and private groundwater wells throughout the San Joaquin Valley. Furthermore, the subsidence can permanently reduce the storage capacity of underground aquifers, threatening future water supplies. It's also expensive. While there is no comprehensive estimate of damage costs associated with subsidence, state and federal water agencies have spent an estimated $100 million on subsidence-related repairs since the 1960s.

To determine the extent to which additional groundwater pumping associated with California's current historic drought, which began in 2012, has affected land subsidence in the Central Valley, California's Department of Water Resources (DWR) commissioned NASA's Jet Propulsion Laboratory, Pasadena, California, to use its expertise in collecting and analyzing airborne and satellite radar data. An initial report of the JPL findings (Aug. 2015) analyzed radar data from several different sensors between 2006 and early 2015. Due to the continuing drought, DWR subsequently commissioned JPL to collect and analyze new radar images from 2015 and 2016 to update DWR on the land subsidence.

**How much sinking?**

Several trouble spots identified in the first report continue to subside at rates as high as 2 feet (0.6 meters) a year. Significant subsidence was measured in two subsidence bowls located near the towns of Chowchilla, south of Merced; and Corcoran, north of Bakersfield. These bowls cover hundreds of square miles and continued to grow wider and deeper between May 2015 and Sept. 2016. Maximum subsidence during this time period was almost 2 feet (0.6 meters) in the Corcoran area and about 16 inches (41 centimeters) near Chowchilla. Subsidence also intensified near Tranquility in Fresno County during the past year, where the land surface has settled up to 20 inches (51 centimeters) in an area that extends 7 miles (11 kilometers). Subsidence in these areas affects aqueducts and flood control structures.
Small amounts of land subsidence were also identified in the Sacramento Valley near Davis and Arbuckle. A small area observed for the first time in Sierra Valley, north of Lake Tahoe, shows about 6 inches (15 centimeters) of subsidence.

JPL scientists plotted the history of subsidence of several sites in the mapped areas and found that for some areas in the San Joaquin Valley, subsidence slowed during the winter of 2015-16 when rainfall matched crop water needs.

"While we can see the effect that rain has on subsidence, we know that we've run a groundwater deficit for some time, so it'll take a long time to refill those reservoirs," said JPL report co-author Tom Farr.

The report update also examined California's South Central coast, including Ventura, Oxnard, Santa Barbara and north to the San Joaquin Valley, as well as the Santa Clara Valley. It found no major areas of subsidence in these regions, though a known area of subsidence in the Cuyama Valley was observed to have continued land subsidence.

JPL report co-author Cathleen Jones said being able to pinpoint where subsidence is happening helps water resource managers determine why it is happening.

"If you see a subsidence bowl, then something is going on at the center of the bowl that is causing the land to sink -- for example, high levels of groundwater pumping," Jones said. "We can locate problem spots so the state can focus on those areas, saving money and resources. We find the needle in the haystack, so to speak."

How the study was done

To obtain the subsidence measurements, JPL scientists compared multiple satellite and airborne interferometric synthetic aperture radar (InSAR) images of Earth's surface acquired as early as 2006 to produce maps showing how subsidence varies over space and time. InSAR is routinely used to produce maps of surface deformation with approximately half-inch-level (centimeter-level) accuracy.

The subsidence maps in the new report were created by analyzing satellite data from the European Space Agency's Sentinel-1A satellite from March 2015 to Sept. 2016, and from NASA's airborne Uninhabited Aerial Vehicle Synthetic Aperture Radar (UAVSAR) from March 2015 to June 2016. The new data
complement the data used in the previous report from Japan's PALSAR (2006 to 2010), Canada's Radarsat-2 (May 2014 to Jan. 2015) and UAVSAR (July 2013 to March 2015).

How subsidence affects key California water supply routes

The high-resolution airborne UAVSAR radar mapping was focused on the California Aqueduct, the main artery of the State Water Project, which supplies 25 million Californians and nearly a million acres of farmland. The aqueduct is a system of canals, pipelines and tunnels that carries water 444 miles (715 kilometers) from the Sierra Nevada and Northern/Central California valleys to Southern California.

The JPL report shows that localized subsidence directly impacting the aqueduct is ongoing, with maximum subsidence of the structure reaching 25 inches (64 centimeters) near Avenal in Kings County. As a result of subsidence in this area since the initial aqueduct construction, the aqueduct there can now carry a reduced flow of only 6,650 cubic feet (188 cubic meters) per second -- 20 percent less than its design capacity of 8,350 cubic feet per second (236 cubic meters per second). Water project operators must reduce flows in the sections that have sunk to avoid overtopping the concrete banks of the aqueduct.

DWR, which operates the State Water Project, is analyzing whether the subsidence-created dip in the California Aqueduct will affect deliveries to water districts in Kern County and Southern California. If the State Water Project allocation is 85 percent or greater, delivery may be impaired this year due to cumulative subsidence impacts in the Avenal-Kettleman City area.

The new NASA analysis also found subsidence of up to 22 inches (56 centimeters) along the Delta-Mendota Canal, a major artery of the Central Valley Project (CVP), operated by the U.S. Bureau of Reclamation. The CVP supplies water to approximately three million acres of farmland and more than two million Californians.

Also of concern is the Eastside Bypass, a system designed to carry flood flow off the San Joaquin River in Fresno County. The bypass runs through an area of subsidence where the land surface has lowered between 16 and 20 inches (41 and 51 centimeters) since May 2015, on top of several feet of subsidence measured between 2008 and 2012. DWR is working with local water districts to analyze whether surface deformation may interfere with flood-fighting efforts, particularly as a heavy Sierra snowpack melts this spring. A 5-mile (8-
kilometer) reach of the Eastside Bypass was raised in 2000 because of subsidence, and DWR estimates it may cost in the range of $250 million to acquire flowage easements and levee improvements to restore the design capacity of the subsided area.

"The rates of San Joaquin Valley subsidence documented since 2014 by NASA are troubling and unsustainable," said DWR Director William Croyle. "Subsidence has long plagued certain regions of California. But the current rates jeopardize infrastructure serving millions of people. Groundwater pumping now puts at risk the very system that brings water to the San Joaquin Valley. The situation is untenable."

The upcoming NASA and ISRO (Indian Space Research Organisation) radar mission, NISAR, will systematically collect data over California and the world and will be ideal for measuring and tracking changes to the land subsidence associated with groundwater pumping, as well as uplift associated with natural and assisted groundwater recharge.

To read the new report, visit:


Read the full DWR news release:


For more information on JPL's water resource applications initiatives, visit:

http://water.jpl.nasa.gov

For more on UAVSAR, visit:

http://uavsar.jpl.nasa.gov/

For more on NISAR, visit:

http://nisar.jpl.nasa.gov/

For more on NASA's Earth science activities, visit:

http://www.nasa.gov/earth

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Tab J – 2018 President’s Budget Request
June 1, 2017

Dear Western Delegation Member:

On behalf of the Western Governors’ Association (WGA), I am writing to highlight the importance of the Snow Survey and Water Supply Forecasting Program administered by the U.S. Department of Agriculture’s Natural Resources Conservation Service (NRCS). The information provided by this program is integral to water supply management decisions for states, utilities, reservoir operators, and agricultural producers. This data forms a foundation for predicting snowpack runoff, which is particularly useful throughout the arid West. These data sources also provide states with valuable information pertaining to navigation and flooding.

On April 28, 2017, Dr. Michael Strobel, Director of the National Water and Climate Center, responded to a comprehensive list of questions posed by WGA about the current state of the Snow Survey and Water Supply Forecasting Program and its practical applications to inform water resource management throughout the West. A copy of Dr. Strobel’s responses is attached to this letter for your review.

Western Governors recognize the importance of NRCS’s Snow Survey and Water Supply Forecasting Program to the management of western states’ vital water resources. I encourage you, as a representative of the West, to maintain this critical effort as you consider funding levels for the U.S. Department of Agriculture. Thank you for your consideration of this request, and I hope you will contact me if you have any questions or require further information. In the meantime, with warm regards, I am

Respectfully,

James D. Ogsbury
Executive Director

Attachments (2)
April 20, 2017

Dr. Michael Strobel
Director, National Water and Climate Center
Natural Resources Conservation Service
U.S. Department of Agriculture
1201 NE Lloyd Boulevard, Suite 802
Portland, OR  97232

Dear Dr. Strobel:

Western Governors have historically supported the Snow Survey and Water Supply Forecasting program administered by the U.S. Department of Agriculture’s Natural Resources Conservation Service (NRCS). Western Governors’ Association (WGA) Policy Resolution 2015-08, Water Resource Management in the West, expressly reiterates this support and states that, “basic information on the status, trends and projections of water resource availability is essential to sound water management.”

I am writing on behalf of Western Governors to request additional information regarding the Snow Survey and Water Supply Forecasting program. Attached please find a list of questions about the program’s role in generating vital snowpack and water-related information for the western U.S. Complete answers to these questions will help inform the Governors as to program status and needs and help them promote effective water management and planning in their states.

Thank you for your consideration of this request. Please contact me if you have any questions or require further information. In the meantime, with appreciation and warm regards, I am

Respectfully,

James D. Ogsbury
Executive Director

cc: Leonard Jordan, Acting Chief, NRCS
Astor Boozer, West Regional Conservationist, NRCS
Questions for the Snow Survey and Water Supply Forecasting / SNOTEL Program (the “Program”)

The System:

- Please provide a map detailing the locations of SNOTEL and manual data collection sites throughout the western U.S., preferably at a state-by-state scale.

- Please describe the Program’s historic and current role in comprehensive water management in the West.

- How have the Program’s goals and methods changed since its inception? Have monitoring locations been lost? What was the cause of those losses? Has the closure of any stations (manual or automated) disrupted continuous streams of historic data gathered as part of the Program?

Technological Innovations:

- Please describe the Program’s new “regional” approach to gathering snowpack data throughout the West. How has this improved efficiency and the production of data?

- Please describe the cost differences between automated and manual data collection sites.

- Please describe the functional advantages and disadvantages of automated SNOTEL sites vis-a-vis manual data collection sites, specifically addressing the data-gathering capabilities of each. Is certain data available from SNOTEL sites that is not available from manual sites, and vice-versa?

- What are the advantages and disadvantages of manual versus automated SNOTEL sites in terms of maintenance? What is the useful life of the automated technology?

- What types of staffing and training issues are involved in operating the Program? To what types of safety risks are employees and contractors exposed? What measures have been, or should be, taken to mitigate such risks?

- What is the current role of third-party, non-federal employees in the maintenance and operation of SNOTEL and manual sites? What issues have precluded additional involvement of third parties, and what role could third parties play in the program if such issues were to be resolved?

- Are there any technical vulnerabilities associated with the new technologies?
• How has NRCS determined the priority of which manual sites have been (and will be) converted to automation?

Funding:

• Is the current federal funding of the Program sufficient for needed upgrades and maintenance of data collection sites? If funding deficiencies exist, what essential parts of the Program are at the most risk due to such deficiencies?

• Does the Program receive funding from any non-federal sources?

• How does the Program complement (or otherwise interact with) other national weather programs (i.e., NOAA satellite programs)? Do other such programs compete with the Program directly for funding?

• If data collections sites are to be shut down due to a lack of funding in the future, by what criteria will such sites be selected?

Building Partnerships:

• How could western states and WGA better partner with NRCS to assure the stability and longevity of the Program?

• Are there functions in retrofitting, maintaining, operating and funding data collection sites that could be performed by third parties? Please provide examples. What regulatory, technical, and legal hurdles discourage such partnerships?

• What type of marketing is currently employed to promote the Program to private parties that may have interest in utilizing the data collected (e.g., agricultural and recreational interests)?
April 28, 2017

Mr. James D. Ogsbury
Executive Director
Western Governors Association
1600 Broadway
Suite 1700
Denver, CO 80202

Dear Mr. Ogsbury,

Thank you for the opportunity to discuss the NRCS Snow Survey and Water Supply Forecasting Program by addressing the questions you provided. The questions were very comprehensive and well stated, such that in providing responses, I feel the many issues that impact the Snow Survey and Water Supply Forecasting Program were documented and discussed. If there are further questions on any topic covered in the responses, please let me know and I would be happy to elaborate further.

We truly appreciate the strong support and attention that the Western Governors Association has given to our program over the last many years. Water in the West is closely tied to the economy, health and well-being, energy production, and all other aspects of life in the region, and your continued interest in how our program provides a critical contribution to water resources and water management is much appreciated.

Thank you and let me know if there are further questions or concerns.

Sincerely,

Dr. Michael L. Strobel
Director, National Water and Climate Center
Questions for the Snow Survey and Water Supply Forecasting/SNOTEL Program (the "Program")

The System:

- Please provide a map detailing the locations of SNOTEL and manual data collection sites throughout the western U.S., preferably at a state-by-state scale.
Please describe the Program's historic and current role in comprehensive water management in the West.

The Snow Survey and Water Supply Forecasting (SSWSF) Program collects high elevation snow and other climate data at over 2,000 remote sites in the Western United States and provides managers and users with snowpack information, other climatic data, and water supply forecasts. These data are used to provide estimates of annual water availability, spring snowmelt runoff, and summer stream flows. Researchers are increasingly accessing the data to evaluate trends in the Western U.S. climate. The water supply forecasts are used by individual farmers and ranchers; water resource managers; Federal, State, and local government agencies; municipal and industrial water providers; hydroelectric power generation utilities; irrigation districts; fish and wildlife management agencies; reservoir project managers; recreationists; Tribal Nations; and the countries of Canada and Mexico.

The SSWSF Program has been operated continuously since 1935. The program is designated as a cooperative effort because it operates in cooperation with both public and private entities that rely on consistent and accurate water supply and river forecasts. Although most funding and field efforts are through the agency, the partners and cooperators provide a share of the financial burden and contribute to data collection activities. During the 2016 water year (October 1, 2015 to September 30, 2016), partners and cooperators contributed a significant amount of money and in-kind services towards the collection of snow and related climate data. The SSWSF Program consists of a network of 1,179 manually measured snow courses and aerial markers in the U.S, 864 automated Snow Telemetry (SNOTEL) sites, 24 automated SnoLite (abbreviated SNOTEL) sites, 10 hydromet stations, and 22 manually measured (non-tele) data collection stations.

How have the Program’s goals and methods changed since its inception? Have monitoring locations been lost? What was the cause of those losses? Has the closure of any stations (manual or automated) disrupted continuous streams of historic data gathered as part of the Program?

The conversion of manual snow courses over to SNOTEL has been the largest change in the program since its inception. The SSWSF Program initially consisted of only manual snow courses measured for snow depth and snow water equivalent near the first of each month from January to June. Beginning in the late 1970s, automated SNOTEL stations were installed and began transmitting data every hour; data which included not only snow depth and snow water equivalent, but also temperate, precipitation, and other variables including relative humidity, solar radiation, wind speed and direction, soil moisture and soil temperature. For most cases, SNOTEL stations were located adjacent to snow course locations in order to have continuity of data (no break in the long-term record). In a minority of cases, SNOTEL stations were placed in new locations based on a lack of data for that particular basin, a request from a cooperator, or better conditions for collecting data than the previous snow course location.

There have been a few cases of removal of snow course or SNOTEL stations due to loss of property access (change in ownership) or access ability. Other reductions in snow courses have been based on budgetary and personnel reasons, such as in 2013 when it was decided to reduce snow courses in Montana from 134 sites measured by NRCS down to 95 sites. The reduction in snow courses mainly occurred in areas of lower priority or difficult (cost and time) access. In making this decision, Montana also reduced other costs related to field measurements, such as the number of snowmobiles needed. In closing snow courses without replacing the location with a SNOTEL station or in closing a SNOTEL station for any reason, the trend data collected over previous decades stops. In disrupting this process, the continuity of the records and the data are lost.
Technological Innovations:

- Please describe the Program's new "regional" approach to gathering snowpack data throughout the West. How has this improved efficiency and the production of data?

Beginning with the first snow measurements in 1906, data collection at manual snow courses was organized and carried out by each individual state. In 1939, when NRCS (then the Soil Conservation Service) took over the SSWSF program, data collection was still handled by each state, but overall program management, database management, and analysis for the western US was overseen by the Program Manager in Portland, Oregon.

With the introduction of SNOTEL in the late 1970s, the workload for SSWSF changed from mainly winter data collection to summer site installation and maintenance. This change in technology also required more equipment, storage and electronics training. To improve on efficiency and resources, the SSWSF program created six Data Collection Offices (DCOs) (Alaska, Idaho, Montana, Colorado, Oregon and Utah) that had multi-state responsibilities (except for Alaska) to maintain SNOTEL stations within their regions. This organization has been extremely successful at spreading the workload between units based on the number of sites and geographic area to cover, and has utilized resources, purchases and personnel in an efficient manner. Since 1990, the SSWSF program has been under the direction of the National Water and Climate Center (NWCC) in Portland, Oregon.

- Please describe the cost differences between automated and manual data collection sites.

Because manual snow courses and SNOTEL sites are located in the mountains and often in very remote areas, it is difficult to compare one snow course or SNOTEL site to another for cost based on travel and time. To place it in simplest terms, a manual snow course generally costs $3,000-$5,000 per year, mainly in travel and personnel costs due to visiting the site at the beginning of each month during the snow season. A SNOTEL station costs about $30,000-$35,000 to install. Following installation, the stations require annual maintenance in the summer, which is in the $5,000-$6,000 range per station. Therefore, manual snow courses are much less expensive than SNOTEL stations.

- Please describe the functional advantages and disadvantages of automated SNOTEL sites vis-a-vis manual data collection sites, specifically addressing the data-gathering capabilities of each. Is certain data available from SNOTEL sites that is not available from manual sites, and vice-versa?

Manual snow courses are measured once per month during the snow season and provide measurements of snow depth and snow water equivalent. SNOTEL stations measure a wide number of parameters in addition to snow depth and snow water equivalent, including precipitation, relative humidity, temperature (average, maximum and minimum) and many other measurements. These data are collected at numerous time increments (depending on location and sensor) and transmitted each hour. Therefore, a SNOTEL station provides about 720 measurements of snow depth and snow water equivalent (as well as all the other parameters measured) for every one measurement taken at a manual snow course. And SNOTEL stations transmit data the entire year, not just during the snow season, so conditions throughout the summer and fall are also observed. The huge amount of data provided by SNOTEL allows for better analysis of conditions throughout the month and is critical information for water managers, climate modelers, and water supply forecasters. In addition, SNOTEL provides near real-time information that is up-to-date and allows for daily assessment of conditions that may impact flooding, reservoir management and other critical needs.
What are the advantages and disadvantages of manual versus automated SNOTEL sites in terms of maintenance? What is the useful life of the automated technology?

Based on the benefit to users of additional and near real-time data from SNOTEL stations, the cost difference between a manual snow course and a SNOTEL station is justifiable. But even more important are the reduced risks to personnel. Manual snow courses require little summer maintenance, but the data collection requires that people access sites throughout the winter, often using skis, snowshoes, snowmobiles, or helicopters, and often in harsh conditions. SNOTEL sites are maintained during the summer and fall when conditions are less harsh, thereby reducing the risk of sending personnel into potentially hazardous conditions in remote locations. The maintenance of a SNOTEL site is greater than that of a manual snow course, due to the many different sensors and on-site equipment, and many of the sensors require regular maintenance and/or replacement on a 3-10 year period. SSWSF upgrades and improves sensor and telemetry technology as better sensors and improved technology becomes available.

What types of staffing and training issues are involved in operating the Program? To what types of safety risks are employees and contractors exposed? What measures have been, or should be, taken to mitigate such risks?

The SSWSF program, when fully staffed, has approximately 59 fulltime employees to cover the 12 western states, plus utilizes a large number of NRCS field staff to assist with field measurements in the winter. The six Data Collection Offices (DCOs) each have between 3 and 8 employees, the other six Water Supply Specialist states (WA, CA, AZ, NM, NV and WY) have 1 to 2 employees, and the NWCC has 19 employees.

Training for the program consists of on-the-job training for new employees working closely with existing staff, both in the office and in the field. The program requires field employees to take Snow School every 3-5 years to learn and refresh knowledge of survival and medical skills, sampling and field methodology, and equipment operation. Employees who maintain SNOTEL stations are required to take Tower Climbing certification every 5 years. Each state offers other training in areas such as snowmobile operation, ATV/UTV operation, first aid/CPR, and helicopter transportation and awareness training, if applicable. The program requires all field personnel to have annual medical physicals. Even with the training and precautions, there are certain risks involved with working in remote and harsh environments, such as are encountered at our manual snow courses and SNOTEL sites. Potential risk from vehicle and snow machine operation, hypothermia, altitude illness, and other aspects of these environments are inherent in the duties of the job.

What is the current role of third-party, non-federal employees in the maintenance and operation of automated and/or manual sites? What issues have precluded additional involvement of third parties, and what role could third parties play in the program if such issues were to be resolved?

The SSWSF program utilizes a large number of other federal, state, university, tribal and local employees to assist in making manual snow course measurements. These individuals greatly help the program in completing the monthly measurements on time. The maintenance for SNOTEL stations is highly technical and requires trained staff within our program to carry out. There are limitations to using third-party, non-federal employees to assist in summer maintenance because of transportation (restrictions for having passengers who are non-federal in government vehicles), liability in case of injury, requirements for medical physicals, requirements for equivalent snow school training, and requirements for tower climbing certification. Our telemetry system and SNOTEL electronics are unique to our program and necessitates adequate training and experience before being able to conduct maintenance on a station.
• Are there any technical vulnerabilities associated with the new technologies?

With all new technology, there needs to be a testing period to assure that the data collected are accurate and provide both reliable and comparable data to previous sensors and technology. For example, we are presently testing the use of fluidless snow sensors at some SNOTEL stations as a new technology to replace the current traditional snow pillows that require significant fluids to be transported to the sites during installation and that can leak if the pillow becomes ruptured (such as occurs when bears or falling trees interact with the pillows). To test this, we set up fluidless sensors adjacent to existing traditional snow pillows and run them concurrently for a number of years to compare data. We will continue to test the sensors, work with the manufacturers on issues and improve the technology until we are comfortable with moving forward with these sensors program-wide. The same is true with all new technology. Because the data our program collects and distributes is mission critical for the agency and is utilized by a wide array of users, including hydroelectric power generators, water managers, dam operations, flood forecasting, climate research and others, it is extremely critical that we have confidence and strong justification for switching and updating our systems with new technologies.

• How has NRCS determined the priority of which manual sites have been (and will be) converted to automation?

The top priority for the conversion of a manual site to SNOTEL is how critical that site is for water supply forecasting. Many of our sites are located in basins that are major contributors to streams or reservoirs that impact millions of people and are dominated by springtime snow melt. Having real-time data at these locations allows us to not only provide monthly water supply forecasts, but also allows hourly data tables and graphics to monitor status and changes throughout the month. Another factor in converting sites to SNOTEL depends on access. Remote sites, often in wilderness areas, have limited access with motorized snow machines or aircraft. These sites are a priority to convert to SNOTEL for reducing costs and reducing potential safety concerns from sending personnel into remote locations on skis or snowshoes. The NWCC developed a tool called BAGIS (Basin Analysis GIS) for quantifying the best locations for SNOTEL sites utilizing information such as access, topography, land ownership, vegetation cover, slope, aspect and other factors for selecting where new stations should be installed. This tool is used to assist when determining priorities for converting snow courses to SNOTEL, even though the main priority for determining locations for new SNOTEL stations is collocation with existing snow courses. One other factor we consider is whether existing SNOTEL stations already exist in a particular basin and if converting snow courses in that basin will improve our water supply forecasts. Often, the present number of SNOTEL stations in a basin, along with existing snow courses, are adequate for forecasting needs.

Funding:

• Is the current federal funding of the Program sufficient for needed upgrades and maintenance of data collection sites? If funding deficiencies exist, what essential parts of the Program are at the most risk due to such deficiencies?
For the past 15 years, the budget for the SSWSF program, in millions of dollars, is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>SNOTEL sites</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>696</td>
<td>9.16</td>
</tr>
<tr>
<td>2004</td>
<td>714</td>
<td>9.25</td>
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<td>8.937</td>
</tr>
<tr>
<td>2017</td>
<td>898</td>
<td></td>
</tr>
</tbody>
</table>

The number of SNOTEL stations is also shown for each fiscal year.

To illustrate the relationship between SNOTEL and budget, the graph below shows the changes over the past 15 years:

Current funding levels support the staff and other resources needed to maintain the present SNOTEL network.

NRCS will continue to communicate with WGA going forward to address funding and potential program adjustments if necessary.
• Does the Program receive funding from any non-federal sources?

The program does have some reimbursable agreements for SNOTEL stations, but these dollars account for only a minor amount of the funding used for operations. Where the program does benefit from other sources is in in-kind services for snow course measurements and some flights for SNOTEL maintenance. Most of this is provided by other federal agencies, but states, hydroelectric power companies, local utilities and tribes do provide cooperative services to assist in our mission.

• How does the Program complement (or otherwise interact with) other national weather programs (i.e., NOAA satellite programs)? Do other such programs compete with the Program directly for funding?

Our data from the SSWSF program is utilized by many other agencies, including NOAA and NASA, for verification of satellite imagery of snow. The National Weather Service’s River Forecast Centers in the west cannot run their models without SNOTEL data and are highly dependent on the information the SSWSF program provides. Much of the information provided by NOAA and NASA, such as snow imagery provided on the NOHRSC website, is used by our forecasters and state staff to assess larger-scale status of snow cover. As such, the SSWSF program has a strong and collaborative relationship with the other agencies in providing the best possible product to the public. Not only are the data critical to other US agencies, but agencies in Canada utilize the information in their water assessments and the flow of data is part of an International agreement. There is no apparent competition for funding in regards to other agencies and their missions.

• If data collections sites are to be shut down due to a lack of funding in the future, by what criteria will such sites be selected?

For manual snow courses, we have developed a table that prioritizes sites based on their application to water supply forecasting models, cost for access/transportation, and importance of site to the program’s mission. If there is a need to discontinue SNOTEL sites, they will follow under the same criteria.

Building Partnerships:

• How could western states and WGA better partner with NRCS to assure the stability and longevity of the Program?

The western states and WGA understand the critical importance of water in the west as the lifeline for agriculture, power generation, population centers, recreation and environmental habitat. Our program has greatly appreciated the strong and continual support the WGA has provided to our mission by communicating the importance of the program to a wide audience. Important to the longevity of the program is our continued dialogue and sharing information.

• Are there functions in retrofitting, maintaining, operating and funding data collection sites that could be performed by third parties? Please provide examples. What regulatory, technical, and legal hurdles discourage such partnerships?

Our manual snow surveys at snow courses are performed by a wide range of different agencies and private entities that contribute to the cooperative nature of this effort. Expanding this aspect of data collection is a win-win situation because it allows our program to gather data at a reduced cost and generates both awareness and involvement of many other groups in the continuation and security of long-term monitoring. The work on SNOTEL stations is more complicated because our sites have extensive electronics in the form of sensors, data loggers and radios that require specialized training and experience. Most SNOTEL stations
utilize meteorburst technology for data transmission, which is a unique system that is owned and developed by NRCS for this network. In addition, most of our SNOTEL sites are located in remote areas, usually on government property, that require personnel to have specialized training in snow survival, wilderness first aid, and equipment operation. Because of all of these requirements, partnering or contracting the work at SNOTEL would require much time for training and would not be cost effective compared to utilizing existing qualified staff.

- What type of marketing is currently employed to promote the Program to private parties that may have interest in utilizing the data collected (e.g., agricultural and recreational interests)?

Our outreach includes our monthly Water Supply Outlook reports put out by each state, our weekly Water and Climate Update report, our quarterly Snow News publication and many other forms of paper and electronic communication. However, our best means of reaching out to the public is through presentations at local, district, state and regional meetings of different groups of water users, whether agricultural produces, soil and water conservation districts, water managers, or environmental groups. At a recent meeting of the Western Snow Conference, almost every presentation given over a two day period by researchers and scientists at universities and various agencies had some mention of SNOTEL and most models and analysis were based and calibrated on the SNOTEL network. Each month, local television, radio and newspaper media throughout the west will accompany our field staff in making the monthly snow survey and present this to a wide audience. And each SSWSF program office, including the National Water and Climate Center, receives numerous data and information requests via email and telephone each day during the forecast season. There may be ways to better market what we do, but we already invest much of our time in presenting information and educating the public about snow surveys and are generally well known throughout the west. The one area we lack in exposure would be in the rest of the country, where snow is not as critical for water supplies and the importance of our program may be overlooked. This is an area we need to improve upon in helping to inform the American public about the critical role of snow as a water supply.
Western State House and Senate Delegations:

On behalf of the Western States Water Council, I am writing to express our support for sustaining and accelerating National Oceanic and Atmospheric Administration (NOAA) efforts to improve sub-seasonal and seasonal (S2S) precipitation forecasts. In the West, water is too often scarce and precipitation variability directly impacts our economic and environmental well-being. We are particularly dependent on winter snowfall and subsequent spring and summer runoff. After enduring several back-to-back years of drought, Western states have experienced historic precipitation in recent months. Improved forecasting will allow communities throughout the West to better prepare for precipitation extremes during wet and dry seasons alike.

Water management in the West includes significant decisions that have to be made weeks to months and years ahead of time. Some of these decisions hinge on expectations or predictions of precipitation, snow pack and general watershed conditions, but accurate prediction of precipitation beyond 5-7 days is highly uncertain. Stretching our predictive capabilities to provide accurate and reliable longer-range precipitation forecasts to sub-seasonal (out to 3 months) and seasonal forecasts (out to 2 years), begins with advancing week 3 and week 4 forecasts. As the budget request itself states, improved S2S outlooks would better inform farmers, fishermen, emergency responders, and other industries regarding what to expect in two weeks, next month or next season. As envisioned by the National Academies of Sciences, achieving reliable S2S forecasts would provide tremendous benefits, including mitigating damage from drought and flooding.

The Administration’s budget request proposes cuts of up to 30% for NOAA’s National Weather Service (NWS) programs, and involves the proposed elimination of the Climate Prediction Center (CPC) and consolidation of some of its functions into the Weather Prediction Center. Moreover, the Administration’s request proposes terminating science and technology investment in mid-range weather outlooks now being produced that extend predictions beyond 14 days, as well as cutting funding for the Next Generation Global Prediction System (NGGPS) weather model necessary for advancing forecasting at all timescales. These cuts are puzzling given the very recent enactment of the Weather Research and Forecasting Innovation Act of 2017, which explicitly directed NOAA to improve S2S forecasts.
We are concerned that such actions could be a serious obstacle to sustaining and accelerating progress towards reliable S2S forecasts. The science community has identified a set of goals and actions to pursue improvements to national precipitation forecasts from two weeks to several months in advance, including identifying and characterizing sources of S2S predictability, natural modes of variability, slowly varying processes, and external forcings – focusing on S2S “forecasts of opportunity.” Meeting these goals also entails significant use of High Performance Computing (HPC) capacity to support research with the coupled global weather prediction models needed for forecasting.

Cuts to NOAA’s Office of Atmospheric Research (OAR), including the Modeling, Analysis, Predictions and Projections (MAPP) program would also harm competitively funded S2S research.

There is a growing need for adequate and consistent federal funding to improve S2S forecasting. In considering the Administration’s FY2018 budget request, the Western States Water Council urges you to give a high priority to the allocation of sufficient funds for critical, vital programs to improve the development, implementation and communication of S2S forecasts.

Sincerely,

Jerry Rigby
Chairman

Jeanine Jones
Vice-Chair

cc: Acting NOAA Administrator

Attachments: WSWC Position #399 and S2S Coalition Member Fact Sheet
President's Fiscal 2018 Budget for U.S. Army Corps of Engineers Civil Works Program released

Posted 5/25/2017

Release no. 17-004

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Washington (May 25, 2017) - The President’s Budget for fiscal year 2018 (FY 2018) includes $5.002 billion in gross discretionary funding for the Civil Works program of the U.S. Army Corps of Engineers (Corps).

"The fiscal 2018 Civil Works budget for the U.S. Army Corps of Engineers reflects the administration’s priorities to support and improve the nation’s economy and infrastructure, and to protect the American people," said Mr. Doug Lamont, senior official performing the duties of the Assistant Secretary of the Army for Civil Works. "This Budget supports the core mission areas of coastal and inland navigation, reducing flood risks from riverine flooding and along our coasts, and restoring aquatic ecosystems."

"The Budget enables the Corps to carry out its important missions, while advancing key Administration infrastructure initiatives," said Lamont. "It also reflects the tough choices necessary to put the country on a fiscally sustainable path."

New federal funding in the Civil Works budget consists of $3.966 billion from the general fund, $965 million from the Harbor Maintenance Trust Fund, $45 million from Special Recreation User Fees, and $26 million from the Inland Waterways Trust Fund.

The FY 2018 funding will be distributed among the appropriations accounts as follows:

- $3.1 billion for Operation and Maintenance
- $1.02 billion for Construction
- $253 million for Mississippi River and Tributaries
- $200 million for the Regulatory Program
- $185 million for Expenses
- $118 million for the Formerly Utilized Sites Remedial Action Program (FUSRAP)
- $86 million for Investigations
- $35 million for Flood Control and Coastal Emergencies
- $5 million for the Office of the Assistant Secretary of the Army for Civil Works

The FY 2018 Budget includes $2.098 billion for the study, design, construction, operation and maintenance of inland and coastal navigation projects. It funds capital investments on the inland waterways within the
estimated revenues to the Inland Waterways Trust Fund. The Budget gives priority to coastal harbors and inland waterways with the most commercial traffic.

It also provides priority for maintenance of channels at small ports that support significant commercial fishing, subsistence, or public transportation benefits.

The FY 2018 Investigations program as a whole is funded at $89 million, including $3 million from the Mississippi River and Tributaries (MR&T) account, to fund studies to determine the need, engineering feasibility, and economic, environmental and social return of potential solutions for water and related land resources problems. This includes $5 million for work on proposals to improve seven high and moderate commercial use U.S. harbors and waterways: GIWW â€“ Brazos River Floodgates & Colorado River Lock, TX; Houston Ship Channel, TX; Matagorda Ship Channel, TX; Port of Long Beach, CA; San Juan, PR; Three Rivers, AR; and Unalaska (Dutch) Harbor, AK.

The Budget also funds 26 studies to completion. These studies comprise 10 flood risk management studies, eight ecosystem restoration studies, and eight navigation studies. These study completions include Aliso Creek Mainstem, CA; Arkansas River Corridor, OK; City of Norfolk, VA; Corte Madera Creek, CA; Dry Creek (Warm Springs) Restoration, CA; Du Page River, IL; Espanola Valley, Rio Grande and Tributaries, NM; Jefferson County Shore Protection, TX; Kotzebue Small Boat Harbor, AK; Little Colorado River (Winslow), AZ; Lowell Creek Tunnel Flood Diversion, AK; Lower Santa Cruz River, AZ; Port of Long Beach Navigation Improvements, CA; Proctor Creek Watershed, Fulton County, GA; Resacas at Brownsville, TX; Rota Harbor Modifications, CNMI; Sacramento River Bank Protection (Phase 3), CA; Saint George Harbor Improvement, AK; San Juan Harbor Improvement Study, PR; Souris River Basin, ND; Sweetwater, GA; Three Rivers, AR; Tinian Harbor Modifications, CNMI; Unalaska (Dutch) Harbor, AK; Village Creek, AL; and Yuba River Fish Passage, CA (Englebright & Dague Point Dams).

The Investigations account also includes $25 million for Corps' efforts, in conjunction with state floodplain management authorities, to provide technical and planning assistance to enable local communities to reduce their flood risk, with emphasis on non-structural approaches. The Budget continues to invest in the development of interagency teams known as Silver Jackets to help coordinate federal assistance in implementing flood risk management solutions.

The FY 2018 Construction program is funded at $1.128 billion, including $108 million in the MR&T account. The construction program uses objective, performance-based guidelines to allocate funding toward the highest performing economic, environmental, and public safety investments.

The Budget funds 25 construction projects, consisting of 14 flood risk management projects, seven aquatic ecosystem restoration projects, and four commercial navigation projects.

The FY 2018 Budget includes $265 million for safety modifications on seven dam safety, seepage control and static instability correction projects and $21 million for interim risk recuction measures for dams with a significant risk.

Among the ongoing construction projects in the FY 2018 Budget, the 10 highest funded projects are: Olmsted Locks and Dam, IL & KY ($175 million); Lower Mississippi River Mainstem (MR&T) ($108 million); Herbert Hoover Dike, FL, seepage control ($82 million); the South Florida Ecosystem Restoration (Everglades), FL ($77 million); Columbia River Fish Mitigation, WA, OR & ID (CRFM) ($70 million); Boston Harbor Deep Draft Improvements, MA ($58 million); Isabella Lake, CA (Dam Safety) ($58 million); East Branch Clarion River Lake, PA ($50 million); Savannah Harbor Expansion, GA ($50 million); and Santa Ana River Mainstem, CA ($40 million).
The FY 2018 O&M program is funded at $3.242 billion, including $142 million in the MR&T account. For O&M, the Budget emphasizes performance of existing projects by focusing on those coastal harbors and inland waterways with the most commercial traffic, as well as safety improvements at federal dams and levees based on the risk and consequence of a failure. The FY 2018 O&M program also funds the completion of 11 master plans, one shoreline management plan and one dredged material management plan.

The FY 2018 aquatic ecosystem restoration program is funded at $335 million with $301 million from Construction, $19 million from O&M and $16 million from Investigations. This program supports restoring aquatic habitat in ecosystems where ecosystem structure, function, and processes have been degraded. Aquatic ecosystems supported by the Budget include the California Bay-Delta, the Everglades, the Great Lakes, the Columbia River, the Upper Mississippi River and the Missouri River.

The Corps will continue to work with other federal, state and local agencies, using the best available science and adaptive management to protect and restore these ecosystems.

The FY 2018 Budget funds Recreation at $280 million, with $268 million in the O&M account and $11 million in the MR&T account. The Corps is one of the nation’s largest providers of federal recreation opportunities, with approximately 250 million visits to Corps’ lands and waters per year.

The FY 2018 Regulatory Program is funded at $200 million to protect the nation’s waters and wetlands and provide efficiency in permit processing.

The FY 2018 FUSRAP program is funded at $118 million to continue program activities at 19 sites contaminated by the Nation’s early efforts to develop atomic weapons.

Based on the Corps’ contribution to the response and recovery of communities after natural disasters strike, and the inevitability that there will be more, the Emergency Management program of the Corps is funded at $41 million in FY 2018, with $35 million in the FCCE account for preparedness and training to respond to floods, hurricanes, and other natural disasters, and $6 million in the O&M account.


-30-
The President’s Budget for Fiscal Year (FY) 2018 requests $28.0 billion for the Department of Energy (DOE) to make key investments in science and technology innovation that support its missions in nuclear security, basic scientific research, energy innovation and security, and environmental cleanup.

The FY 2018 Budget Request provides:

- $13.9 billion for the National Nuclear Security Administration (NNSA) to fulfill the President’s vision of rebuilding and restoring the Nation’s security through robust investments to modernize the nuclear security enterprise.

- $6.4 billion for energy and science research and development programs, with a renewed focus on cutting-edge innovation and transition of those breakthroughs to the private sector for commercialization. This includes $4.5 billion for the Office of Science to maintain American leadership in scientific research.

- $6.5 billion for Environmental Management, including $225 million for an Excess Facilities program to address high-risk contaminated facilities that are not in the current project inventory.

To advance the DOE mission in several key areas, the FY 2018 Budget Request:

- Includes $120 million to advance the Nation’s nuclear waste management program. This investment will accelerate fulfillment of the Federal Government’s obligations to address nuclear waste, enhance national security, and reduce future burdens on American taxpayers.

- Invests $508 million to reduce the timeline to achieve an exascale computing system, including $347 million in the Office of Science and $161 million in NNSA. With the $286 million increase over the FY 2016 Enacted level, DOE intends to accelerate delivery of an exascale machine to 2021 to be closely followed by a second machine with a different architecture.

- Addresses cyber threats through $330 million to secure networks and infrastructure across the DOE enterprise and over $40 million to strengthen and protect the Nation’s energy sector.

- Invests $10.2 billion for NNSA to continue refurbishment of the nuclear weapon stockpile and replacement of aging and degrading facilities that support nuclear stockpile operations.
The FY 2018 Budget Request proposes $13.9 billion for the NNSA, $1.4 billion, over the FY 2016 Enacted level. The request ensures the reliability of the nuclear stockpile, modernizes the Nation’s aging nuclear infrastructure, addresses nuclear proliferation and radiological threats at home and abroad, and meets the current and future national defense requirements of America’s nuclear navy. The Budget Request includes:

- $10.2 billion for Weapons Activities, $1.4 billion above the FY 2016 Enacted level, to maintain the safety, security, and effectiveness of the nuclear stockpile, to continue the nuclear modernization program, and to modernize NNSA’s nuclear security infrastructure portfolio.

- $1.8 billion for Defense Nuclear Nonproliferation, $147 million below the FY 2016 Enacted level, to continue missions across the entire nuclear threat spectrum. The Budget Request includes $270 million, $70 million below FY 2016, to terminate the Mixed Oxide (MOX) Fuel Fabrication Facility with an orderly and safe closure of the facility, and $9 million to pursue the dilute and dispose method as an alternative.

- $1.5 billion for Naval Reactors (NR), an increase of $104 million from the FY 2016 level, to support the current fleet and to create the future fleet.

**SCIENCE**

The FY 2018 Budget Request includes $4.5 billion for the Office of Science, $874 million below FY 2016 Enacted, to focus on its core mission of conducting cutting edge, early-stage research. Highlights of the Request include:

- $722 million for Advanced Scientific Computing Research, an increase of $101 million from FY 2016 Enacted, includes $347 million for research, development, and design to accelerate delivery of exascale computing systems.

- $1.6 billion for Basic Energy Sciences (BES), $295 million below FY 2016 Enacted, to support facilities and core research activities.

- $349 million for Biological and Environmental Research, $260 million below FY 2016 Enacted.

- $310 million for Fusion Energy Sciences, a decrease of $128M from FY 2016 Enacted levels, including $247 million for domestic research and fusion facilities, and $63 million for the ITER project.

- $673 million for High Energy Physics, a decrease of $122 million from FY 2016 Enacted levels, to support the highest-priority activities and projects.

- $503 million for Nuclear Physics, $114 million below FY 2016 Enacted levels, to support ongoing high-priority research and vital projects.
ENERGY

The FY 2018 Request provides $2.2 billion, $2.4 billion below the FY 2016 Enacted level, for energy programs that enhance U.S. security and economic growth through transformative science, technology innovation, and market solutions to meet the Nation’s energy challenges. The Budget Request consolidates programs focused on bringing technologies to the market into one office, the Office of Technology Transitions, to create a robust technology transfer program to transfer breakthroughs from the national laboratories to the private sector.

The request provides $1.9 billion for energy research and development (R&D), $2.3 billion below FY 2016 Enacted. Highlights include:

- $636 million for Energy Efficiency and Renewable Energy, $1.4 billion below the FY 2016 Enacted level, focusing on early stage R&D to support American energy independence and domestic job-growth. The Weatherization and State Energy subprograms are eliminated to reduce Federal intervention in State-level energy policy and implementation.

<table>
<thead>
<tr>
<th>Energy Programs</th>
<th>FY18 ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Efficiency and Renewable Energy</td>
<td>636</td>
</tr>
<tr>
<td>Electricity Delivery and Energy Reliability</td>
<td>120</td>
</tr>
<tr>
<td>Fossil Energy Research and Development</td>
<td>280</td>
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<tr>
<td>Fossil Energy Petroleum Reserves</td>
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<tr>
<td>Nuclear Energy</td>
<td>703</td>
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<tr>
<td>Yucca Mountain and Interim Storage</td>
<td>120</td>
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<tr>
<td>Indian Energy</td>
<td>10</td>
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<tr>
<td>Office of Technology Transitions</td>
<td>7</td>
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<tr>
<td>Advanced Research Projects Agency—Energy</td>
<td>20</td>
</tr>
<tr>
<td>Loan Programs</td>
<td>-</td>
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<tr>
<td>Energy Information Administration</td>
<td>118</td>
</tr>
<tr>
<td>Energy Total</td>
<td>2,214</td>
</tr>
</tbody>
</table>

- $120 million for Electricity Delivery and Energy Reliability, a decrease of $86 million from FY 2016 Enacted, including $42 million for R&D on next-generation, early-stage grid cybersecurity solutions.

- $703 million for Nuclear Energy, $283 million below FY 2016 Enacted, focusing on early stage R&D. The request includes $20 million for R&D to explore different SMR designs.

- $120 million for the Yucca Mountain and Interim Storage Program to accelerate progress on fulfilling the Federal Government’s obligations to address nuclear waste by restarting NRC licensing activities for the Yucca Mountain nuclear waste repository and establishing a robust interim storage program to develop a capability for earlier acceptance of spent nuclear fuel.

- $280 million for Fossil Energy Research and Development, $352 million below the FY 2016 Enacted level, for cutting edge, early stage R&D to bolster energy security and domestic energy production while advancing clean coal technologies. The request proposes to initiate consolidation of National Energy Technology Laboratory sites.

- In line with Administration priorities, the Request terminates the Advanced Research Projects Agency—Energy and the Department’s Loan Programs, while funding federal staff to oversee existing awards to completion and monitor the loan portfolio.

The Request provides $200 million for the Petroleum Reserves, including the Strategic Petroleum Reserve (SPR), Naval Petroleum and Oil Shale Reserves, and Northeast Home Heating Oil Reserve. The President’s Budget includes a mandatory budget proposal to sell approximately 270 million barrels of SPR crude oil by 2027, roughly half of the remaining SPR inventory after all sales currently authorized by law are completed, resulting in deficit
reduction of $17 billion over 10 years, and proposes to liquidate the Northeast Gasoline Supply Reserve, resulting in an estimated $69 million in receipts that offset discretionary spending.

The President’s Budget includes a mandatory budget proposal to sell the transmission assets of the Western Area Power Administration (WAPA), the Bonneville Power Administration (BPA), and the Southwestern Power Administration (SWPA) and to repeal WAPA’s $3.25 billion emergency borrowing authority.

ENVIRONMENTAL MANAGEMENT

The Budget Request includes $6.5 billion for Environmental Management, $290 million above the FY 2016 Enacted level, to continue managing the cleanup resulting from five decades of nuclear weapons development and production and Government-sponsored nuclear energy research. Highlights of the FY 2018 Budget Request include:

- $225 million to establish an Excess Facilities program to address specific high-risk contaminated facilities at the Y-12 National Security Complex and Lawrence Livermore National Laboratory.

- $1.5 billion, $90 million above the FY 2016 Enacted level, for the Office of River Protection, to continue cleanup activities at Hanford, including ongoing construction of the Low Activity Waste Pretreatment facility.

- $1.4 billion, $111 million above the FY 2016 Enacted level, for cleanup activities at the Savannah River Site, including commissioning and start-up of the Salt Waste Processing Facility.

- $800 million, $190 million below FY 2016 Enacted, for Richland cleanup at Hanford.

- $418 million, $129 million above FY 2016 Enacted, for the decontamination and decommissioning project and other cleanup at the Portsmouth Site.

- $390 million, $78 million less than the FY 2016 Enacted level, for cleanup activities at the Oak Ridge site, including continued deactivation and demolition at the East Tennessee Technology Park.

- $359 million, $43 million less than FY 2016 Enacted, to continue major cleanup at the Idaho site, including commissioning the Integrated Waste Treatment Unit and operating the Advanced Mixed Waste Treatment Project.

- $323 million, $18 million above FY 2016 Enacted, to safely continue waste emplacement at the Waste Isolation Pilot Plant (WIPP), the Nation’s only mined geologic repository for permanent disposal of defense-generated transuranic waste, including $65 million for projects to increase underground airflow.

- $270 million, $2 million more than FY 2016 Enacted, for the Paducah site to continue ongoing cleanup activities.

<table>
<thead>
<tr>
<th>Environmental Management</th>
<th>FY18 ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOE Cleanup Sites and Program</td>
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<tr>
<td>• River Protection</td>
<td>1,504</td>
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<td>• Savannah River</td>
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<tr>
<td>• Richland/Hanford</td>
<td>800</td>
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<tr>
<td>• Portsmouth</td>
<td>418</td>
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<tr>
<td>• Oak Ridge</td>
<td>390</td>
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<td>• Idaho</td>
<td>359</td>
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<tr>
<td>• Program Direction</td>
<td>300</td>
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<td>• Carlsbad/Waste Isolation Pilot Plant (WIPP)</td>
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<tr>
<td>• Paducah</td>
<td>270</td>
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<td>• Excess Facilities</td>
<td>225</td>
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<td>• Los Alamos</td>
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<td>• West Valley Demonstration Project</td>
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<td>• Nevada</td>
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<td>• Headquarters Operations</td>
<td>43</td>
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<td>• Moab</td>
<td>35</td>
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<tr>
<td>• Uranium Thorium Reimbursements</td>
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<td>• Technology Development</td>
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<td>• Energy Technology Engineering Center</td>
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<td>• Other Sites</td>
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<tr>
<td>• Sandia National Laboratory</td>
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<tr>
<td>• Separation Process Research Unit (SPRU)</td>
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<tr>
<td>• Brookhaven</td>
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<td>• Lawrence Livermore National Laboratory</td>
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<td>Environmenta l Management Total</td>
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</table>
President Proposes $2.5 Billion Budget for Indian Affairs in Fiscal Year 2018
Budget Invests in Education, Resource Development, Construction and Infrastructure

WASHINGTON – President Donald Trump today proposed a $2.5 billion Fiscal Year 2018 (FY18) budget for Indian Affairs, which includes the Bureau of Indian Affairs (BIA) and the Bureau of Indian Education (BIE). The President’s budget reaffirms his support of tribal sovereignty and self-determination across Indian Country by focusing on core funding and services to support ongoing tribal government operations, including an emphasis on infrastructure repair and improvements.

“President Trump promised the American people he would cut wasteful spending and make the government work for the taxpayer again, and that’s exactly what this budget does,” said U.S. Secretary of the Interior Ryan Zinke. “Working carefully with the President, we identified areas where we could reduce spending and also areas for investment, such as addressing the maintenance backlog in our National Parks and increasing domestic energy production on federal lands. The budget also allows the Department to return to the traditional principles of multiple-use management to include both responsible natural resource development and conservation of special places. Being from the West, I’ve seen how years of bloated bureaucracy and D.C.-centric policies hurt our rural communities. The President’s budget saves taxpayers by focusing program spending, shrinking bureaucracy, and empowering the front lines.”

“President Trump’s Fiscal Year 2018 budget request for Indian Affairs strongly reflects his proposed investments in education, energy development, and infrastructure which focus on enhancing tribal prosperity through tribal, rather than federal efforts,” said Michael S. Black, acting Assistant Secretary – Indian Affairs. “We will achieve that by refocusing our resources into those programs that are most effective in supporting tribal self-determination.”

Indian Affairs plays an important role in carrying out the federal government’s trust, treaty and other responsibilities to the nation’s 567 federally recognized American Indian and Alaska Native tribes.
Operation of Indian Programs

The FY18 budget proposal for Indian Affairs operational programs is $2.1 billion.

It includes $786.4 million for Advancing Indian Education, an investment that supports a vision for a 21st century Indian education system, grounded in both high academic standards and tribal values and traditions. The funding will allow for the comprehensive reorganization of the BIE to continue in FY18. The request proposes $643.9 million for Elementary and Secondary Education programs, $118.4 million for Post-Secondary programs, and $24.0 million for education management.

In its role as a capacity builder and service provider to support tribes in educating their youth and delivering world-class and culturally appropriate education across Indian Country, the budget request for Indian education focuses on direct school operations including classroom instruction, textbooks, student transportation, language development programs, Gifted and Talented programs, school maintenance, and in some remotely located schools, residential costs. Importantly, the budget continues to invest in activities that promote educational self-determination for Tribal communities. Accordingly, the budget proposes $74.4 million, an increase of $1.2 million, to fully fund Tribal Grant Support Costs for tribes that choose to operate BIE-funded schools.

The FY18 Operation of Indian Programs request for Supporting Indian Families and Protecting Indian Country includes:

- $123.9 million for BIA Office of Indian Services programs that provide social services, welfare assistance and Indian Child Welfare Act protections, all of which contribute to Indian Affairs’ mission to promote the development of prosperous tribal communities.
- $349.3 million for the BIA’s Office of Justice Services to support 190 law enforcement programs and 96 corrections programs operated by tribes and by the BIA as direct services, including $22.0 million for tribal courts and $1.3 million for fire protection.

The FY18 request for Supporting Sustainable Stewardship of Trust Resources and Lands supports Indian Affairs’ fiduciary trust responsibilities and sustainable stewardship of trust lands, natural resources and the environment in Indian Country. The budget proposes $112.0 million for the BIA’s Real Estate Services programs, which includes probating Indian trust assets, land title and records processing, geospatial support needs, and database management. The budget also proposes $165.5 million for the BIA’s Natural Resource Management programs, which assist tribes in the management, development and protection of Indian trust land and natural resources on 56 million surface acres and 59 million acres of subsurface mineral estates.

The budget supports the Administration’s focus on infrastructure with proposed increases totaling $12.3 million, including $3.8 million programs in the operations account for programs that support deferred maintenance projects for resource management infrastructure and roads. The budget includes:

- An additional $2.6 million for irrigation project operations and maintenance. This program serves the 17 Indian irrigation projects in the BIA’s asset inventory, 15 of which generate revenues that are used to fund most of their operations and maintenance. Annual
receipts for the revenue-generating projects exceeded $33 million in 2016, which are reinvested into the projects.

- An increase of $1.2 million for the BIA’s Roads program for deferred maintenance projects. The program has maintenance responsibility for approximately 29,000 miles of BIA-owned roads and over 900 bridges.

The FY18 budget request also proposes $24.7 million for Minerals and Mining programs. Funding includes continued commitment to the Indian Energy Service Center, which was initially funded in 2016. Income from energy production is the largest source of revenue generated from trust lands, with royalty income of $534 million in 2016.

The FY18 request proposes $627.0 million for Tribal Priority Allocations, a $63.0 million decrease from the FY17 CR level.

**Contract Support Costs**

The President’s FY18 budget requests $241.6 million for Contract Support Costs, which support the tribes’ ability to assume responsibility for operating federal programs, maintains the Administration’s strong support for the principle of tribal self-determination and strengthening tribal communities across Indian Country. Based on the most recent analysis of funding levels in the 2018 request, the proposed amount will fully fund contract support costs.

**Construction**

The budget request for Construction is $143.3 million, which supports the Administration’s focus on Maintaining Essential Infrastructure and Resources.

It includes proposed increases totaling $12.3 million, including $8.5 million programs in the construction account, for deferred maintenance projects for resource management infrastructure and other BIA construction and deferred maintenance programs. The request proposes:

- An additional $2.5 million for the Safety of Dams program, which is currently responsible for 138 high or significant-hazard dams located on 42 Indian reservations, $1.8 million for dam maintenance, and $0.7 million for Survey and Design.
- An additional $1.5 million for irrigation projects rehabilitation. The irrigation rehabilitation program addresses critical deferred maintenance and construction work on BIA-owned and operated irrigation facilities, with a focus on health and safety concerns. Most facilities are reaching 100 years old and are in need of major capital improvements.
- An increase request of $2.0 million for deferred maintenance needs of regional and agency facilities at 127 locations to address safety, security and handicap accessibility issues where Indian programs are administered.

The budget provides $80.2 million for education construction programs to address deferred maintenance needs at the 183 campuses in the BIE school system. The proposal for construction projects is focused on continuing the planning and design of the 10 schools on the BIE’s 2016 School Replacement List as well as major improvement and repair projects at other education facilities.
Land and Water Claims Settlements

The FY18 request for authorized settlements payments is $14.0 million. Funding will support payments to enacted settlements authorized for appropriations. At the proposed funding level, the Department can continue to honor commitments within the statutory requirements for completion. These settlements resolve tribal land and water rights claims and ensure that tribes have access to land and water to meet their domestic, economic and cultural needs.

Indian Guaranteed Loan Program

The FY18 budget request for this program is $6.7 million. The funding level will guarantee $87.4 million in loan principal to support Indian economic development.

Indian Affairs’ FY18 Budget Justification is available here, and additional details on the President’s FY18 Budget Request are available on the Department’s website. Visit https://www.doi.gov/budget/appropriations/2018/highlights to view the Department’s Budget in Brief.

The BIA’s mission includes developing and protecting Indian trust lands and natural and energy resources; supporting social welfare, public safety and justice in tribal communities; and promoting tribal self-determination and self-governance. For more information, visit the Indian Affairs website. The BIE implements federal Indian education programs and funds 183 elementary and secondary day and boarding schools (of which two-thirds are tribally operated) located on 64 reservations in 23 states and peripheral dormitories serving over 47,000 individual students. BIE also operates two post-secondary schools, administers grants for 28 tribally controlled colleges and universities and two tribal technical colleges, and provides higher education scholarships to Native youth. For more information, visit the Bureau of Indian Education website.

###
President Proposes $1.1 Billion Budget for BLM in Fiscal Year 2018

Spending plan supports American energy production, local economies

President Donald Trump today requested a $1.1 billion Fiscal Year 2018 (FY18) budget (https://www.doi.gov/budget/appropriations/2018/highlights) for the Bureau of Land Management (BLM) that supports the Administration’s priorities, including increased American energy development and promoting job growth.

“The President’s budget gives the BLM the resources needed to carry out our multiple-use and sustained yield mission, which includes promoting American energy and mineral production on Federal lands and supporting local economies,” said BLM Acting Director Mike Nedd. “The proposed budget will allow us to continue working with our non-Federal partners and strengthen these vital relationships in order to be good neighbors in the communities we serve. BLM lands create jobs in local communities, and the President’s budget supports traditional land uses such as timber harvesting, responsible energy development, grazing and recreation including hunting and fishing.”

The BLM budget generally prioritizes and advances the President’s priorities of enhancing American energy security and creating jobs with resource allocation that supports an “all of the above” energy development approach, including increased coal, oil and gas, and renewable energy production. The BLM also proposes to address the explosive cost growth in the Wild Horse and Burro program, which has become unsustainable due to several factors. To help achieve a balanced budget by 2027, the President’s budget proposes various necessary reductions across the Federal government, including within the BLM budget. The BLM’s overall budget reflects a net reduction of $162.7 million from the FY 2017 CR baseline.

“President Trump promised the American people he would cut wasteful spending and make the government work for the taxpayer again, and that’s exactly what this budget does,” said U.S. Secretary of the Interior Ryan Zinke. “Working carefully with the President, we identified areas where we could reduce spending and also areas for investment, such as addressing the maintenance backlog in our National Parks and increasing domestic energy production on federal lands. The budget also allows the Department to return to the traditional principles of multiple-use management to include both responsible natural resource development and conservation of special places. Being from the West, I’ve seen how years of bloated bureaucracy and D.C.-centric policies hurt our rural communities. The President’s budget saves taxpayers by focusing program spending, shrinking bureaucracy, and empowering the front lines.”

Congress charged the BLM with a mandate of managing public lands for a variety of uses such as energy development, livestock grazing, recreation, and timber harvesting while ensuring natural, cultural, and historic resources are maintained for present and future use. The agency manages 245 million surface acres of public lands—the most of any Federal agency—primarily in 12 Western states, including Alaska, and 700 million acres of subsurface mineral estate nationwide. This equates to 10 percent of the nation’s surface and roughly one-third of its subsurface mineral resources.

The FY 2018 budget reflects the President’s focus on the following priorities:

**Strengthening America’s Energy Independence:** The 2018 BLM budget proposal includes significant funding increases in support of American energy development, which will facilitate domestic energy production, generate revenue, and increase jobs in the energy sector. In particular, there is a proposed $16 million increase in the Oil and Gas Management program to help ensure BLM has sufficient administrative and staff capacity to quickly process Applications for Permits to Drill and Expressions of Interest, and to help alleviate administrative burdens in processing rights-of-way requests for critical infrastructure needs.

The BLM budget proposal also includes an $8 million increase within the Coal Management program to support improvements to the Federal coal leasing and permitting processes. In particular, the increased funds will support staff capacity to meet additional coal application processing and inspection requirements, processing and approving exploration licenses and recovery and protection plans, and conducting lease sale fair market determinations.
Managing America's Lands and Resources for Multiple-Use: The budget proposes $47.2 million for Recreation Resources Management. With these funds, the BLM will focus on sites with the highest visitation and make necessary adjustments to staffing resources and core functions (e.g., visitor services, travel management planning, and law enforcement) to meet the public's demand for access and diverse recreation opportunities.

The proposed budget calls for $67.8 million for the Rangeland Management program for monitoring and evaluating the health of the public grazing lands, administering grazing use, managing invasive weeds, and other activities. In addition, the budget proposes $75.1 million for the Wildlife Management program, which conserves and restores wildlife habitat as an essential part of BLM's mission. More than 3,000 species of wildlife live on BLM-managed lands. The budget request also funds the Threatened and Endangered Species Management program at $20.3 million. Priority will be given to recovering federally-listed species; conservation and other pre-emptive actions will continue on a smaller scale.

Managing Healthy Wild Horses and Burros on Healthy Rangelands: The budget request proposes $70.7 million for the Wild Horse and Burro program and eliminates appropriations language restricting BLM from using all of the management tools provided for in the 1971 Wild Free-Roaming Horses and Burros Act. The BLM manages wild horse and burro herds on 26.9 million acres of public lands. Low public demand to adopt or purchase excess animals, a lack of effective reproduction-control tools, and high costs to care for unadopted or unsold animals have restricted the BLM's ability to manage herd growth. As a result, the BLM estimates that nearly 73,000 wild horses and burros roam public lands as of March 2017, almost three times the number that is sustainable and healthy for the land and the animals. The President's budget would help reverse the declining health of wild horse and burro herds and the public rangelands on which they—and many other species—depend, by allowing the BLM to use the full range of tools identified in the 1971 Act, including humane euthanasia and unrestricted sale of certain excess animals.

Supporting Local Communities: The budget requests $89.8 million for the Oregon and California (O&C) account to support BLM's management of the 2.4 million acres of O&C grant lands, Coos Bay Wagon Road grant lands, and Intermingled public domain lands in western Oregon. The BLM manages certain O&C Railroad grant lands and Coos Bay Wagon Road grant lands for forest diversity and sustainability. Furthermore, appropriated funds will support local communities and employment opportunities by supporting timber harvests commensurate with the approved resource management plans and the O&C Act.

Additional details on the President's FY 2018 Budget are available on the Department's website. (https://www.dol.gov/budget)

(basic/press-release-footer-boiler-plate)

The BLM manages more than 245 million acres of public land, the most of any Federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western states, including Alaska. The BLM also administers 700 million acres of sub-surface mineral estate throughout the nation. The BLM's mission is to sustain the health, diversity, and productivity of America's public lands for the use and enjoyment of present and future generations. In Fiscal Year 2015, the BLM generated $4.1 billion in receipts from activities occurring on public lands.

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RELEASE DATE
Tuesday, May 23, 2017

ORGANIZATION
Bureau of Land Management

ATTACHMENTS
President Proposed $1.1 Billion Fiscal Year 2018 Budget for Bureau of Reclamation

Budget sustains Reclamation’s efforts to deliver water and generate hydropower in cost-efficient and environmentally responsible manner

Media Contact: Dan DuBray, 202-513-0574

For Release: May 23, 2017
WASHINGTON – President Donald Trump proposed a $1.097 billion Fiscal Year 2018 (FY18) budget for the Department of the Interior’s Bureau of Reclamation. The budget supports the Administration’s and Interior’s goals of ensuring the efficient generation of American energy, provision of secure water supplies, varied use of resources, celebration of America’s recreation opportunities and fulfilling commitments to tribal nations.

“President Trump promised the American people he would cut wasteful spending and make the government work for the taxpayer again, and that’s exactly what this budget does,” said U.S. Secretary of the Interior Ryan Zinke. “Working carefully with the President, we identified areas where we could reduce spending and also areas for investment, such as addressing the maintenance backlog in our National Parks and increasing domestic energy production on federal lands. The budget also allows the Department to return to the traditional principles of multiple-use management to include both responsible natural resource development and conservation of special places. Being from the West, I’ve seen how years of bloated bureaucracy and D.C.-centric policies hurt our rural communities. The President’s budget saves taxpayers by focusing program spending, shrinking bureaucracy, and empowering the front lines.”
As the nation’s largest wholesale water supplier and second-largest producer of hydroelectric power, Reclamation's projects and programs are an important driver of economic growth in the western States. Its mission is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public. Reclamation manages water for agricultural, municipal and industrial uses, and provides flood risk reduction and recreation for millions of people.

"President Trump's budget for Reclamation shows his strong commitment to our mission of managing water and producing hydropower in the West," Acting Commissioner Alan Mikkelsen said. "Reclamation's infrastructure needs are also high in priority to keep dams safe for the public they serve."

Reclamation's expenditures are offset by current receipts in the Central Valley Project Restoration Fund of $41 million, resulting in net discretionary budget authority of $1.056 billion. The budget proposal for permanent appropriations in FY18 totals $97.5 million.

The proposal for Reclamation's Water and Related Resources account of $960.0 million provides for five major program activities: Water and Energy Management and Development ($313.7 million), Land Management and Development ($44.2 million), Fish and Wildlife Management and Development ($153.0 million), Facility Operations ($296.0 million), and Facility Maintenance and Rehabilitation ($153.2 million). The funding proposed in Reclamation's FY18 budget supports key programs important to the 17 Western States.

It emphasizes Reclamation's core mission of reliable water delivery and hydropower generation to address the water demands of a growing population in an environmentally responsible and cost-efficient manner; and to assist states, tribes and local entities in solving water resource issues. It also emphasizes the operation and maintenance of Reclamation facilities in a safe, efficient, economic and reliable manner — ensuring systems and safety measures are in place to protect the public and Reclamation facilities.

The budget also supports water rights settlements to ensure sufficient resources to address the requirements of legislation passed by Congress to settle litigation. The request includes amounts for specific Indian water rights settlements that support tribal nations, including the newly enacted Blackfeet Water Rights Settlement.

The FY18 budget will continue to support and emphasize activities designed to prevent and combat the infestation of quagga and zebra mussels across Reclamation states. These invasive species are rapidly reproducing and have infested multiple operational areas of Reclamation facilities, impacting pumping capabilities for power and water operations, blocking water intake structures and affecting the ecosystems by feeding off existing algae resulting in a shift in native species and a disruption of the ecological balance. Research is continuing to find ways to impede
the quagga and zebra mussels' populations. Increased funding in FY18 will support Reclamation mussels' activities framework established in the Quagga–Zebra Mussel Action Plan (QZAP) for Western U.S. Waters. This work is being pursued in close cooperation with the Western Governors Association, and includes a focus on working with states and tribes to keep invasive mussels from infecting the Columbia River Basin in the Pacific Northwest.

Reclamation's dams, water conveyances and power generating facilities are critical components of the Nation's infrastructure. Effectively managing these structures is among the many significant challenges facing Reclamation over the next several years and beyond. Reclamation's FY18 budget reflects a very deliberate approach to addressing mission priorities.

Tribal Nations – Within Water and Related Resources in FY18, Reclamation is requesting a total of $151.3 million to support tribal nations' efforts and initiatives. To meet Interior's trust and treaty obligations, Reclamation's budget request sets Indian water rights settlements among the highest priorities. In FY18, $98.6 million is requested for the Indian water rights settlements authorized under several legislative statutes, including the Claims Resolution Act of 2010, the Omnibus Public Land Management Act of 2009 and the newly enacted Water Infrastructure Improvements for the Nation Act of 2016. This includes funding of $67.8 million for the Navajo-Gallup Water Supply Project, $12.8 million for the Crow Tribe Water Rights Settlement, $8.0 million for the Aamodt Litigation Settlement, and $10.0 million for the Blackfeet Water Rights Settlement. The funding for the Blackfeet Water Rights Settlement represents Reclamation's first contribution towards meeting its required contribution of $246.5 million by January 2025. In addition to requesting funding consistent with current activity, these settlements will draw on available mandatory funding to continue project activities. In FY18, the discretionary funds are requested within Water and Related Resources, as opposed to a separate appropriations account as requested in prior years.

Funding to support tribal nations is also included within a number of projects, including the Mni Wiconi Project for the required tribal operation and maintenance ($13.5 million), the Nez Perce Settlement within Columbia and Snake River Salmon Recovery Project ($7.1 million), the San Carlos Apache Tribe Water Settlement Act ($1.6 million) and the Ak Chin Indian Water Rights Settlement Act ($16.2 million).

Other aspects of the FY18 budget proposal include:

Central Valley Project Restoration Fund – This fund was established by the Central Valley Project Improvement Act, Title XXXIV of P.L. 102-575, Oct. 30, 1992. The budget of $41.4 million is expected to be offset by discretionary receipts totaling $41.4 million, which is the maximum amount that can be collected from project beneficiaries under provisions of Section 3407(d) of the Act. The discretionary receipts are adjusted on an annual basis to maintain payments totaling $30 million (October 1992 price levels) on a three-year rolling average basis. The budget of $41.4 million for
the CVPRF was developed after considering the effects of the San Joaquin River Restoration Settlement Act (P.L. 111-11, March 30, 2009) which redirects certain fees, estimated at $2 million in FY 2018, collected from the Friant Division water users to the San Joaquin Restoration Fund.

Dam Safety Program – The safety and reliability of Reclamation’s dams is one of Reclamation’s highest priorities. The Dam Safety Program is critical to effectively manage risks to the downstream public, property, project, and natural resources. The budget of $88.1 million for the Safety of Dams Evaluation and Modification Program provides for risk management activities at Reclamation’s high and significant hazard dams where loss of life or significant economic damage would likely occur if the dam were to fail. The budget also includes preconstruction and construction activities for several ongoing and planned Dam Safety modifications. In addition, funding is included in the budget for Interior’s Dam Safety Program, which Reclamation oversees.

Desalination and Water Purification Research Program – This program supports desalination research, development and demonstrations for the purpose of converting unusable waters into useable water supplies. The FY18 request of $2.9 million supports new and continued projects in the three funding areas: laboratory scale research studies, pilot-scale testing projects and full-scale testing projects. Funding also supports the operation and maintenance of Reclamation’s Brackish Groundwater National Desalination Research Facility, which supports testing of pilot-scale and full-scale testing projects, as well as potentially supporting work from Cooperative Research and Development Agreements that are in development, including one focused on produced waters from oil and gas extraction activities.

Science and Technology Program – The FY18 request at $11.1 million supports continued science and technology projects, water and power technology prize competitions, technology transfer, and dissemination/outreach activities addressing critical water and power management technical obstacles in water management, hydropower generation, infrastructure management and environmental compliance. The S&T Program also continues to develop improved methods for monitoring, detection and control of invasive mussels that continue to spread in the West, infesting Reclamation dams, power plants, and facilities of other water providers.

The Site Security program – The budget will continue Reclamation’s ongoing site-security program at $26.2 million, which includes physical security upgrades at key facilities, guards and patrols, anti-terrorism program activities and security risk assessments.

WaterSMART Program – The President’s proposed budget for Reclamation calls for $59.1 million for the WaterSMART Program — Sustain and Manage America’s Resources for Tomorrow — to assist communities in optimizing the use of water supplies by improving water management. The WaterSMART Program components include: WaterSMART Grants funded at $23.4 million; Basin
Studies Program, $5.2 million; Title XVI Water Reclamation and Reuse Program, $21.5 million; Water Conservation Field Service program, $4.0 million; Cooperative Watershed Management program, $1.75 million; and the Drought Response program, $3.25 million.

The Bureau of Reclamation, throughout the 17 western states, is committed to helping meet the many water and power challenges of the West. Reclamation's water and hydropower projects and activities throughout the western United States are a foundation for essential and safe water supplies, providing renewable hydropower energy and sustaining ecosystems supporting fish and wildlife, recreation and rural economies.

To view Reclamation's budget request, see www.usbr.gov/budget.

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Reclamation is the largest wholesale water supplier in the United States, and the nation's second largest producer of hydroelectric power. Its facilities also provide substantial flood control, recreation, and fish and wildlife benefits. Visit our website at https://www.usbr.gov and follow us on Twitter @USBR.

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President Proposes $2.55 Billion FY18 Budget for National Park Service

News Release Date: May 23, 2017

Contact: Tom Crosson (Tom.Crosson@nps.gov)

Increases funding to tackle the deferred maintenance backlog

WASHINGTON – President Donald J. Trump today proposed a $2.55 billion Fiscal Year 2018 budget for the National Park Service (NPS), including funding increases for top Trump Administration priorities like deferred maintenance.

The budget makes a balanced investment in daily park and program operations and parks’ long-term needs while putting the federal government on track for a balanced budget by 2027. Priorities receiving increased funding include $33.3 million in programmatic increases for more construction, planning and deferred...
maintenance, $25.7 million across all activities for fixed costs, and $1.1 million for new responsibilities at existing parks.

"President Trump and I are absolutely committed to repairing our treasured national parks and making sure the American people have a world class experience when they visit our parks, and this budget reflects that," said U.S. Secretary of the Interior Ryan Zinke. "I've been pushing for more funding for the deferred maintenance backlog since my time in Congress. Not all spending is solely an expense, this is an investment in our parks' infrastructure and our future. While tough decisions had to be made to save taxpayer dollars and put ourselves on track to a balanced budget, I'm confident we will find innovative solutions for cost reduction, like public private partnerships, and revenue generation that will improve both sides of the books."

**American Infrastructure** - The FY18 budget provides $129 million for line item construction, an increase of $13 million over the FY17 Continuing Resolution. The budget provides $685.9 million to support facility operations and maintenance across the National Park System. This supports funding for front line maintenance and rehabilitation of high priority park infrastructure assets, including $112.7 million for cyclic maintenance, which provides daily, routine, and preventive maintenance, and $99.3 million for repair and rehabilitation projects, which provide critical funding to conduct work that helps to reduce deferred maintenance on parks' highest priority assets.

These construction projects tackle large infrastructure priorities, including funding needed to rehabilitate the Arlington Memorial Bridge and restore Scotty's Castle Visitor Center at Death Valley National Park.

In FY16, the NPS deferred maintenance backlog decreased by $600 million to $11.3 billion. The completion of some large projects; the revision of several others; and savings due to decreases in construction costs contributed to the reduction.

**American Safety & Security** - The FY18 budget provides $338.2 million for park protection to protect visitors and natural and cultural resources in our National Parks. NPS safety and security efforts focus on critical public safety and resource protection activities. This includes safeguarding the highest visitor use areas, securing the highest priority resources and most critical assets, readily responding to requests for emergency assistance, performing search and rescue operations, and apprehending criminal violators. The United States Park Police will continue to maintain its law enforcement presence in Washington, D.C., New York City, and the San Francisco metropolitan areas, with an emphasis on protecting national icons such as the Statue of Liberty and the Washington Monument.

**America's Public Lands** – The budget continues to support programs such as the American Battlefield Protection Program, providing $8.5 million to allow the NPS to work with state and local governments to promote the preservation and protection of significant historic battlefields associated with the Revolutionary War, War of 1812, and Civil War.

The budget also proposes a shift of $90 million in funding from discretionary to mandatory funding for state conservation grants, to provide funding to states to acquire open spaces and natural areas for outdoor recreation and access purposes, and develop outdoor recreation facilities.


www.nps.gov (https://www.nps.gov)


Last updated: May 23, 2017

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Press Release
President Proposes $1.3 Billion FY 2018 Budget for U.S. Fish and Wildlife Service
Budget Makes Commitments to Public Lands, Energy and Public Access
May 23, 2017
Contact(s):
Gavin Shire, gavin_shire@fws.gov, 703-346-9123

WASHINGTON – President Donald Trump today proposed a $1.3 billion Fiscal Year 2018 (FY18) budget for the U.S. Fish and Wildlife Service. The Service’s budget also includes $1.5 billion in permanent funding, which is mostly administered to states through various grants and other initiatives for their wildlife and sportfish conservation programs. The bureau budget helps put the federal government on track to a balanced budget by 2027.

“President Trump promised the American people he would cut wasteful spending and make the government work for the taxpayer again, and that’s exactly what this budget does,” said U.S. Secretary of the Interior Ryan Zinke. “Working carefully with the President, we identified areas where we could reduce spending and also areas for investment, such as addressing the maintenance backlog in our National Parks and increasing domestic energy production on federal lands. The budget also allows the Department to return to the traditional principles of multiple-use management to include both responsible natural resource development and conservation of special places. Being from the West, I’ve seen how years of bloated bureaucracy and D.C.-centric policies hurt our rural communities. The President’s budget saves taxpayers by focusing program spending, shrinking bureaucracy, and empowering the front lines.”

The President’s budget focuses funding on the nation’s highest priority conservation needs, access to public lands for all Americans, and the agency’s role in streamlining energy development, while containing costs through management efficiencies and other savings to address federal fiscal realities.

“Improving access to national wildlife refuges supports the great American traditions of hunting and fishing that together generate billions of dollars for conservation and billions more for our nation’s economy,” said Principal Deputy Assistant Secretary for Fish and Wildlife and Parks Virginia Johnson. “Accordingly, this budget request prioritizes deferred maintenance funding for national wildlife refuges and fish hatcheries, active habitat management across millions of acres of public lands, and core wildlife-dependent recreational opportunities.”

“Timely environmental review of energy development and other infrastructure needs will create jobs and help the U.S. achieve energy independence,” said Johnson. “This budget also supports our law enforcement officers who support cooperative efforts to secure our borders.”

The FY18 budget includes the President’s continued focus on the following priorities:

America’s Public Lands:
Through the National Wildlife Refuge System, the Service continues the American tradition, started by President Theodore Roosevelt in 1903, of protecting fish and wildlife and their habitats and providing opportunities for hunting, fishing and other outdoor recreation to all Americans. The proposed FY18 funding level for the Refuge System is $470.1 million. The proposed budget maintains a commitment to providing outdoor recreational opportunities in rural, urban or suburban landscapes, including through the Service’s Urban Wildlife Refuge Partnerships program, as well as supporting the vital role of volunteers on our refuges.

American Infrastructure:
Included in the request for National Wildlife Refuges is $136.2 million for improving the Service’s maintenance backlog and to take care of the American public’s investments in facilities and infrastructure managed by the Service. Of this, $41.0 million is to address the backlog in deferred maintenance. This would sustain the Service’s current commitment to eliminate its maintenance backlog in the National Wildlife Refuge System.

In addition, $19.4 million is requested for maintenance of national fish hatcheries, which stock sport and subsistence fish for states and tribes and also propagate and release endangered aquatic species to aid in their recovery. A further $51.9 million in funding is proposed for national fish hatchery operations.

Invasive species cost our economy billions of dollars each year. To continue its commitment to address this important issue, the Administration proposes level funding for programs that focus on preventing the spread of Asian carp, quagga and zebra mussels, and sea lamprey.

A total of $225.2 million is proposed to implement the Endangered Species Act and related programs, of which $79.8 million is dedicated for species recovery efforts. Recovery funding includes an increase of $1.8 million for working on five-year species reviews and delistings and downlistings.

Birds are important to Americans in many ways. Birdwatching generates $43 billion in economic activity yearly; hunting of migratory waterfowl is a traditional recreational pastime that generates billions more. A total of $44.0 million is requested for the Service’s Migratory Bird program, which provides waterfowl hunting opportunities and encourages conservation of birds and their habitats.

The budget eliminates funding for Landscape Conservation Cooperatives and the Service’s science program, as well as funding for youth programs and the Cooperative Recovery Initiative.

American Safety and Security:

Refuge law enforcement efforts are funded at $37.9 million to enhance visitor and employee safety on our public lands and honor the President’s commitment to improving border security.

Additionally, the Office of Law Enforcement is funded at $73.0 million. The recent escalation in poaching of protected species and the illegal trade in wildlife poses an urgent threat to conservation and global security. Wildlife trafficking generates billions of dollars in illicit revenues each year, contributing to the illegal economy, fueling instability in range nations, and undermining regional security in Africa, Asia, and Latin America. Poaching operations themselves have expanded beyond small-scale, opportunistic actions to become a coordinated, large-scale activity often commissioned by armed and organized criminal syndicates that also traffic drugs, arms, and people, and that see wildlife trafficking as a low-risk, high-reward alternative. Our continued investment in combatting wildlife trafficking is important to addressing organized crime and saving hundreds of iconic species such as the African elephant and rhino from extinction. The Service’s International Affairs program is funded at $14.2 million, nearly level with FY17 Continuing Resolution Baseline. The program provides grants and technical assistance for the international conservation of endangered and threatened species.

America First Energy:

The budget includes $96.8 million to facilitate planning and consultation that will support energy development, economic recovery and job creation in the United States. Timely evaluations of proposed infrastructure, energy and other development projects contribute to job creation and economic growth. Funding will allow the Service to expedite project reviews and work with developers on appropriate mitigation and avoidance measures.

The President’s budget also contains proposals to open the Arctic National Wildlife Refuge to oil and gas drilling; to enable the National Wildlife Refuge System to recover damages from persons who injure or destroy federal resources; and to permanently authorize the Recreation Fee Program.


The Department of the Interior oversees one-fifth of the nation’s land and the entire Outer-Continental Shelf. The Department is charged with overseeing energy development on federal lands and waters, grazing allotments and timber sales, water conservation and delivery, upholding tribal trust responsibilities, conservation of wildlife and habitat, and maintaining access for recreation throughout public lands, among other priorities.

The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the benefit of the American people. We are both a leader and trusted partner in fish and wildlife conservation, known for our scientific excellence, stewardship of lands and natural resources, dedicated professionals, and commitment to public service. For more information on our work and the people who make it happen, visit www.fws.gov (https://www.fws.gov).


Last updated: May 10, 2016


President Proposes $922 Million FY18 Budget for USGS

Release Date: May 23, 2017
Budget Focuses on Core USGS Science and Efficiency

President Donald Trump today proposed a $922.2 million Fiscal Year 2018 (FY18) budget for the U.S. Geological Survey. This highlights the Administration’s commitment to increasing efficiency across the federal government and science supporting national objectives and priorities. The President’s proposed FY18 request reflects a savings of $577.8 million in appropriated funds from the FY 2017 CR baseline and a continued commitment to the bureau’s core mission.

"President Trump promised the American people he would cut wasteful spending and make the government work for the taxpayer again, and that’s exactly what this budget does,” said U.S. Secretary of the Interior Ryan Zinke. “Working carefully with the President, we identified areas where we could reduce spending and also areas for investment, such as addressing the maintenance backlog in our National Parks and increasing domestic economic production on federal lands. The budget also allows the Department to return to the traditional principles of multiple-use management to include both responsible natural resource development and conservation of special places. Blacks from the West, I’ve seen how years of blunted bureaucracy and D.C.-centric policies hurt our rural communities. The President’s budget saves taxpayers by focusing program spending, shrinking bureaucracy, and empowering the front lines.”

The request ensures that the USGS will continue to focus on conducting leading-edge research and providing impartial scientific data to key stakeholders and decision-makers to help promote stewardship of public lands and waters and protect the health, safety and prosperity of the Nation.

America First: Energy The USGS budget places strong emphasis on assessing the occurrence, quantity, supply and use of energy and critical mineral resources. The FY18 budget request for the USGS Energy and Minerals Resources Mission Area (https://www.usgs.gov/science/mission-areas/energy-and-minerals?qt-mission_areas_12_landing_page=12-qm) is $671.4 million. The agency will continue to assess energy resources and provide publicly available scientific data and tools to inform energy policy discussions as well as to support science-based decisions that facilitate responsible resource management, including energy, geothermal, uranium and gas hydrate energy resource activities. This request will also allow the USGS to focus on understanding the genesis and distribution of the Nation’s critical mineral resources, particularly in Alaska, midcontinent and southeastern regions of the United States.

America’s Public Lands: The USGS proposed budget promotes the Department of the Interior’s stewardship for public lands by providing science support for disaster alert and rapid response, producing high-resolution geospatial data, addressing new and emerging invasive species and disease, tackling water challenges and supporting development for the Landscapes and the ground system. The USGS will also conduct work on environmental impacts of resource extraction and understanding how mineral resources interact with the environment to affect human and ecosystem health. The agency will also continue to develop and apply new methods to forecast, detect and understand health implications of toxins produced by harmful algal blooms. Additionally, the USGS will continue research to understand contaminants and their related to drinking water.

The President’s FY18 budget request for the Natural Hazards Mission Area (https://www.usgs.gov/science/mission-areas/natural-hazards?qt-mission_areas_12_landing_page=12-qm) is $400.7 million. This provides resources to continue the agency’s natural hazard research, monitoring, response and mitigation capability. With the FY18 budget, the USGS will be able to monitor the Nation’s earthquakes via the Advanced National Seismic System and deliver rapid earthquake impact and dislocation awareness products to support emergency response. The budget also will enable the USGS to continue to conduct field investigations of volcanoes and inform volcano monitoring strategies and volcanic hazard assessments. Additionally, it will enable the USGS to continue to communicate earthquake and volcano information to the public. The FY18 budget also supports science to develop, test and advance tools and methods for landslide monitoring, hazard assessment and forecasting, as well as post-wildfire debris flow hazard assessments for major wildfires.

The President’s FY18 budget request for the Core Science Systems Mission Area (https://www.usgs.gov/science/mission-areas/core-science-systems?qt-mission_areas_12_landing_page=12-qm) is $61.0 million. With the FY18 proposal, the USGS will continue the 3D Elevation Program with completion of high-resolution LiDAR elevation data across the Nation to support topographic map production, and to help protect infrastructure and natural resources and improve public safety. Mapping accuracy through cutting-edge technology allows for precise planning for energy development, transportation and pipeline infrastructure projects, urban planning, flood prediction, emergency response and hazard mitigation. The USGS will also continue acquisition of high-resolution interferometric synthetic aperture radar elevation data as part of the Alaska Mapping Initiative. The USGS will also develop more efficient means of updating hydrologically and ecologically valued species including Asian carp, invasive mussel, sea lamprey, brown trout and muskellunge, and enhance wildlife disease risk assessment, surveillance and management tools.

The President’s FY18 budget request for the Water Resources Mission Area (https://www.usgs.gov/science/mission-areas/water-resources?qt-mission_areas_12_landing_page=12-qm) is $141.0 million. The budget supports a robust network of more than 8,000 streamgages. It will ensure continued research vital to preserving the Nation’s water resources. With the FY18 budget, the USGS will continue to measure and analyze water use information in cooperation with other Federal agencies, States, localities and Tribes to determine the amount of water used, where it is used and how it is used to support water managers. The USGS will also focus on drought research, including determining the changing importance of snowmelt in the water cycle that can provide a regional and national picture of how water availability and use changes during drought.

The FY18 budget request for the Land Resources Mission Area (https://www.usgs.gov/science/mission-areas/denate-and-land-use-change?qt-mission_areas_12_landing_page=12-qm) is $132.8 million. The remaining of this mission area reflects its actual problem-solving focus on meeting the practical science needs of land managers. With the FY18 budget, the USGS will continue the Landscapes program. We will continue to develop an early warning system to monitor the land cover and ecosystem functions and processes, which are driven by climate change. The USGS will also continue to develop and implement new tools and methods to support the Landscapes program.


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USGS Water Resources Mission Area (WMA): As the primary Federal science agency for water information, the USGS monitors and assesses the amount and characteristics of the Nation’s water resources, assesses sources and behavior of contaminants in the water environment and develops tools to improve management and understanding of water resources.

The 2018 budget proposal supports:

- Measuring and analyzing water use information in cooperation with other Federal agencies, States, localities and Tribes to determine the amount of water used, where it is used and how it is used to allow management of water resources.
- Continued work on regional groundwater availability studies that will provide managers more information and new tools to understand groundwater resources in their area.
- Work with partners to conduct national water-budget component studies that provides quantitative information about the amount of water that resides in individual components of the water budget as part of the National Water Census.
- Focus on drought research, including determining the changing importance of snowmelt in the hydrologic cycle, that can provide a regional and national picture of how water availability and use changes during drought.
- Collecting, managing and disseminating consistently high-quality and reliable water resource information in real time. This includes maintaining a national streamgage network of 8,200+ real-time streamgages and 1,600+ real-time groundwater wells.
- Long-term, nationally-consistent monitoring of sediment, nutrients and pesticides at 116 stream monitoring sites and collect and analyze water-quality samples from about 625 groundwater wells.

Water Availability and Use Science Program (WAUSP) $30,413,000 and 280 FTE (-$11,559,000 and -60 FTE):
WAUSP mission directly supports the USGS Science Strategy focus on the National Water Census; providing scientific information on water availability and use nationally to inform the public and decision makers about the status of water resources and how they are changing. FY18 program changes would:

- Reduce National Research Program – Reduces local, regional and national studies examining changes in water budget components (precipitation, evapotranspiration, streamflow and groundwater) and impacts to water availability.
- Eliminate Water Use Data and Research – Eliminates cooperative agreements with States to improve the availability, quality, compatibility and delivery of water-use data.
- Eliminate Mississippi Alluvial Plain Aquifer Assessment Project (MAP) – Eliminates MAP including the collection of information about the interaction of groundwater and streamflow to inform sustainable management practices.
- Eliminate U.S.-Mexico Transboundary Aquifer Assessment Project (TAAP) – Eliminates TAAP collaboration with Arizona, New Mexico and Texas; the International Boundary and Water Commission; stakeholders; and Mexico.
- Eliminate Water-Use Unconventional Oil and Gas Project – Eliminates a study in the Williston Basin to provide tools and information to determine the quantities of water necessary to develop and recover unconventional oil and gas resources.
- Eliminate Focus Area Studies – Eliminates studies in the Upper Rio Grande, the Red River and the Coastal Carolina Basins with State and local partners to provide data, models and decision-support tools.
- Eliminate Two Regional Groundwater Evaluations – Eliminates the Coastal Lowlands Aquifer System (CLAS), which extends from Texas to the Panhandle of Florida, and the California Coastal Basin Aquifers.
- Eliminate Groundwater Model Development, Maintenance and Sustainability – Eliminates maintenance and improvements on existing groundwater software tools, MODFLOW and GSFLOW.

* This fact sheet is based off of the change from the 2017 Continuing Resolution Annualized level
** Full-time Equivalent
USGS 2018 Budget Request
Water Resources (continued)

FY17 Continuing Resolution Annualized: $210,287,000
FY17 Enacted Funding: $214,754,000
FY18 Budget Request: $173,042,000
Change from FY17 CR*: -$37,245,000 / -179 FTE**
Change from FY17 Enacted: -$41,712,000 / -179 FTE

Ground Water and Streamflow Information Program (GWSIP) $68,159,000 and 382 FTE (-$3,240,000 and -10 FTE): GWSIP mission is to collect, manage and disseminate reliable, high quality hydrologic information in real-time and over the long-term, which are important for both managing our Nation’s water resources and anticipating and responding to water hazards to minimize the loss of life and property. FY18 program changes would:

- Reduce National Research Program (NRP) – Reduces research on water quality data and trend analysis on nutrients and sediments to partners in the Gulf of Mexico, Chesapeake Bay and other state and local efforts.
- Reduce National Groundwater Monitoring Network (NGWMN) – Reduces cooperative agreements with States that support national and local groundwater databases that are shared through the NGWMN Data Portal.

National Water Quality Program (NWQP) $74,470,000 and 566 FTE (-$15,958,000 and -108 FTE): NWQP mission is to conduct water-quality monitoring, assessment and research activities that examine the current quality of the Nation’s freshwater resources and how quality is changing over time; explain how human activities and natural factors are affecting the quality of the Nation’s freshwater resources; evaluate water-quality and hydrologic stressors that impair freshwater ecosystems; and predict how changes in human activities, management strategies and climate will affect water quality and ecosystem conditions in the future. FY18 program changes would:

- Reduce National Research Program (NRP) – Suspends studies in Arizona, California, Colorado and Minnesota that focus on how contaminants move through the environment. Also suspend studies that examine how nutrients, carbon and sediment are transported and delivered to small streams in the agricultural Midwest and to large estuaries.
- Eliminate National Park Service Cooperative Water Partnership (NPS-CWP) – Eliminate the NWQP’s NPS-CWP, which provides water-quality science support to the National Park Service.
- Eliminate National Atmospheric Deposition Program – Eliminates the USGS support of five national monitoring networks for nutrients, acidic compounds, mercury and other airborne contaminants in precipitation done in collaboration with about 250 Federal, State, tribal, academic and local organizations.
- Reduce NAWQA Project Lower Mississippi Stream Quality Assessment – Defers the NAWQA Project's stream-quality assessment study of the Lower Mississippi River Basin (LMRB).
- Reduce NAWQA Project Trends Assessments – Delay implementation of a national effort to understand and explain the factors influencing long-term trends in surface water and groundwater quality.

Water Resources Research Act Program (WRRA) $0 and 0 FTE (-$6,488,000 and -1 FTE): WRRA Program is a Federal-state partnership that plans, facilitates and coordinates water resources research, education and information transfer through a matching grant program. The program provides an institutional mechanism for promoting National, regional and State coordination of water resources research, promotes student education and training, and is a focal point for research coordination and information and technology transfer. FY18 program changes would:

- Eliminate Water Resources Research Act Program – Eliminates grant and cooperative agreement program for land grant universities. It also USGS involvement and administrative support for all grants to Water Resource Research Institutes.

Cooperative Matching Funds (CMF) $57,710,000 ($0): Program funds are matched by nearly 1,600 local, State, Regional and Tribal partner agencies to monitor and assess water in every State, protectorate and territory.

- FY18 request includes $11,397,000 in WAUSP, $29,799,000 in GWSIP, and $16,514,000 in NWQP.

* This fact sheet is based off of the change from the 2017 Continuing Resolution Annualized level
** Full-time Equivalent
WASHINGTON – The proposed Fiscal Year 2018 budget for the U.S. Environmental Protection Agency, announced today, provides $5.655 billion to help the agency protect human health and the environment. With a 31 percent cut from the FY 2017 Annualized Continuing Resolution, and a 30 percent reduction from the FY 2017 Enacted budget, the President’s budget aims to reduce redundancies and inefficiencies and prioritize EPA’s core statutory mission of providing Americans with clean air, land, and water.

“The President’s budget respects the American taxpayer,” said EPA Administrator Scott Pruitt. “This budget supports EPA’s highest priorities with federal funding for priority work in infrastructure, air and water quality, and ensuring the safety of chemicals in the marketplace.”

DETAILS OF THE FISCAL YEAR 2018 BUDGET PROPOSAL INCLUDE:

Supporting the President’s Focus on the Nation’s Infrastructure
The infrastructure of the nation is not limited to roads and bridges. The infrastructure needs of our communities are broader. They include making improvements to drinking water and waste water infrastructure as well as a focus on cleaning up contaminated land. Efforts in the Superfund and Brownfields programs can lead to tangible benefits for communities: a cleaner environment and the redevelopment of sites back to beneficial or to new economic use, which is important to the economic well-being of communities and provides a new foundation for American greatness.

EPA’s support for water infrastructure will be provided under the State Revolving Funds (SRFs) and Water Infrastructure Finance and Innovation Act (WIFIA) program. The FY 2018 budget includes $2.3 billion for the SRFs and $20 million for the WIFIA program. The WIFIA requires a small appropriation compared to its potential loan volume, demonstrating respect for the American taxpayer. Under WIFIA, EPA could potentially provide approximately $1 billion in credit assistance, which would spur an estimated $2 billion in total infrastructure investment.
In FY 2018, the Superfund Remedial program provides $342 million to support states, local communities and tribes in their efforts to assess and cleanup many of the worst contaminated sites in the United States and return them to productive use. EPA will maximize appropriated dollars by reducing administrative costs, identifying efficiencies, and prioritizing the cleanup of sites where funds are available from existing settlements with responsible parties.

In FY 2018, EPA is investing over $118 million in support for Brownfields to help communities oversee, assess, safely cleanup and redevelop brownfield properties. The cleanup and reuse of contaminated lands often can play a role in economically revitalize a community.

**Improving America’s Air Quality**
EPA’s FY 2018 budget of $448 million provides funding to better manage and support air quality with stakeholders through common sense standards, guidelines, and grant assistance. The budget focuses on air quality efforts and on making progress toward increased attainment. Most notably, $100 million is allotted to perform key activities in support of the National Ambient Air Quality Standards (NAAQS). It discontinues funding of the Clean Power Plan, climate change research, and partnership programs. $139 million in program eliminations and $95 million in major programmatic changes will reorient the agency efforts in addressing air quality.

**Ensuring Clean and Safe Water**
EPA is requesting $83.7 million in drinking water programs to continue to partner with states, drinking water utilities, and other stakeholders to identify and address current and potential sources of drinking water contamination. These efforts are integral to the sustainable infrastructure efforts because source water protection can reduce the need for additional drinking water treatment and associated costs.

The FY 2018 budget includes $193 million to support work in surface water protection and wetlands programs. EPA will continue to provide scientific water quality criteria information, review and approve state water quality standards, and review and approve state lists of impaired waters. In FY 2018, the agency will continue to work with states and other partners on Total Maximum Daily Loads (TMDLs) as required by the Clean Water Act, as well as on other waterbody restoration plans for listed impaired waterbodies. EPA also will continue to implement and support core water quality programs that control point-source discharges through permitting and pre-treatment programs. Over $651 million in program eliminations, including Geographic Programs and non-point source grants, and $115 million in major programmatic changes will focus the agency’s water programs on addressing core statutory requirements and national priorities. Responsibility for funding local environmental efforts is returned to State and local entities.

**Keeping America’s Environment Safe from Toxic Chemicals**
EPA’s chemical safety programs are integral to maintaining environmental and human health. In FY 2018, EPA requests a total of $296 million to strengthen the capability of EPA, other regulators, and the public to assess chemical hazards and potential exposures, identify potential risks to human health and the environment and take appropriate risk management action.

In FY 2018, increased resources will support the agency’s significant continuing and new responsibilities for ensuring that new and existing chemicals are
evaluated in a timely manner. EPA will work aggressively to complete additional chemical risk assessments from the Toxic Substances Control Act (TSCA) Work Plan list of existing chemicals and meet its requirement to review all current pesticide registrations by 2022. The agency also is implementing fee-based funding as is envisioned in the statute. The agency will continue efforts to reduce risk and ensure that safety and compliance, including on-going pesticides licensing efforts. Program eliminations totaling nearly $53 million combined with nearly $60 million in other major program changes, including research programs, will focus federal resources on highest national priorities and core statutory requirements.

Supporting State and Tribal Partners
Effective environmental protection is a joint effort of EPA, states and our tribal partners. EPA must work collectively with states and tribes as the primary implementers of EPA’s statutory obligations. Realizing the value of these partnerships, for FY 2018, EPA is requesting $597 million in funding for State and Tribal Assistance Categorical Grants. These levels are in line with the broader strategy of streamlining environmental protection and focusing federal investment in core statutory programs. The agency will work with states and tribes to target core grant resources and provide flexibility to address their specific priorities.

Reducing and Eliminating Programs
As careful stewards of the taxpayer’s resources, we will look to attack fraud, waste, and abuse. Also, EPA will continue to examine its programs to identify those that create unnecessary redundancies or those that have served their purpose and accomplished their mission. The FY 2018 President’s Budget identifies and eliminates a number of programs totaling over $1 billion. Details can be found in EPA FY 2018 Congressional Justification: https://www.epa.gov/planandbudget/fy2018.

EPA’s FY 2018 budget request includes the elimination of $427 million in Geographic Program funding. Recognizing the progress that has been made to date, these eliminations return responsibility for funding local environmental efforts to state and local entities. EPA will encourage states, tribes, and communities to continue to make progress from within core EPA program funding. In addition, nearly $30 million in locally focused funds for infrastructure projects on Alaska Native Villages and on the US Mexico Border are not requested in this budget; however, these types of projects may be eligible for funding under the Clean Water and Drinking Water State Revolving Funds.

For more information on EPA’s FY 2018 proposed budget, please visit https://www.epa.gov/planandbudget/fy2018

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LAST UPDATED ON MAY 23, 2017
## FY 2018 President's Budget Request Summary

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FY 2018 Budget Request Executive Summary

MESSAGE FROM THE ADMINISTRATOR (ACTING)

I am pleased to present President Trump’s FY 2018 $19 billion budget request for NASA.

NASA helps fuel the engine of American innovation by planning to take humans deeper into space, increasing U.S. technological capabilities, making new discoveries about our solar system and the universe, and inspiring the next generation even as it creates good jobs and great economic benefits for our nation.

This budget enables continued American leadership in space. It focuses on NASA’s core missions and the cutting edge capabilities we’ll need to carry them out. It supports a sustained cadence of science and technology breakthroughs and missions that will take humans back to the vicinity of the moon and beyond.

The budget supports and expands public-private partnerships as the foundation of future U.S. civilian space efforts. Such partnerships have enabled American industry to provide cargo resupply services for the International Space Station and the imminent return of the capability to launch astronauts from American soil. The Budget creates new opportunities for collaboration with industry in space station operations, deep space habitation, Earth observation, and the development of new technologies. In this and many other ways, NASA remains a good investment for the nation. Our missions help develop our evolving industrial base— which strengthens our economic and national security—and give our nation greater capabilities and flexibility to achieve challenging exploration goals.

Building on an incredible history of achievement in science, this request pushes out the frontiers of knowledge by enabling us to bring testing and construction of our next Great Observatory, the James Webb Space Telescope, to its final stages before its 2018 launch. It continues our work to put the InSight lander on Mars and send the Mars 2020 rover to the Red Planet in advance of sending humans there, in addition to a diverse portfolio of missions to explore our solar system and universe. It advances development of our next great outer planets mission—the long awaited visit to Jupiter’s moon Europa.

We remain committed to studying our home planet and the universe, but are reshaping our focus within the resources available to us. While some planned missions in Earth science will not go forward, this budget is not far from where we have been in recent years. It enables our wide ranging science work on many fronts, which continues to lead the world in its size, scope, and scientific output.

While we are ending our mission to an asteroid, known as the Asteroid Redirect Mission, many of the central technologies in development for that mission, such as solar electric propulsion, will continue, as they constitute vital capabilities needed for future human deep space missions. Our commitment to breakthroughs on many fronts in space technology remains strong.

NASA remains committed to conducting world-class Aeronautics research and development, and we will continue to develop the next generation technologies to improve air travel and air traffic management, including a focus on making supersonic commercial air travel a reality once again.

While we will no longer operate a formal Office of Education, we will continue to leverage our unique assets to further advance our Nation’s education goals. NASA remains committed to engaging the next generation of explorers, indeed learners of all ages, to maintain our competitiveness now and for generations to follow.

In his speech to both houses of Congress, the President said, “American footprints on distant worlds are not too big a dream.” NASA is already working toward that goal, and we look forward to the amazing
milestones this budget will help us reach, and to continuing America's leadership in achieving long-term goals in space.

This budget reflects tough choices within today's constrained fiscal environment, but we are confident and optimistic that as NASA leads the world in space, it also can lead the way in a more effective, modern government. Our nation needs NASA more than ever. The agency's work every single day is vitally important, and we look forward with this budget to delivering continued great value for the taxpayer.

Robert M. Lightfoot, Jr.

Administrator (Acting)
FY 2018 Budget

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FY 2016 reflects funding amounts specified in Public Law 114-113, Consolidated Appropriations Act, 2016, as executed under the Agency’s current FY 2016 Operating Plan.

FY 2017 Enacted reflects the funding amounts specified in Division B of the Consolidated Appropriations Act, 2017, P.L. 115-31. Table does not reflect emergency supplemental funds also appropriated in FY 2017, totaling $184 million.

NASA’s Earth Science Research program develops a scientific understanding of Earth and its response to natural or human-induced changes. Earth is a system, like the human body, comprised of diverse components interacting in complex ways. Understanding Earth’s atmosphere, crust, water, ice, and life as a single, connected system is necessary in order to improve our predictions of climate, weather, and natural hazards.

The Earth Science Research program addresses complex, interdisciplinary Earth science problems in pursuit of a comprehensive understanding of the Earth system. This strategy involves six interdisciplinary and interrelated science focus areas, including:

- Water and Energy Cycle: quantifying the key reservoirs and fluxes in the global water cycle, assessing water cycle change, and water quality;
- Weather: enabling improved predictive capability for weather and extreme weather events; and
- Earth Surface and Interior: characterizing the dynamics of the Earth’s surface and interior and forming the scientific basis for the assessment and mitigation of natural hazards and response to rare and extreme events.
- Climate Variability and Change: understanding the roles of ocean, atmosphere, land, and ice in the climate system and improving our ability to predict future changes;
- Atmospheric Composition: understanding and improving our predictive capability for changes in the ozone layer, Earth’s radiation budget, and air quality associated with changes in atmospheric composition;

An atmospheric river (“Pineapple Express”) delivered over five inches of rainfall in parts of California during January 3-10, 2017 as viewed by Global Precipitation Measurement (GPM) data.
Science: Earth Science

EARTH SCIENCE RESEARCH

- Carbon Cycle and Ecosystems: quantifying, understanding, and predicting changes in Earth’s ecosystems and biogeochemical cycles, including the global carbon cycle, land cover, and biodiversity;

NASA’s Earth Science Research program pioneers the use of both space-borne and aircraft measurements in all of these areas. NASA’s Earth Science Research program is critical to the advancement of the interagency U.S. Global Change Research Program (USGCRP). NASA’s Earth Science Research program also makes extensive contributions to international science programs, such as the World Climate Research Programme.

EXPLANATION OF MAJOR CHANGES IN FY 2018

NASA transferred $15M of FY 2018 High End Computing Capability (HECC) funds to the Construction and Environmental Compliance and Restoration (CECR) account in support of modular supercomputer facility construction. See the CECR section of this document for more information. In light of budget constraints and higher priorities within the Science budget, the request reduces funding for Earth Science competed research awards and eliminates funding for new Carbon Monitoring System awards.

ACHIEVEMENTS IN FY 2016

The Earth Science Subcommittee of the NASA Advisory Council Science Committee determined in September 2016 that NASA remained on track in its annual performance towards the achievement of the research goals relevant to the six science focus areas described in the previous section. Below are examples of the scientific progress reported in FY 2016.

The Global Ozone Chemistry and Related trace gas data records for the Stratosphere (GOZCARDS) provides information and access for the public on data on hydrogen chloride, water vapor, and ozone decline and recovery. This data set is a global long-term stratospheric Earth system data record, based on high-quality measurements from several NASA satellite instruments and the Canadian Atmospheric Chemistry Experiment Fourier Transform Spectrometer (ACE-FTS) on SCISAT.

While emissions of nitrogen oxides have decreased over North America during the 2005-2010 period, the increased downwelling from the stratosphere and increased pollution from China offset the expected resulting tropospheric ozone decrease. A recent study reported that transport of ozone and its precursors from China had offset about 43 percent of the 0.42 Dobson unit reduction in free-tropospheric ozone over the western U.S. that was expected between 2005 and 2010, because of emissions reductions associated with federal, state, and local air quality policies.

With the use of satellite retrievals and surface observations of atmospheric methane, researchers found that U.S. methane emissions have increased by more than 30 percent over the 2002–2014 period. Researchers found the largest increase in the central part of the country; they could not attribute it to any specific source. The researchers concluded that these “top-down” derived emissions (i.e. emission estimates based on methane satellite observations) were far greater than estimated from the “bottom-up” approach that computes emissions as the product of activity rates.
Earth's physical climate is changing and there are measurable impacts on Earth's biogeochemistry and ecosystems. Researchers used inputs from a variety of process-based biophysical models to examine the net balance of the three major gases that trap heat (carbon dioxide, methane, and nitrous oxide), which revealed that human-induced emissions of methane and nitrous oxide overwhelmingly surpass the ability of the land to absorb carbon dioxide emissions.

Researchers use remote sensing-derived tools and models to capture shifting climate and other ecosystem and habitat parameters, and improve natural resource management. For example, in order to build niche models of Atlantic Bluefin tuna habitats for use in better managing this species within a high-profile fishery, researchers used remote sensing-derived environmental data, such as chlorophyll-a fronts and concentration, sea surface current and temperature, and sea surface height anomaly. Defining key spatial and temporal habitats further helps in building spatially-explicit stock assessment models, thus improving the spatial management of bluefin tuna fisheries.

High-resolution lidar-derived biomass maps provided a valuable bottom-up reference to improve the analysis and interpretation of large-scale maps produced in carbon monitoring systems. Researchers developed a global gridded data product of agricultural carbon budgets, including crop- and animal-based food intake, crop biofuels, crop residues left on-field and used as feed, crop byproducts used as feed, livestock grazing, additions to food reserves, and food supply chain losses and waste.

Researchers used the Normalized Difference Vegetation Index (NDVI) data set to constrain estimates of net biome production (NBP) over Europe between 1982 and 2012, which revealed links to anomalies in heat and water transport controlled by interactions between the North Atlantic Oscillation and the East Atlantic Pattern. These results suggest that human alterations of land cover and management practices over the past century have resulted in a substantial increase of carbon exported from the land to the ocean.

The loss of Arctic sea ice and its effect on sea levels has important implications for defense and economic activity. The September 2015 seasonal minimum extent was the fourth lowest on record and reinforced the long-term downward trend. The nine lowest September sea ice extents in the satellite record have all occurred in the last nine years. Arctic winter maximum sea ice extents have also experienced a long-term downward trend, though smaller in magnitude. However, Antarctic sea ice has experienced a small increasing trend, with recent years experiencing record highs. The contrasting behavior of sea ice in the Antarctic is at a much lower level than the strong decrease observed in the Arctic, and is due to a stronger influence of natural variability in the region.

The processes controlling ice loss from the Greenland ice sheet continue to be the subject of intense focus. Multi-beam echo sounding observations revealed that marine-terminating glaciers are grounded deeper below sea level than previously measured, and are undercut by warm, salty Atlantic water, increasing iceberg calving, impacting ice front stability and, in turn, glacier mass balance. Researchers used ice-penetrating radar and a subglacial flow model to show that the connectivity of different regions influences how glacier velocity responds to variations in surface melting.

Landslide inventories are critical to support investigations of where and when landslides have and, may occur in the future; however, there is little information on the historical occurrence of landslides at the global scale. NASA scientists presented a new publicly available global landslide catalog (GLC), based on media reports, online databases, and other sources. Researchers also compared reported landslide events to precipitation estimates from Tropical Rainfall Measuring Mission (TRMM) to evaluate the co-occurrence of extreme precipitation and landslide activity. Of the 3,550 points considered in a subset of
the GLC, approximately 60 percent of the reported landslides have daily precipitation exceeding the 95th percentile of precipitation calculated over a 14-year TRMM record for the same location.

Researchers used in-situ and satellite data to review the surface temperature of 235 lakes, on six continents, and discovered that threats to more than half of the world’s freshwater supply by rising water temperatures. They found that lake temperatures are increasing at an average of 0.34°C each decade, which is a higher rate than seen in either the ocean or the atmosphere. The study projected that lakes will produce 4 percent more methane per decade over the next century and lake algal bloom outbreaks may increase by 20 percent.

Earth Surface and Interior (ESI) focus area investigators continued to advance understanding of interactions between hydraulic systems and solid-Earth deformation. Researchers used Uninhabited Aerial Vehicle Synthetic Aperture Radar (UAVSAR) data acquired in June 2009 and July 2012 to measure ongoing subsidence (gradual caving in or sinking of an area of land) near New Orleans, Louisiana. Researchers identified primary drivers of subsidence as groundwater withdrawal, and surficial drainage/dewatering activities, with high subsidence rates, also observed around some major industrial facilities and due to shallow compaction in highly localized areas. UAVSAR also captured subsidence in California’s Sacramento-San Joaquin Delta. The study measured subsidence rates across Sherman Island averaging 1.3 cm/year with a systematic uncertainty of 0.3 cm/year, consistent with previous measurements at electric transmission line towers. Results have important implications for maintaining a reliable water supply for California and protecting the Delta ecosystem.

Key field campaigns implemented in FY 2016 include:

The Korea U.S.-Air Quality Study (KORUS-AQ) used observations from three research aircraft, eight ground sites, ships, and satellites to test air quality models and remote sensing methods, to prepare for future geostationary observations from satellite instruments focused on air quality over Asia. North America, and Europe.

The GPM-sponsored Olympic Mountains Experiment (OLYMPEX) collected precipitation observations in the Olympic Mountains in Washington from November 2015 through January 2016. OLYMPEX was one of the most comprehensive campaigns for GPM for validating rain and snow measurements in mid-latitude frontal systems moving from ocean to coast to mountains. Researchers will use OLYMPEX observations to investigate the optimal use of GPM precipitation observations in a range of hydrologic, weather forecasting, and climate process studies and products. For more information, go to https://pmm.nasa.gov/OLYMPEX.

The Salinity Processes in the Upper Ocean Regional Study 2 (SPURS-2) is a field campaign in a low salinity, rainy area of the eastern Tropical Pacific, and is a follow-up study to SPURS-1. SPURS-1 focused on a high salinity area in the North Atlantic Ocean during 2012-13. The purpose of both SPURS campaigns is to identify ocean processes that lead to the salinities observed by NASA’s Aquarius and SMAP missions. As part of SPURS-2, a 20m schooner rigged sailing vessel called Lady Amber sailed June 2016 from Mexico to Honolulu, deploying 10 surface salinity drifters. In addition to this schooner, the Scripps Institution of Oceanography’s research vessel R/V Roger Revelle, which sailed during August 2016, deployed three moorings, floats, gliders, as well as Conductivity-Temperature-Depth (CTD) and air-sea flux measurements.

During FY 2016, HECC started a pilot facility project to examine the feasibility to use ambient air to cool the computing systems. HECC is able to expand the computing facility using a modular system approach.
The pilot project demonstrated higher energy efficiency, with the measured Power Usage Effectiveness of 1.06 compared to 1.7 for traditional cooling systems. The benchmarked computing throughput is 1.09 petaFlops (1.06 x 1,015 floating-point operations per second).

Scientific Computing significantly increased their operational capabilities to support key NASA science projects. The project installed an additional computational unit consisting of over 18,000 processor cores with a peak computing capacity of 0.72 petaFlops (0.72 x 1,015 floating-point operations per second). Scientific computing requires large amounts of storage, and to meet these needs, NASA integrated an increase in the overall storage capacity of 10 petabytes into the operational environment. To supplement the large-scale computational environment, Scientific Computing introduced the Advanced Data Analytics Platform (ADAPT), which is a high-performance NASA science cloud designed specifically for “Big Data” applications. Finally, Scientific Computing began to prototype the next generation combination of storage and computing systems designed for the future of data analytics.

Airborne Science conducted over 4,200 flight hours in support of Earth Science. Major campaigns included AfriSAR, GPM OLYMPEX/RADEX, KORUS-AQ, and Operation IceBridge, as well as the start of Earth Venture Suborbital-2 (EVS-2) investigation campaigns for Act-America, ATom, CORAL, NAAMES, OMG, and ORACLES.

**WORK IN PROGRESS IN FY 2017**

NASA and the European Space Agency (ESA) are co-sponsoring the next Ice-sheet Mass Balance Intercomparison Exercise (IMBIE-2). In the original exercise, a series of workshops brought together experts in various remote-sensing techniques in an attempt to reconcile estimates for the mass balance for the Greenland and Antarctic ice sheets. Based on the success of that effort researchers established the scope, structure and timeline for IMBIE-2 with open participation to anyone with ice-sheet mass balance estimates to contribute, and a one-month registration period opened on July 1, 2016.

Following the NASA airborne campaign in 2016 in the Hawaiian Islands for volcano and coral reef research, NASA solicited and recently initiated research to utilize data collected during the campaign. Data collected with the Airborne Visible/Infrared Imaging Spectrometer (AVIRIS) and the MODIS/ASTER Airborne Simulator (MASTER) instruments will serve as precursor datasets in advance of the Hyperspectral Infrared Imager (HyspIRI) mission.

The Export Processes in the Ocean from RemoTe Sensing (EXPORTS) is a science plan for a future NASA field campaign to develop a predictive understanding of the export and fate of the global ocean’s primary production and its implications for the Earth’s carbon cycle in present and future climates. NASA plans to execute the EXPORTS field campaign, likely in the Atlantic and Pacific Oceans, during the next five to seven years following a 2016/2017 open competition. NASA’s satellite ocean-color data record has revolutionized our understanding of global marine systems by providing synoptic and repeated global observations of phytoplankton stocks and rates of primary production.

The Arctic-Boreal Vulnerability Experiment (ABoVE) is a major NASA field campaign in Alaska and western Canada over the 2015 to 2023 timeframe. ABoVE seeks a better understanding of the vulnerability and resilience of ecosystems and society to environmental changes in this region. Following the selection of the initial science team in 2015, the team has produced the first version of the ABoVE Science Implementation Plan, and field-based investigations began in January 2016. NASA has finalized
Memorandums of Agreement with our Canadian partner Polar Knowledge Canada, and with the Department of Energy’s Next Generation Ecosystem Experiment – Arctic.

NASA will continue the SnowEx multi-year airborne snow campaign, a ground and aerial field campaign underway in the fall of 2016 and winter of 2017. SnowEx will study how much water is stored in Earth’s terrestrial snow-covered regions. The data will help researchers investigate the distribution of snow-water equivalent (SWE) and the snow energy balance in different canopy types and densities and terrain. It employs a unique combination of sensors, including lidar, active and passive microwave, an imaging spectrometer, and infrared to determine the sensitivity and accuracy of different remote sensing techniques for measurement of SWE. Future plans include ground-based instruments, snowfield measurements, and modeling.

HECC plans to add the second pilot module and additional computing racks to the existing supercomputing systems. Scientific Computing will continue to add both computing and storage to its operational high-performance environment during FY 2017. The next generation Advanced Data Analytics Platform (ADAPT) prototyped during FY 2016 will be put into operations. The projects plans a significant increase in the ADAPT system (both in computing and storage). In addition, Scientific Computing will begin to explore the use of computing systems specialized in machine executable learning algorithms to solve problems in climate and weather applications. As the model and observational data continue to grow at increasing rates, leveraging the capabilities of machine learning systems for science will be necessary for future research.

Major airborne campaigns will continue in FY 2017 to include ABoVe, Operation leebridge, HyspIRI Tropics, and the continuation of all EVS-2 investigations.

**KEY ACHIEVEMENTS PLANNED FOR FY 2018**

NASA will perform the Clouds, Aerosol, and Monsoon Processes-Philippines Experiment (CAMP2Ex) in partnership with Philippine research and operational weather communities. Currently scheduled for the summer of 2018, it will characterize the role of anthropogenic and natural aerosol particles in modulating the frequency and amount of warm and mixed phase precipitation near the Philippines during the Southwest Monsoon.

NASA will conduct the Fire Impacts on Regional Emissions and Chemistry (FIREChem) mission, a cooperative biomass burning and air quality field study, in the continental United States from late June to mid-September 2018. FIREChem will focus on the links between satellite and ground-based measurements of both fresh and aged biomass burning plumes generated from both wildfires and prescribed burns (e.g., agriculture and forest management). The FIREChem mission will include in situ measurements and remote sensing observations from the NASA DC-8 to sample upwind and downwind of natural and managed fires.

As part of a broader cooperative effort in Earth science research and applications, NASA and the Indian Space Research Organization (ISRO) agreed to operate the NASA AVIRIS – Next Generation (AVIRIS – NG) instrument aboard the ISRO National Remote Sensing Centre King Air B-200 aircraft. This airborne campaign will generate data products relevant to Earth science research and applications activities in a number of topic areas by capturing spectra from terrestrial, freshwater, and marine sites throughout India. The products will provide ISRO with important baseline spectroscopy data for a wide variety of Indian environments and offer NASA researchers an opportunity to use an important new dataset. Both NASA
and ISRO will have access to all scientific data coming from the AVIRIS-NG instrument. This campaign marks the first step in a potential multiyear effort between NASA and ISRO to advance imaging spectroscopy of the Earth.

In FY 2018, HECC plans to build a one-acre concrete pad to support the modular computing facility expansion. They will add three new computing modules to the facility.

Scientific Computing will continue to increase its high-performance compute and storage capacities to meet emerging NASA science requirements. Expansions to Scientific Computing’s primary services in ADAPT and the next generation data analytics systems will continue. Additional investment into deep learning capabilities will occur during FY 2018.

In FY 2018, major airborne campaigns planned include Operation IceBridge, CAMP2Ex, FIREChem, and the continuation of EVS-2 investigations.

**Program Elements**

**Carbon Cycle Science Team**

Carbon Cycle Science Team funds research on the distribution and cycling of carbon among Earth’s active land, ocean, and atmospheric reservoirs.

**Global Modeling and Assimilation Office**

The Global Modeling and Assimilation Office creates global climate and Earth system component models using data from Earth science satellites and aircraft. Investigators can then use these products worldwide to further their research.

**Airborne Science**

The Airborne Science project is responsible for providing manned and unmanned aircraft systems that further science and advance the use of satellite data. NASA uses these assets worldwide in campaigns to investigate extreme weather events, observe Earth system processes, obtain data for Earth science modeling activities, and calibrate instruments flying aboard Earth science spacecraft. NASA Airborne Science platforms support mission definition and development activities. For example, these activities include:

- Conducting instrument development flights;
- Gathering ice sheet observations as gap fillers between missions (e.g., Operation IceBridge);
- Serving as technology test beds for Instrument Incubator Program missions;
- Serving as the observation platforms for research campaigns, such as those competitively selected under the suborbital portion of Earth Venture; and
- Calibrating and validating space-based measurements and retrieval algorithms.
Tab K – Water Data Developments
Providing Input and Feedback to Federal Data Providers. WIDS and WestFAST provide a unique mechanism for bringing together and sharing feedback on federal data-related initiatives such as NIDIS' Drought Early Warning Systems, USGS' National Streamflow Information Program (NSIP), USGS Water Use Data Research (WUDR) program, and the Open Water Data Initiative (OWDI), among many others.

Development of Water Information Management Symposia (WIMS). Another task for WIDS is to assist with planning and development of symposia/workshops, where state IT staff can discuss new technologies and strategies for data management within their programs. In the past, WIMS have brought together state staff working on a variety of water data tasks and connected those participants to great effect.

Partnerships and Funding Opportunities. Over the past year, WSWC has been asked to contribute and partner on a number of data-related efforts. For example, the WSWC is excited to conduct a review and survey of member states’ use of cloud technologies for their current and future water data applications, as well as related challenges, with assistance from NASA. WSWC has partnered on a potential grant with Utah/Utah State University and California to pilot sensor-based continuous monitoring data. More recently, WSWC has been working with USGS Office of Water Information on tools that use WaDE-based web services to share aggregated water use data from their 5-year compilations. There are many opportunities on the horizon, and the WIDS will assist and provide feedback for the WaDE program and related work, partnerships, and funding opportunities.
EXECUTIVE SUMMARY

Weather Station Networks and specifically Irrigation Management Information Systems (IMIS) provide essential data that can be used to calculate the day-to-day water requirement for a given crop. When used more widely, these evapotranspiration (ET) products have the potential to greatly improve agricultural water use efficiency across the West. A number of larger weather station/IMIS networks are operated across the western United States consisting of weather stations that report on temperature, solar radiation, wind speed, and humidity, among other variables, which are then used to estimate ET.

The Western States Water Council (WSWC) and the California Department of Water Resources (CA-DWR) co-hosted a survey and workshop to learn more about the capabilities and operation of selected, larger weather station networks that also operate as IMIS. The meeting helped the attendees gain a greater understanding of data collection capabilities, quality control techniques, dissemination, adoption rates, and usage of IMIS data in general, and ET data products specifically. It also served as a forum for exploring the networks’ potential compatibility with the California Irrigation Management Information System (CIMIS), a robust network owned by CA-DWR that could serve as a model software platform for others. Results of the survey and workshop presentations and discussions identified data gaps, and assisted in determining what resources may be available or needed by the networks for more regional collaboration.
BENEFITS

Network operators and managers reported a variety of users/applications that rely on their weather station data and generated products. These include growers and agricultural consultants for irrigation scheduling, fertilizer application, and pest management; water agencies and other public agencies for estimating water consumption; home owners for lawn irrigation; and researchers exploring weather patterns, water consumption trends, or irrigation strategy modeling. The data are also used for firefighting, air quality monitoring, weather forecasting, and infrastructure engineering. These applications yield many benefits, including: mitigating the impact of drought and climate change, improving the environment and the overall quality of the landscape, producing greater and higher quality crop yield, conserving water, helping locals to achieve conservation goals, and reducing costs of energy and water for the grower.

COLLABORATION

Increased collaboration between managers and coordinators of weather station networks and IMIS may help overcome challenges to accessing a wider network of data. These are related to differences in data acquisition, quality control methods, and maintenance/calibration standards (such as differences in data accuracy and frequency of site visits). The WSWC encourages participation and funding for meetings such as the Western Extension Research Activity (WERA) workshops, where network managers and operators discuss challenges, share information, and work toward establishing uniform standards.

CHALLENGES

IMIS networks face a number of challenges, which affect their operation and dissemination of data. These include:

- **Limited Funding Resources** – Used for station installation, maintenance costs, data management/IT, and personnel salaries. Funding levels impact the amount of maintenance, quality assurance, analysis, publication, and outreach that can be done by those who manage the network.
- **Differences in Standards** – Different policies for data acquisition, site maintenance, calibration, and ET estimation are an issue that need to be addressed before data can be made interoperable between networks.
- **Station Maintenance/Sensor Failure** – Damage to weather stations and failure of individual sensors results in poor data/loss of data. The unscheduled failure of sensors may require additional resources for maintenance technicians or new partnerships with local entities or service contractors who can perform needed maintenance.
- **Station Siting** – Many networks are unable to install stations in areas with ideal pitch/crop conditions. Local conditions have a significant impact on the accuracy of parameters used to calculate ET. There are several obstacles to obtaining ideal siting conditions, including difficulty finding partners with suitable crop types, changing crop types, patterns, and irrigation practices near existing sites, and the need for easy access by maintenance technicians.
- **Public Outreach** – With limited budgets, doing extensive QA/QC, and subsequent publication of data and derivative products may not be possible. There are also barriers to understanding, adoption, and utilization of derivative products by targeted users (primarily growers).

THE FUTURE OF WEATHER STATION/IMIS NETWORKS

Weather station and IMIS networks are growing to meet user needs, enhancing their data products, developing new applications, and adapting to available funding resources. The workshop attendees agreed that there should be a new and sustained focus on developing consistent standards for data acquisition, site maintenance, calibration, and quality control of data. There is a need to strengthen partnerships between networks to ensure not only the integrity of data released by individual networks but to work toward greater interoperability.

To achieve this, network operators should also address data gaps and achieve greater consistency when estimating and reporting ET. Currently, the networks use a variety of methods (or modifications of the standard American Society of Civil Engineers (ASCE) Penman-Monteith method) to calculate ET, and may report one or multiple ET values to users. This can create confusion for end-users and can also be problematic when data are shared across networks or when data products are aggregated to create tools for management decisions. At the time of the workshop, most network managers planned to move toward reporting the ASCE standardized method as their primary estimating technique, while some would continue to report older methods for long-time users.

Additionally, many weather station and IMIS networks are planning on expanding both spatially and the number of data products offerings. These include crop-specific ET, forecasting, irrigation scheduling applications, and other useful tools.
Internet of Water: Sharing and Integrating Water Data for Sustainability, a report from the Aspen Institute Dialogue Series on Water Data, is the Dialogue Series’ vision for a national policy framework that addresses institutional barriers to scaling the integration of water data and information to support sustainable water management.

Currently in the United States, we do not have the necessary data we need to manage our water supplies and to pursue innovative solutions to meet our water management challenges. Where data does exist, it is not in a format that is easily accessible or understandable and there are often strong disincentives, fears, and concerns about sharing it. To address this challenge, the Aspen Institute Energy and Environment Program in partnership with the Nicholas Institute for Environmental Policy Solutions at Duke University and Redstone Strategy Group convened the Aspen Institute Dialogue Series on Water Data.

Between May 2016 and February 2017, the Dialogue Series hosted several roundtables with a select group of water experts, managers, policy makers, regulators, and representatives from the private and social sectors, to focus on how to create better water data infrastructure to access and connect publicly collected and reported sources for data, beginning with quantity, quality and use information.

The report highlights and provides a principle-based blueprint recommending a 3-step plan for how to design and launch a feasible and operable “Internet of Water” – a network of interconnected data producers, hubs, and users –
that will enable connecting and transmitting water-related data and information in real-time.

To sustainably manage any resource, there needs to be an accounting system comprised of accessible data of a known quality. Connecting water data from across the U.S. will then revolutionize how water resources are being managed; being better situated to address prevalent water problems such as extreme flooding, scarcity, contamination, and restoring aquatic systems.

**Key findings from the Dialogue Series on Water Data:**

1. **THE VALUE OF OPEN, SHARED, AND INTEGRATED WATER DATA HAS NOT BEEN WIDELY QUANTIFIED, DOCUMENTED OR COMMUNICATED.**
2. **THE MOST NECESSARY STEP IN USING WATER DATA FOR SUSTAINABILITY IS MAKING PUBLIC WATER DATA OPEN BY DEFAULT, DISCOVERABLE AND DIGITALLY ACCESSIBLE.**
3. **WATER DATA COULD BE MOST EFFECTIVELY INTEGRATED THROUGH AN INTERNET OF WATER.**

**Action-Oriented Recommendations:**

1. **ENABLE OPEN WATER** – An Internet of Water is dependent on there being open water data and increased discoverability of water data.
2. **INTEGRATE EXISTING PUBLIC WATER DATA** and develop tools to facilitated connecting data producers and users.
3. **CONNECT REGIONAL DATA SHARING COMMUNITIES** that can address near-term water management problems for key sectors.

READ THE FULL REPORT
DEPARTMENT OF ENERGY


AGENCY: Office of Energy Policy and Systems Analysis (EPSA), Department of Energy (DOE).

ACTION: Notice of request for information.

SUMMARY: The Department of Energy (DOE) gives notice of a Request for Information (RFI): “Review of Draft Version of DOE Energy-Water Nexus State Policy Database.” This RFI seeks review and feedback from stakeholders on the draft version of the DOE Energy-Water Nexus State Policy Database, including over 1,700 state-level water policies that affect energy systems. The database is being developed by DOE’s Office of Energy Policy and Systems Analysis (DOE–EPSA). The draft or “beta” version of the database is presented as a web tool at http://energywaterpolicy.org. Categories of policies in the database include surface water rights; groundwater rights; water discharge regulations for power plant cooling water effluent, stormwater, and wastewater from oil and gas production; Underground Injection Control (UIC) program regulations; state water plans; regional watershed commissions; reservoir and river operations; and integrated energy and water policies. The goals of the database are to facilitate improved policy analysis, modeling, visualization, and communication by states, industry, utilities, academia, federal agencies, and other stakeholders.

DATES: Written comments and information are requested on or before August 4, 2017.

ADDRESSES: Interested persons are encouraged to submit comments, which must be submitted electronically to EPSA.Database@hq.doe.gov.

FOR FURTHER INFORMATION CONTACT: Requests for additional information may be sent to Samuel Bockenhauer, U.S. Department of Energy, Office of Energy Policy and Systems Analysis, 1000 Independence Avenue SW., Washington, DC 20585. Email: samuel.bockenhauer@hq.doe.gov. Phone: (202) 586–9016.

SUPPLEMENTARY INFORMATION:

Background

Present-day energy and water systems are in many cases interconnected. Water is used in most phases of energy production and electricity generation. Energy is required to extract, convey, and deliver water of appropriate quality for diverse human uses, and then again to treat wastewaters prior to their return to the environment. Historically, energy and water systems have been developed, managed, and regulated independently and without significant acknowledgement of the connections between them. The energy and water policy landscape is thus highly fragmented, which can make it difficult for industry, utilities, government, and other stakeholder groups to effectively balance energy and water goals.

Furthermore, much of the authority for water policy lies at the level of individual states. For example, allocation of water rights and permitting for water discharge are managed primarily at the state level. The particularly complex and fragmented nature of water policies affecting energy systems, as well as their variation across different states, suggests that a centralized, public database of water policies affecting energy systems could enable enhanced policy analysis, modeling, visualization, and communication by states, industry, utilities, academia, federal agencies, and other stakeholders.

Purpose

The purpose of this RFI is to solicit feedback from industry, utilities, academia, research laboratories, government agencies, and other stakeholders on the draft version of the Energy-Water Nexus State Policy Database available at http://energywaterpolicy.org. Regarding the draft version of the Energy-Water Nexus State Policy Database, neither the United States Government nor any
Request for Information Response Guidelines

Responses to this RFI must be submitted electronically to EPSA.Database@hq.doe.gov no later than 11:59 p.m. (ET) on August 4, 2017. Responses must be provided as attachments to an email. It is recommended that attachments with file sizes exceeding 25MB be compressed (i.e., zipped) to ensure message delivery. Responses must be provided as a Microsoft Word (.docx) or Microsoft Excel (.xlsx) attachment to the email. Only electronic responses will be accepted.

Please identify your answers by responding to a specific question or topic if applicable. Respondents may answer as many or as few questions as they wish. DOE–EPSA will not respond to individual submissions or publish publicly a compendium of responses. A response to this RFI will not be viewed as a binding commitment to develop or pursue the project or ideas discussed.

Respondents are requested to provide the following information at the start of their response to this RFI:
- Company/institution name;
- Company/institution contact;
- Contact’s address, phone number, and email address.

Confidential Business Information

Pursuant to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email two well-marked copies: One copy of the document marked “confidential” including all the information believed to be confidential, and one copy of the document marked “non-confidential” with the information believed to be confidential deleted. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include: (1) A description of the items; (2) whether and why such items are customarily treated as confidential within the industry; (3) whether the information is generally known by or available from other sources; (4) whether the information has previously been made available to others without obligation concerning its confidentiality; (5) an explanation of the competitive injury to the submitting person that would result from public disclosure; (6) when such information might lose its confidential character due to the passage of time; and (7) why disclosure of the information would be contrary to the public interest.

Issued in Washington, DC, on May 9, 2017.

Carol Battershell,
Acting Director, Office of Energy Policy and Systems Analysis.

[FR Doc. 2017–11547 Filed 6–2–17; 8:45 am]
BILLING CODE 4505–01–P

DEPARTMENT OF ENERGY

U.S. Energy Information Administration

Agency Information Collection Extension

AGENCY: U.S. Energy Information Administration (EIA), Department of Energy.

ACTION: Notice and request for OMB review and comment.

SUMMARY: The EIA has submitted an information collection request to the Office of Management and Budget (OMB) for extension under the provisions of the Paperwork Reduction Act of 1995. The information collection requests a three-year extension of its CIPSEA Confidentiality Pledge Revision, OMB Control Number 1905–0211. The proposed collection will make permanent the modification to the confidentiality pledge that was approved on January 12, 2017, under the emergency clearance under OMB Control Number 1905–0211.

DATES: Comments regarding this proposed information collection must be received on or before July 5, 2017. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of time allowed by this notice, please advise the DOE Desk Officer at OMB of your intention to make a submission as soon as possible. The Desk Officer may be telephoned at 202–395–4718.

ADDRESSES: Written comments should be sent to the DOE Desk Officer, Office of Information and Regulatory Affairs, Office of Management and Budget, New Executive Office Building, Room 10102, 735 17th Street NW, Washington, DC 20503.

And to Jacob.bournazian@eia.gov or Jacob Bournazian, U.S. Energy Information Administration, Mail Stop EI–23, Forrester Building, 1000 Independence Avenue SW., Washington, DC 20585 (Email is preferred).

FOR FURTHER INFORMATION CONTACT: Jacob Bournazian, U.S. Energy Information Administration, 1000 Independence Avenue SW.,
The draft database was commissioned by the U.S. Department of Energy’s (DOE) Office of Energy Policy and Systems Analysis (EPSA). Under contract to DOE, Energetics Incorporated researched and gathered the information for the draft database and developed the web-based tool.

This draft database provides an extensive source of key information about state-level water policies and programs that are relevant to energy systems in the United States. The goals of the database are to facilitate improved policy analysis, modeling, visualization, and communication by states, industry, utilities, academia, federal agencies, and other stakeholders.

DOE-EPSA invites your comments and feedback as stakeholders and potential users so that we can make the database design and content as useful, accurate, and up-to-date as possible. This draft
database is a “beta” version and a work-in-progress. To submit feedback, please respond to the Request for Information by email to EPSA.database@hq.doe.gov.

All data were gathered from public sources. Links and contact information are provided for users requiring further information. Users are encouraged to refer to these links for original source materials with additional details.
**RWIS at http://water.usbr.gov**

The Reclamation Water Information System (RWIS) provides historical and current data in easy-to-port, consistent, automated formats that a variety of stakeholders can use. You can easily incorporate this machine-readable data from RWIS into your apps and models to help you plan for operations, droughts, floods, and more. So...

**What could you do with RWIS?**

<table>
<thead>
<tr>
<th>Role</th>
<th>Action</th>
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<tr>
<td><strong>WEATHER OR NEWS OUTLET</strong></td>
<td>Incorporate RWIS' real-time data for streamflow, reservoir levels, and</td>
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<td>reservoir inflow and outflow into your app, along with the National</td>
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<td>Weather Service, USGS, and other data sources to provide a very</td>
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<td>detailed, local picture of local conditions.</td>
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<td><strong>IRRIGATION DISTRICT, WATER</strong></td>
<td>Use your SCADA system and RWIS to monitor operations and flow.</td>
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<td><strong>PURVEYOR, FARMER</strong></td>
<td>Print out historical flow levels from RWIS as a comparison, and match</td>
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<td>these historical patterns, so that you can note which canal sections</td>
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<td></td>
<td>need to be watched closely.</td>
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<td><strong>WATER RIGHTS REGULATOR</strong></td>
<td>Use current and historical information from RWIS to compare this and</td>
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<td>previous flooding patterns to determine any emergency actions or water</td>
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<td></td>
<td>allocations needed.</td>
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<tr>
<td><strong>ENVIRONMENTAL ADVOCACY GROUP</strong></td>
<td>Import real-time data from RWIS into your GIS based system of</td>
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<td>critical habitat to prioritize emergency actions.</td>
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<tr>
<td><strong>SCIENTIST, RESEARCHER, STUDENT</strong></td>
<td>Add real-time and historical data from RWIS into your models to</td>
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<td>analyze infrastructure and operations for strengths and weaknesses to</td>
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<td>withstand flood conditions.</td>
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<tr>
<td><strong>POLICY MAKER, GOVERNMENT OFFICIAL</strong></td>
<td>Use Reclamation's information with other databases to track floods,</td>
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<td>droughts, and other emergencies for real-time responses.</td>
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<td>Use Reclamation's information with other databases to monitor water</td>
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<td>quality, habitat conditions, and other parameters over time.</td>
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*Tell us how you want to use RWIS at rwis@usbr.gov*
Reclamation Water Information System (RWIS) - General Use

http://water.usbr.gov

Contact: rwis@usbr.gov
Jim Nagode
303-445-2038

Our Vision:
The RWIS project aims to build a Reclamation-wide system to publicly share Reclamation’s water data in open formats on the web.

What does RWIS Do?
RWIS serves current and historical data from each of Reclamation’s five regions. A map lets you get information by location, a query tool lets you select the sites and parameters that you are interested in, and a web service/API can automatically transfer data to your own tools, apps, and models. The pilot project started in Spring 2016 and 2017. Further development and transition from the pilot to a full-featured system is anticipated to continue in 2017-2018.

RWIS can give you the answers you need!

Q: I want to plan my crops for the irrigation season. How can I see how past reservoir storage and weather conditions affected irrigation deliveries?
A: Go on the map, select your area, filter by type, and see weather sites. You can also look up reservoir, stream, and canal water levels.

Q: I want to go whitewater rafting. Which river in my area has the best reservoir outflows for rafting this weekend?
A: Go on the map, select, and get streamflow data.

Q: I saw lots of water in the canals in a nearby agricultural area. When did the flows go up? How long are they usually this high?
A: Go on the map, select your basin, and get historical and current data on canal diversions, flows, and stage.

Q: I am worried about drought conditions in my region. Are water levels in those reservoirs below normal?
A: Go to the query tool, select your region and reservoir sites, and get current and historical reservoir levels.
Our Vision:
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What does RWIS Do?
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How can I use RWIS to develop data visualization and analysis tools?
With RWIS, you can automatically pull data into apps, models, tools, etc. The web service/API URL allows an automated exchange of data in standardized, machine-readable formats.

The system allows queries for multiple parameters and sites. It provides historic and real-time data in JSON, CSV, HTML, and interactive plots.

Use RWIS data to create tools such as:
- An app that provides users with daily data updates from sites they are interested in.
- A visualization of reservoir storage conditions for a news story about drought in the West.
- An alert system for notifying emergency responders when river flow or stage exceeds flood levels.
- An interactive map combining Reclamation data with other Federal, State, and local agency data: basin-wide, state-wide, or Reclamation-wide.
Reclamation Information Sharing Environment (RISE)

RISE Vision: To share Reclamation’s data in consistent, open, machine-readable formats via a centralized, sustainable public data portal.

Reclamation’s new pilot project, the Reclamation Water Information System (RWIS) will make a selection of Reclamation’s water-related time-series data available in open formats on the web in early 2017. RWIS brings together water data from across Reclamation with a cross-walking data standard to create a centralized data portal. The portal provides query tools, map browsing capabilities, and a web service/API for accessing machine readable, downloadable data.

RWIS paves the way for the Reclamation Information Sharing Environment (RISE), which will share data from other topic areas beyond water and other types of data beyond time-series. Anticipated data domains and types include: infrastructure, hydropower, and environmental data stored as spatial data sets, modeling and analytic results, and reports.

Where We Are Going

FY 2017–Form communities in the infrastructure, hydropower, and environment domains to identify data to share and develop crosswalks between regional databases. Evolve the RWIS central database and portal to serve up infrastructure, hydropower, and environmental data. Enhance the central database and data portal for the water data domain by adding features, functionality, and datasets.

FY 2018–Enhance the central database and data portal for the infrastructure, hydropower, and environment domains by adding features, functionality, and datasets. Work with Reclamation staff, other federal agencies, and other partners to develop applications, visualizations, and tools to showcase and use data in the portal.

FY 2019 and beyond–Continue to enhance features, functionality, and datasets in the portal and expand to additional data domains. Continue to develop apps and tools to integrate datasets and support Reclamation’s planning, decision-making, and operational activities.

Get Involved:
Do you have a dataset you’d like to share or an interest in working on data standardization/crosswalking, developing databases, or building web portal tools for Reclamation’s data?

Use RWIS at water.usbr.gov
Contact the RWIS team at rwis@usbr.gov
Tab L – Summary of WSWC Activities and Events
Western States Water Council  
Summary of Activities  
April 2017 – June 2017

**WSWC MEETINGS, SYMPOSIA AND WORKSHOPS**

April 12-14 – The WSWC held its 183rd Council Meetings in Nebraska City, Nebraska.

May 17-19 – The WSWC and CDWR sponsored a S2S precipitation forecasting workshop in San Diego, California.

**LETTERS**

On April 26, the WSWC wrote letters to House/Senate Committees requesting that Congress work together with the Administration to ensure that stable and continuing federal appropriations are made to the State Revolving Fund programs and State and Tribal Assistance Grants, at levels adequate to help states address their water infrastructure needs, implement federal laws and regulations, and protect public health and the environment.

On May 12, the WSWC submitted a comment letter addressing the U.S. Army Corps of Engineers (Corps) proposed water supply rule, “Use of Corps Reservoir Projects for Domestic, Municipal and Industrial Water Supply,” expressing concern over the lack of substantive state participation in the development of the rule.

On June 1, the WSWC wrote western members of the Senate Appropriations Committee, expressing support for adequate and consistent funding for S2S precipitation forecasting improvements and concern regarding related Administration budget requests.

On June 19, the WSWC submitted comments to EPA regarding its review and outreach related to revising the WOTUS rule.

**WaDE DEVELOPMENT**


**COORDINATION WITH WESTFAST AGENCIES**

Roger Pierce has relocated to Salt Lake City and is working out of the WSWC Office, while WestFAST agencies continue to work out agreements for the NOAA liaison position.

WestFAST agency representatives and WSWC staff continue to hold regular calls on moving forward with an Oklahoma National Drought Resiliency Partnership (NDRP) pilot.

April 19-21 – WSWC Executive Director attended the NIDIS Executive Council in Washington, DC.
June 2 & 16 – EPA WOTUS Rule outreach calls with WSWC members.

June 10 – WSWC Executive Director met with Roger Pierce and Kevin Werner, New Science and Research Director for the Northwest Fisheries Science Center.


June 20-22 - WaDE Program Manager attended the NIDIS/CA-NV DEWS Conference in Reno, Nevada.

COORDINATION WITH OTHER ORGANIZATIONS

Preparations are underway with the Native American Rights Fund (NARF) for our next Indian Water Rights Settlement Symposium.

April 17-18 – WSWC Executive Director attended the Western Snow Conference/Weather Modification Association in Boise, Idaho.

May 16 – WSWC Executive Director attended the AWRA-Utah Section in Salt Lake City, Utah.

COMMITTEES, TASK FORCES AND WORK GROUPS

Ad Hoc Group on Indian Water Rights Settlements – WSWC Executive Director and Legal Counsel

Advisory Committee on Water Information (ACWI) – WSWC Representative Dr. Robert Mace (TX)
Climate Adaptation Workgroup – WSWC Member Jeanine Jones of California
Subcommittee on Spatial Water Data – WaDE Program Manager

American Bar Association Water Law Conference Planning Committee – WSWC Legal Counsel

American Water Resources Association (AWRA) – WSWC Executive Director and WaDE Program Manager

National Geospatial Advisory Committee, Landsat Advisory Group – WSWC Executive Director

National Integrated Drought Information System (NIDIS) Executive Council – WSWC Executive Director

National Water Census Ad Hoc Group – WaDE Program Manager

National Drought Resilience Partnership – WSWC Executive Director

Open Water Data Initiative (OWDI) Technical Development Workgroup and Drought/Water Supply Workgroup – WaDE Program Manager

USGS Groundwater and Streamflow Information Program Collaborative Working Group – WaDE Program Manager
USGS Water Use Strategic Planning Team – WaDE Program Manager

Western Electricity Coordinating Council (WECC) Scenario Planning Steering Group and Environmental Data Work Group – WSWC Executive Director
Tab M – Future WSWC Meetings
WESTERN STATES WATER COUNCIL

FUTURE MEETINGS

Upcoming Council Meetings/Host States

Fall Meeting – Albuquerque, New Mexico
   October 18-20, 2017
   Albuquerque Marriott Pyramid North

2018 Meetings
   Spring – Washington, D.C.
   Summer – Oregon (last hosted 7/29/11 in Bend)
   Fall – Idaho (last hosted 10/7/11 in Idaho Falls)

2019 Meetings
   Spring – Washington (last hosted 6/8/12 in Seattle)
   Summer – Alaska (TBD)
   Fall – Texas (last hosted 10/12/12 in San Antonio)

2017 Symposia/Workshops

WSWC/NARF Indian Water Rights Settlement Symposium
   August 8-10, 2017
   Great Falls, Montana
   Best Western Plus Heritage Inn

WSWC/WestFAST Workshop on Federal Non-Tribal Water Claims
   October 18, 2017
   Albuquerque, New Mexico
   Albuquerque Marriott Pyramid North
<p>|   | Alaska | Arizona | California | Colorado | Idaho | Kansas | Montana | Nebraska | Nevada | New Mexico | North Dakota | Oklahoma | Oregon | South Dakota | Texas | Utah | Washington | Wyoming | Other |
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| 150 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | Wash. DC 3/29/06 |
| 151 |   |   |   | Breckenridge | 7/21/06 |   |   |   |   |   |   |   |   |   |   |   | Sheridan 10/6/06 |
| 152 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 153 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 154 |   |   |   | Bozeman | 8/10/07 |   |   |   |   |   |   |   |   |   |   |   |   |
| 155 |   |   |   | Phoenix | 11/16/07 |   |   |   |   |   |   |   |   |   |   |   |   |
| 156 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | Wash. DC 3/7/08 |
| 157 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 158 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 159 |   |   |   | Kansas Cy | 4/24/09 |   |   |   |   |   |   |   |   |   |   |   |   |
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| 161 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | Lincoln 10/16/09 |
| 162 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | Wash. DC 3/23/10 |
| 163 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | Lake Tahoe 7/23/10 |
| 164 |   |   |   | San Diego | 10/28/10 |   |   |   |   |   |   |   |   |   |   |   |   |
| 165 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | Santa Fe 4/13/11 |
| 166 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | Bend 7/26/11 |
| 167 |   |   |   | Idaho Falls | 10/9/11 |   |   |   |   |   |   |   |   |   |   |   |   |
| 168 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | Wash. DC 3/13/12 |
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174 Deadwood 10/4/13
175 Manhatten 10/9/15
176 Scottsdale 10/10/14
177 Tulsa 4/17/15
178 Bioman 7/15/16
180 Washington 3/22/16
183 Nebraska City 4/14/17
184 Johns Park 6/29/17

50th Anniversary StateLine 7/10/15
SAVE THE DATE!

Federal Non-Tribal Water Rights Claims Workshop

Continuing State-Federal Relationships Through the Implementation Phase of Decreed and Adjudicated Water Rights

October 18, 2017
8:00 am - 11:30 am

Albuquerque Marriott Pyramid North
5151 San Francisco Road NE, Albuquerque, NM 87109

(The WSWC Fall (185th) Council Meetings will be held on October 18-20)
Tab Mc – Council of State Governments-West
May 22, 2017

Honorable Mitch McConnell  
Majority Leader  
U.S. Senate  
S-230 U.S. Capitol  
Washington, D.C. 20510

Honorable Charles Schumer  
Minority Leader  
U.S. Senate  
419 Hart Senate Office Building  
Washington, D.C. 20510

Honorable Paul Ryan  
Speaker  
U.S. House of Representatives  
H-232 U.S. Capitol  
Washington, D.C. 20515

Honorable Nancy Pelosi  
Minority Leader  
U.S. House of Representatives  
H-204 U.S. Capitol  
Washington, D.C. 20515

Dear Senators McConnell and Schumer, and Representatives Ryan and Pelosi:

Several of the undersigned organizations representing state and local officials previously transmitted to you the attached Shared Principles on Federalism. We are collectively dedicated to improving and strengthening the relationship of the federal government with states and local governments. As you proceed with the difficult tasks of formulating a budget and enacting appropriations for fiscal year 2018, we are taking this opportunity to reiterate and emphasize those principles, particularly as they pertain to issues of federal funding.

States and local governments are eager to work with the federal government as authentic partners. We hope to engage with federal agencies at the earliest stages of federal decision-making and program development. To the extent that local knowledge, expertise, resources and competencies are brought to bear in the formulation and execution of federal policy, the more richly our common constituents will benefit. Moreover, a greater devolution of authority to states will empower those closest to the people to accommodate local needs, customs, legal regimes, economies, and environments most properly.

States and localities are willing and prepared to assume greater responsibilities of governance and to work ever more cooperatively with federal officials. Furthermore, we are prepared to assume our fair share of the fiscal burden in executing such responsibilities. Nonetheless, the size and impositions of the federal budget operate to constrain funding available to state and local governments. As we pursue more effective partnership with the federal government, we respectfully request your cooperation in
ensuring the appropriate allocation of funding for the discharge of shared responsibilities and to otherwise fulfill federal obligations.

In the case of authorities delegated to the states and local governments (such as permitting authority under the Clean Water Act or the achievement of environmental standards under various federal statutes), states should be regarded as co-regulators and be granted the greatest discretion possible in designing mechanisms to achieve federal objectives. Our ability to effectively manage programs, however, depends on access to funding appropriated by Congress to accomplish federal statutory purposes. States and localities cannot bear additional programmatic responsibilities without concomitant funding.

Other obligations of the federal government arise from historic agreements with the states. The Payments-in-Lieu-of-Taxes program, for example, compensates localities for the financial burdens imposed by the presence of non-taxable federal lands within their boundaries. We encourage you to ensure that federal commitments to states and localities continue to be honored.

As we proceed with our efforts to realign the state-federal relationship, we would appreciate the opportunity to consult with Congress on funding imperatives and the efficient allocation of scarce resources. We also request your vigilance to protect against the undue transfer of financial burdens to states and localities. Our common goal should be to maximize the return that Americans receive on the investment of their limited tax dollars.

Thank you for your attention and consideration.

Respectfully,

James D. Ogsbury
Executive Director
Western Governors’ Association

Edgar E. Ruiz
Executive Director
The Council of State Governments West

Matt Morrison
Executive Director
Pacific NorthWest Economic Region

Chris Coppin
Legal Director
Conference of Western Attorneys General

Matthew D. Chase
Executive Director
National Association of Counties

Scott Pattison
Executive Director
National Governors Association

Attachment: Principles to Clarify and Strengthen the State-Federal Relationship
Principles to Clarify and Strengthen the State-Federal Relationship

A. Fundamental Federalism Principles

1. The structure of government established by the United States Constitution is premised upon a system of checks and balances.

2. The Constitution created a federal government of supreme, but limited and enumerated, powers. The sovereign powers not granted to the federal government are reserved to the people or to the states, unless prohibited to the states by the Constitution. The constitutional relationship among sovereign governments, state and federal, is memorialized in the Tenth Amendment to the Constitution. Under this Constitutional framework, states also confer governmental powers to counties and local governments.

3. Our constitutional system encourages a healthy diversity in the public policies adopted by the people of the several States according to their own conditions, needs, and desires.

4. Effective public policy is achieved when there is competition among the several states in the fashioning of different approaches to public policy issues. The search for enlightened public policy is advanced when individual states and local governments are free to experiment with a variety of approaches to public issues. One-size-fits-all national approaches to public policy problems can inhibit the creation of effective solutions to those problems.

5. In the absence of clear constitutional or statutory authority, the presumption of sovereignty should rest with the individual states. Uncertainties regarding the legitimate authority of the federal government should generally be resolved in favor of state and local authority and regulation.

6. To the extent permitted by law, federal executive departments and agencies should not construe, in regulations and otherwise, a federal statute to preempt state or local authority unless the statute contains an express preemption provision or there is some other firm and palpable evidence compelling the conclusion that the Congress intended preemption of state or local authority, or when the exercise of state or local authority directly conflicts with the exercise of federal authority under the relevant federal statute or U.S. Constitution.

7. When an executive department or agency proposes to act through adjudication or regulatory action to preempt state or local authority, the department or agency must provide all affected states and local governments notice and an opportunity for
appropriate participation in the proceedings [as outlined in B(2)].

8. With respect to federal statutes and regulations administered by states and local governments, the federal government should grant states and local governments the maximum administrative discretion possible. Any federal oversight of such state and local administration should not unnecessarily intrude on state and local discretion or create undue burdens on state and local resources.

B. Actions by Federal Agencies That Should Be Covered by Federalism Executive Order / Consultation

1. Actions having federalism implications include federal regulations, proposed federal legislation, policies, rules, guidances, directives, programs, reviews, budget proposals, budget processes and strategic planning efforts that have substantial direct effects on the states and/or local governments or on their relationship with the federal government, or the distribution of power and responsibilities, between the federal government and the states and local governments.

2. “Consultation” -- Each federal executive department / agency should be required to have a clear, consistent and accountable process (see Section C below) to provide states and localities with early, meaningful and substantive input in the development of regulatory policies that have federalism implications.

3. Independent regulatory agencies should be required to comply with the same federalism-related requirements that other executive departments and agencies are required to follow.

C. Federalism Review Process

1. The head of each federal executive department and agency should be required to designate an official responsible for ensuring that the federalism consultation process is executed appropriately and completely.

   a. Regulatory actions [see B(1)] with federalism implications should trigger preparation of a federalism assessment. Such assessments should be considered in all decisions involved in promulgating and implementing the policy.

   b. Each federalism assessment should accompany any submission concerning the policy that is made to the Office of Management and Budget pursuant to Executive Order No. 12291 or OMB Circular No. A19, and:
i. contain the designated official's certification that the policy has been assessed in light of the principles, criteria and requirements contained in this document;

ii. identify any provision or element of the policy that is inconsistent with the principles, criteria, and requirements stated in this document;

iii. specifically identify the extent to which the policy imposes additional costs or burdens on state or local governments, including the likely source of funding for the state and local governments and the ability of the states and impacted local governments to fulfill the purposes of the policy; and

iv. specifically identify the extent to which the policy would affect impacted governments’ abilities to discharge traditional state and local governmental functions, or other aspects of state sovereignty and local government authority.

2. No executive department or agency should promulgate any regulation that is not authorized by federal statute. Where regulations are appropriate, authorized and Constitutional, but have federalism implications or impose substantial direct compliance costs on states or localities, the executive department or agency must:

   a. Ensure that new funds sufficient to pay the direct costs incurred by the state or local government in complying with the regulation are provided by the federal government to the impacted state and local governments for the duration of the impact; and

   b. Prior to the formal promulgation of the regulation:

      i. in a separately identified portion of the preamble to the regulation as it is to be issued in the Federal Register, provide to the Director of the Office of Management and Budget a description of the extent of the executive department / agency’s prior consultation with representatives of affected states and local governments, a summary of the nature of their concerns, and the executive department / agency’s position supporting the need to issue the regulation; and

      ii. makes available to the Director of the Office of Management and Budget any written communications submitted to the agency by states or local governments.
D. Increasing Flexibility for State and Local Waivers

1. Agencies should review the processes under which states and local governments apply for waivers of statutory and regulatory requirements and take appropriate steps to streamline those processes.

2. Each agency should, to the extent practicable and permitted by law, favorably consider any application by a state or local government for a waiver of statutory or regulatory requirements in connection with any program administered by that agency. In general, federal agencies should operate with a general view toward increasing opportunities for utilizing flexible policy approaches at the state or local level in cases in which the proposed waiver is consistent with applicable federal policy objectives and is otherwise appropriate.

3. Each agency should, to the extent practicable and permitted by law, render a decision upon a complete application for a waiver within 120 days of receipt of such application by the agency. If the application for a waiver is not granted, the agency should provide the applicant with timely written notice of the decision and the reasons for the application’s rejection.

4. This process would apply only to statutory or regulatory requirements that are discretionary and subject to waiver by the agency.
Tab N – Clean Water Act Waters of the United States (WOTUS)
June 19, 2017

Ms. Donna Downing  
EPA Project Lead

RE: E.O. 13132 Federalism Consultation

Dear Ms. Downing:

The Western States Water Council (WSWC), created to advise the governors of 18 western states on water policy issues, submits the following comments regarding federalism and the evaluation of a revised rule under consideration by the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (the Corps) to clarify the scope of Clean Water Act (CWA) jurisdiction. These comments are based on WSWC Policy #369, which is attached and incorporated by reference. The WSWC urges EPA and the Corps to review this policy carefully and to incorporate its recommendations.

WSWC Policy #369 sets forth the unanimous, consensus position of our western state appointees regarding federal efforts to clarify or redefine CWA jurisdiction. The policy explicitly addresses substantive comments regarding any rule, as well as calling for further ongoing dialogue between states as co-regulators and the federal agencies also charged with administering the CWA. Implementation of any rule will require broad support among state agencies with delegated authority to administer CWA programs.

Specifically, the WSWC urges EPA and the Corps to ensure that the rule gives as much weight and deference as possible to state interests, needs, priorities, and concerns. CWA Section 101(b) recognizes the States’ critical role in protecting water quality.

It is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this Act. It is the policy of Congress that the States manage the construction grant program under this Act and implement the permit programs under sections 402 and 404 of this Act.

The primary controversy has involved CWA jurisdiction pertaining to the 404 program, but this has now led to confusion regarding other CWA programs. The WSWC believes the programs operating under Sections 402 and 303 of the CWA are working as they should. The new rule should address related and unintended impacts to Section 402 and Section 303 programs. Where possible, EPA and the Corps should ensure that their efforts to address the current uncertainty regarding Section 404 through the
development and implementation of the rule do not adversely affect other CWA programs. Additional ongoing consultation with the states will help minimize the potential for unintended consequences.

Notably, even in the absence of federal jurisdiction over any particular waters, the States have authority to regulate such waters, including authority to permit or preclude discharges now regulated under Section 402. The WSWC is working to compile a list of these state authorities.

The U.S. Supreme Court has clearly determined that not all waters are jurisdictional, and the rule should not try to expand jurisdiction beyond the limits set by the Court to address a perceived gap in regulation. Rather, the rule should acknowledge that states have authority pursuant to their “waters of the state” jurisdiction to protect excluded waters, and that excluding waters from federal jurisdiction does not mean that excluded waters will be exempt from regulation and protection.

States should be directly and intimately involved in development of the rule, and subsequent jurisdictional determinations should be made in collaboration with the States. Such involvement will lead to better, and often more timely determinations, given the states’ familiarity with and interest and experience in protecting both “waters of the United States,” and “waters of the State.” Indeed, states’ constitutional and statutory authorities to protect “waters of the State,” extend to all waters, subsuming any jurisdictional “waters of the United States,” and state protections may be more stringent than CWA requirements.

In the West, where water scarcity is pervasive, it is important that any rule also explicitly acknowledge the primary and often exclusive role of the States in allocating and administering rights to the use of water under authorities to which the Congress has a long history of deference. Indeed, CWA Section 101(g) states:

It is the policy of Congress that the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated or otherwise impaired by this Act. It is the further policy of Congress that nothing in this Act shall be construed to supersede or abrogate rights to quantities of water which have been established by any State. Federal agencies shall co-operate with State and local agencies to develop comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources.

The WSWC reiterates the continuing need for EPA and the Corps to work collaboratively with the States to develop a workable rule, consistent with Sections 101(b) and 101(g). The rule should give full force and effect to, and not diminish or in any way detract from, the intent and purpose of CWA Sections 101(b) and 101(g).

One way to facilitate continued dialogue with the western states would be for the agencies to avail themselves of the existing Western Federal Agency Support Team, a federal working group with a liaison in the WSWC offices. EPA and the Corps have WestFAST representatives that can serve as a bridge to the western states as part of an ongoing conversation as your agencies work to revise and implement the rule. Continuing dialogue, collaboration, and relationship-building will be needed to create a workable and effective rule.

Any revised rule must comply with the limits Congress and the U.S. Supreme Court have placed on CWA jurisdiction, while providing greater certainty, clarity and recognizable limits to the extent of CWA jurisdiction. No universally acceptable definition nor guide has emerged from often contentious
dialogue and litigation to date. A “clear bright line” has yet to be recognized. However, it is possible for EPA and the Corps to more clearly define those waters that are “in” from those waters that are “out,” and narrow the gray area in between, in which waters “may be” jurisdictional.

Justice Scalia’s plurality opinion in *Rapanos v. United States*, 547 U.S. 715 (2006), is an appropriate first test for determining what is “in,” or jurisdictional, requiring a direct relatively permanent surface water connection. It is also important to note that Justice Kennedy’s concurring opinion and “significant nexus” test for evaluating waters that “may be” jurisdictional, required a connection between waters that is more than speculative or insubstantial. The rule should quantify “significance” to the extent practical to ensure that the term’s usage does not extend jurisdiction to waters with a de minimis or inconsequential connection to jurisdictional waters.

Waters and features that should be “out”-side the scope of CWA jurisdiction, should include groundwater, as well as man-made impoundments and conveyances such as farm ponds, stock ponds, irrigation ponds, irrigation ditches, drainage ditches, dugouts (and similar works currently excluded under the CWA’s agricultural exemption). Moreover, dip ponds that are excavated on a temporary, emergency basis to combat wildfires and address dust abatement should be excluded. Prairie potholes and playa lakes should be excluded. Further, consideration should be given to excluding ephemeral streams, dry washes and effluent dominated streams.

To address uncertainty related to waters that “may be” jurisdictional, the WSWC believes the rule should use a specific, quantifiable measure or measures to determine significance (rather than simply stating that the water’s effect on another jurisdictional water must be more than speculative or insubstantial). Waters that satisfy the specified measures would be presumed to be jurisdictional, while waters that do not would be presumed to not be jurisdictional. Under this general framework, parties could still provide evidence to rebut a presumption of jurisdiction or non-jurisdiction. Consequently, the use of specific, quantifiable measures would provide much needed clarity by providing a starting point for significance determinations.

The WSWC recognizes that further discussion between the states and your agencies is needed to develop the specifics of such a process, particularly in light of the considerable variety of hydrologic and geologic conditions that exist across the Nation. As such, the WSWC urges your agencies to work with the WSWC to identify and develop specific, quantifiable measures for determining significance consistent with the WSWC’s rebuttable presumption concept.

Federal jurisdictional determinations should be made in a timely manner, and the rule should ensure that the applicable permitting agency, such as the Corps for Section 404 jurisdictional determinations in most states, bears this burden for waters that “may be” jurisdictional. To help achieve this goal, the rule should provide a specific deadline by which the applicable agency must make a jurisdictional determination for waters after it receives a request from a landowner.

The WSWC urges your agencies to work with the WSWC to determine a reasonable timeframe for such jurisdictional determinations and to address any other issues associated with this proposal, including the possible consequences and remedies in those situations where the permitting agency does not meet the specified deadline. The WSWC has in the past proposed 180 days as an initial, possible starting point.

We note that WSWC member states unanimously requested that EPA and NRCS withdraw prior guidance related to enumerating agricultural practices that would clearly fall under the CWA exemption,
as that guidance raised the implication that any practice not specifically listed could then be considered to fall under EPA regulation. We would hope that this Administration would not again consider any such guidance.

Recent conversations among our members have also raised questions regarding the impact of any jurisdictional determination on eligibility for grants and other financial support under the CWA. The rule should clarify what if any impact it has on eligibility.

Another issue raised relates to water transfers, which in the West are pervasive and critically important to supply water for urban population centers and vital agricultural areas, as well as other economic sectors. Nothing in any proposed rule should be construed so as to call into question EPA’s current interpretation that transfers between waters without any intervening use or the addition of a pollutant are not subject to NPDES permitting requirements – which would be a costly proposition without commensurate improvements in water quality. The WSWC strongly supports this exclusion.

The WSWC appreciates the EPA’s and the Corps’ consideration of the above comments. As always, the WSWC, and its member state agencies as co-regulators, stand ready to work with EPA and the Corps in a joint partnership both on an individual state basis, and through the WSWC, to further refine the rule so that it will better accomplish its stated purpose of clarifying the extent of CWA jurisdiction.

We look forward to further dialogue and consultation between your agencies and the western states regarding this rule, and any other issues involving the protection of our Nation’s waters.

Sincerely,

Jerry Rigby
Chairman
Western States Water Council

cc: Andrew Hanson, EPA Federalism Contact
    Roger Gorke, WSWC EPA Contact
The Definition of “Waters of the U.S.”

E.O. 13132 Federalism Consultation Meeting
Webinar with WSWC
June 2, 2017
2-3 pm Eastern

Adobe Connect Link:  http://epawebconferencing.acms.com/wotus2_wswc/
Call in Number:  (877) 744-6030
Conference ID 32809990
Purpose & Agenda

Purpose:
- Initiate Federalism consultation to obtain state and local government officials’ perspectives
- Provide an overview of potential changes under consideration for the definition of “Waters of the U.S.”

Agenda:
- Federalism overview
- “Waters of the U.S.” over time
- The Executive Order
- Proposed two-step process
  - Step 1
  - Step 2
- Discussion of Potential Approaches
- Next steps
E.O. 13132, Federalism

The Order requires that Federal agencies consult with elected state and local government officials, or their representative national organizations, when developing regulations that have federalism implications.

The agencies are consulting due to strong interest on the part of state and local governments on this issue over the years and potential effects associated with a change in the definition of “waters of the U.S.”
“Waters of the U.S.” Over Time

From the 1970s through the 1990s, the majority of federal courts, as well as the agencies, consistently interpreted a broad scope of Clean Water Act jurisdiction.

Supreme Court decisions in 2001 and 2006 held that the scope of navigable waters must be linked more directly to protecting the integrity of waters used in navigation. The justices in the 2006 *Rapanos* decision were split on how this was to be accomplished.

The agencies have been working since these Supreme Court decisions to provide clarification and predictability in the procedures used to identify waters that are – and are not – covered by the Clean Water Act.

The 2015 Clean Water Rule was an effort to provide that needed clarification and predictability. Many stakeholders, including many states, expressed concerns with the 2015 Rule.

The agencies are now embarking on another effort to provide clarity and predictability to members of the public.
The Executive Order

On February 28, 2017, the President signed the “Executive Order on Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the ‘Waters of the United States’ Rule.”

The E.O. calls on the EPA Administrator and the Assistant Secretary of the Army for Civil Works to review the final Clean Water Rule and “publish for notice and comment a proposed rule rescinding or revising the rule....”

The E.O. directs that EPA and the Army “shall consider interpreting the term ‘navigable waters’” in a manner “consistent with Justice Scalia’s opinion” in *Rapanos*. Justice Scalia’s opinion indicates CWA jurisdiction includes relatively permanent waters and wetlands with a continuous surface connection to relatively permanent waters.

Two-Step Process

The agencies are implementing the Executive Order in two steps to provide as much certainty as possible as quickly as possible to the regulated community and the public during the development of the ultimate replacement rule.

1. The agencies are taking action to establish the legal status quo in the Code of Federal Regulations, by recodifying the regulation that was in place prior to issuance of the Clean Water Rule and that is being implemented now under the U.S. Court of Appeals for the Sixth Circuit’s stay of that rule.

2. The agencies plan to propose a new definition that would replace the approach in the 2015 Clean Water Rule with one that reflects the principles that Justice Scalia outlined in the *Rapanos* plurality opinion.

The agencies are aware that the scope of CWA jurisdiction is of intense interest to many stakeholders and therefore want to provide time for appropriate consultation and deliberations on the ultimate regulation.

In the meantime, the agencies will continue to implement regulatory definition in place prior to the 2015 rule, consistent with the 2003 and 2008 guidances, in light of the *SWANCC* and *Rapanos* decisions, pursuant to the Sixth Circuit stay of the Clean Water Rule.
Step 1: Withdraw 2015 Clean Water Rule

While the Sixth Circuit stay may remain in effect for some time, its duration is uncertain.

To provide greater certainty, the agencies will move to reinstate the preexisting regulations and guidance and to withdraw the 2015 Rule.

In the Step 1 proposed rule, the agencies will define “waters of the United States” using the regulatory definition in place before the Clean Water Rule, which the agencies will continue to implement according to longstanding practice, just as they are today.

The Step 1 proposed rule would maintain the approach in place for decades until a revised rule with a new definition can be promulgated.
Step 2: Develop New Rule Consistent with the Executive Order


Justice Scalia’s opinion indicates Clean Water Act jurisdiction includes relatively permanent waters and wetlands with a continuous surface connection to relatively permanent waters.

The agencies are consulting with state and local government officials as we begin to develop the new definition.
Potential Approaches to “Relatively Permanent” Waters

<table>
<thead>
<tr>
<th>Perennial plus streams with “seasonal” flow</th>
<th>Perennial plus streams with another measure of flow</th>
<th>Perennial streams only</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current practice: seasonal flow = about 3 months (varies regionally)</td>
<td>Use appropriate, implementable metrics, e.g., frequency of flow, intersecting water table</td>
<td>Streams that carry flow throughout the year except in extreme drought</td>
<td>Thoughts?</td>
</tr>
</tbody>
</table>
Potential Approaches to Wetlands with a “Continuous Surface Connection”

- **Surface connection even through non-jurisdictional feature**
  
  Current practice considers directly abutting wetlands and those with a continuous surface connection, regardless of distance, to be jurisdictional

- **Some degree of connectivity**
  
  Use appropriate, implementable metrics, e.g., distance

- **Wetland must directly touch jurisdictional waters**
  
  Only wetlands that directly touch a jurisdictional water

- **Other**
  
  Thoughts?
Discussion:

The change in jurisdictional waters will vary across states and localities and with the options suggested above. Given that:

1. How would you like to see the concepts of “relatively permanent” and “continuous surface connection” defined and implemented? How would you like to see the agencies interpret “consistent with” Scalia? Are there particular features or implications of any such approaches that the agencies should be mindful of in developing the step 2 proposed rule?

2. What opportunities and challenges exist for your state or locality with taking a Scalia approach?

3. Do you anticipate any changes to the scope of your state or local programs (e.g., regulations, statutes or emergency response scope) regarding CWA jurisdiction? In addition, how would a Scalia approach potentially affect the implementation of state programs under the CWA (e.g., 303, 311, 401, 402 and 404)? If so, what types of actions do you anticipate would be needed?

4. The agencies’ economic analysis for step 2 intends to review programs under CWA 303, 311, 401, 402 and 404. Are there any other programs specific to your region, state or locality that could be affected but would not be captured in such an economic analysis?
Next Steps

Do you have any additional information that the EPA should be aware of?
- If so, please provide.

Do you have any other approaches that you would like the agencies to consider?

Comments will be due to the EPA in approximately 5 weeks, June 19, 2017.

Please send written comments to: CWAwotus@epa.gov and copy Hanson.Andrew@epa.gov.
Contacts

Project Lead:

Donna Downing
- (202) 566–2428
- CWAwotus@epa.gov

Federalism Contact:

Andrew Hanson
- (202) 564-3664
- Hanson.Andrew@epa.gov

WSWC EPA Contact:
- 213-244-1853
- Gorke.Roger@epa.gov
For Additional Information

Please visit our new website at:

- [https://www.epa.gov/wotus-rule](https://www.epa.gov/wotus-rule)
Tab O – South Dakota’s General Concentrated Animal Feeding Operation (CAFO) Permits
The reissued General Water Pollution Control Permit for Concentrated Animal Feeding Operations became effective on April 15, 2017. The Feedlot Permit Program has 427 concentrated animal feeding operations (CAFOs) with coverage under the 2003 general permit and 3 CAFOs with individual permits. There are 1,136,463 acres in approved nutrient management plans. Based on the cropping information in the approved nutrient management plans, these fields are capable of accommodating (on average) 106,224,091 pounds of Nitrogen and 39,450,446 pounds of Phosphorous annually.

The reissued permit meets all federal and state requirements, is protective of South Dakota’s surface waters and shallow aquifers, and continues to be a roadmap for environmental compliance for producers.

Chronology

- April through October 2015, DENR met with interested parties.
- 488 people were invited to participate in a webinar to go over changes in the proposed permit. The September 17, 2015, webinar was held at six Extension Service sites statewide and was attended by 63 people. DENR accepted written comments on the proposed permit, responded to all comments received, and made some changes to the proposed permit based on the comments received.
- The proposed general permit and December 16, 2015, contested case hearing were public noticed by October 8, 2015, in 10 daily newspapers, and was mailed to 931 interested parties including every county, municipal, and tribal government.
- 27 people submitted comments during the comment period, and 11 parties submitted petitions to intervene in the hearing by the petition deadline.
- On December 8, 2015, the Secretary received a request from Dakota Rural Action to delay the hearing, and the Secretary granted the request on December 11, 2015.
- On March 15, 2016, the hearing was rescheduled for September 27-29, 2016. Notice of the hearing date was provided to all intervening parties.
- A public notice of the rescheduled hearing was sent to the 10 daily newspapers and the intervening parties on August 2, 2016.
- On September 26, 2016, Dakota Rural Action submitted a Motion to Suspend the Hearing. The motion was not granted.
- The 2½ day hearing, attended by 80 people, was held September 27-29, 2016. At the end of the hearing, the Secretary adopted the general permit with changes based on
both comments received during the comment period and testimony during the hearing.
• Representing the Feedlot Permit Program, the Office of Attorney General submitted proposed Findings of Fact and Conclusions of Law – 39 pages, 244 findings, and 20 conclusions on November 21, 2016.
• The other parties, including Dakota Rural Action, had 30 days to submit their objections and findings, but Dakota Rural Action requested and was granted a 45-day extension.
• On February 6, 2017, Dakota Rural Action submitted Objections to the Proposed Findings of Fact and Conclusions of Law.
• The Secretary adopted Findings of Fact and Conclusions of Law on March 10, 2017.
• Existing operations have one to four years to submit a permit application. They will need to submit a permit application sooner than scheduled if they plan to make a major modification (for example, if they expand their animal numbers).

Reasons for Permit Changes
• 2012 EPA Regulations
• December 2012 South Dakota Natural Resources Conservation Service’s (NRCS) 590 Nutrient Management Standard revisions
• Changes based on interaction and suggestions from producers, engineers, crop consultants, and others

Summary of Significant Changes
• The permit can either be a state permit or a National Pollutant Discharge Elimination System (NPDES) permit.

<table>
<thead>
<tr>
<th></th>
<th>State Permit</th>
<th>NPDES Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effluent Limits</strong></td>
<td>No discharge to waters of the state in any circumstance</td>
<td>Allows certain operations to discharge to waters of the state in the event of a 25-year, 24-hour storm event</td>
</tr>
<tr>
<td><strong>Permit application</strong></td>
<td>Requires NRCS’ Soil Plant Air Water (SPAW) model to verify operation is designed to not discharge</td>
<td>SPAW model only required for new source swine, poultry, and veal operations</td>
</tr>
</tbody>
</table>
| **Permit Issuance Process** | • Does not allow for a contested case hearing  
  • If a public notice is required, the public | • Allows for a contested case hearing  
  • If a public notice is required, DENR’s |
<table>
<thead>
<tr>
<th></th>
<th>State Permit</th>
<th>NPDES Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>notice and DENR’s review</td>
<td>Operations must obtain DENR approval before beginning construction</td>
<td>Operations must obtain permit coverage before beginning construction</td>
</tr>
<tr>
<td>are concurrent</td>
<td>Operations must obtain permit coverage and a Certificate of Compliance before</td>
<td>Operations must obtain Certificate of Compliance before populating</td>
</tr>
<tr>
<td></td>
<td>populating</td>
<td></td>
</tr>
<tr>
<td>Annual reporting</td>
<td>Same as 2003 permit requirements based on EPA’s 2003 regulations</td>
<td>In addition to 2003 permit requirements, requires all annual nutrient</td>
</tr>
<tr>
<td></td>
<td></td>
<td>management information to be submitted to meet EPA’s 2012 regulations</td>
</tr>
</tbody>
</table>

All other requirements such as design, construction, nutrient management planning, inspection, and record keeping requirements are the same for both permits.

**Design, Construction, Operation and Maintenance Requirements**

- The permit continues to include design standards for manure containment systems
- The permit continues to have requirements to protect shallow aquifers as defined in SDCL 34A-3A-24. All operations with process wastewater containment structures continue to need to provide soil boring logs to the department so it can be determined whether they are located over a shallow aquifer. Operations with process wastewater containment structures located over a shallow aquifer continue to be required to conduct ground water monitoring or to obtain a ground water discharge permit
- Adds DENR Water Rights Program’s 100 foot setback for wells with the top of aquifer depth greater than 100 feet to existing well setbacks
- Reference NRCS’ national standard for clay liner and set specific design standards so the seepage rate is approximately 20% less than the NRCS national standard
- Include design requirements for synthetic liners
- Add design requirements for anaerobic digesters, calf hutches, and feed storage areas
- Specify requirements for drain tile located near manure/process wastewater containment systems
- All operations with manure containment systems or land application areas within ¼ mile of streams where Topeka shiners have been observed or have potentially occupied shall develop and implement an Endangered Species Action Plan
• Revise and clarify requirements for permanent and temporary stockpiling sites

**Nutrient Management Plan (NMP) Changes**

• Continues to require land application fields located over a shallow aquifer to conduct 2 to 4 foot soil samples or prior to manure application and within four weeks after harvesting the crop. If the 2 to 4 foot soil test results indicate that there is greater than 30 pounds of nitrogen, the nitrogen recommendation in the rate calculation must be reduced an additional four pounds of nitrogen for each five pound increment above 30 pounds. If the residual nitrate-nitrogen in the post-harvest soil samples is above 100 pounds per acre, the field will not be available for land application until one full growing season has passed. If a soil sample is taken the following year and shows that the nitrate-nitrogen has dropped below 100 pounds per acre, manure application may resume.

• Requires a 5 year crop rotation instead of a 3 year crop rotation. Allows for the use of alternate crops in the rotation

• Updated Phosphorous Index Table to match South Dakota NRCS’ 590 Nutrient Management standard

• Includes requirements for manure or process wastewater sent out of state

• To match NRCS’ Nutrient Management standard, requires initial nutrient management planning in case land application is needed from a properly designed, constructed, operated, and maintained system during saturated, snow covered, or frozen soil conditions

• Allows a producer to give away up to 100 cubic yards of solid manure each year if nutrient results are provided to land owner. If the producer wants to give away more than 100 cubic yards, an individual permit is required

• Contains requirements that allow two operations within two miles of each other to use one nutrient management plan

• Includes soil and manure sampling methods and laboratory certification requirements

• Requires mobile land application systems, such as those with portable hoses and injection equipment, to use a flow meter and on board radio controller during land application so the pump can be quickly shut off if there is a pressure drop that may indicate a leak or pipe failure

• Includes recommended practices for land application near pattern tile

• Includes requirements for precision/variable rate application

**Other Changes**

• References South Dakota Codified Law 34A-2-36.2 (2007), which requires CAFOs to obtain a water pollution control permit, in the “operations required to obtain permit coverage” section of the permit
• To ensure compliance with states “bad actor” law, SDCL 1-40-27, any corporation, partnership, limited liability partnership (LLP), limited liability company (LLC), or trust, the applicant shall provide with their application information on their legal structure including any parent corporation or subsidiary corporations of the applicant. The applicant shall also identify the name, title/position of every officer, general partner, LLP partner, LLC member, trustee, investor, director, or person performing a function similar to a director, the applicant, and each person who is the recorded or beneficial owner of 10 percent or more of any class of voting stock of the applicant, or any other responsible official(s) of the applicant with legal or decision making responsibility or authority for the operation

• Moved existing language requiring manure from out of state CAFOs being land applied in South Dakota to obtain permit coverage for their land application to the section of the permit that indicates which operations are required to obtain permit coverage. Clarifies that EPA NPDES permitted CAFOs in Indian Country do not need permit coverage for their land application activities in South Dakota

• Requires new or expanding operations with twice the number of animals at the threshold to be a large CAFO using wells or surface water sources to install a water meter to verify water usage to determine whether a water right is needed

• Added bankruptcy reporting requirements

• Updated the section that indicates additional permits or requirements that may apply to a CAFO to include other possible permits and requirements not listed in the current permit
Tab P – Survey of State 401 Certification Authority
The Council surveyed its 18 member states. Responses have not yet been received from Nebraska, North Dakota and Washington.

Hydropower permitting-related requests vary widely by State as might be expected, with little or no hydropower development and related 401 certification requirements in most Plains States. Even in the Rocky Mountains there appear to be relatively few active requests. West Coast States have more certification and permitting actions.

It appears that 401 certifications related to CWA Section 404 permitting dominate the number of certification requests. Coordination and collaboration between the States and Corps often expedite the process, but projects requiring an individual 404 permit can be time consuming.

CWA 401 certifications are also used to inform state 402 NPDES permits issued by states, and would be required in those states without primacy to issue 401 permits, which would include Idaho and New Mexico.

1. In your opinion is State 401 certification authority a significant obstacle to timely federal licensing and permitting activities? Specifically hydropower licensing? Other permits (such as CWA Section 404 permits)?

States unanimously reported that the CWA 401 State Water Quality Certification is not usually an obstacle in itself to timely federal licensing and permitting, provided that all applications are complete and ancillary federal activities are complete or nearly complete (e.g. public notice, study requirements, a complete EIS, mitigation requirements, etc.).

States report certification applications filed with missing signatures, illegible maps, and/or required documents such as a CWA Section 404 application. Often substantive details of the proposed action requiring certification can also change. Many times certification requests are filed before the Corps has completed their assessment. Certifications may also be held up by the applicant not responding to requests for additional information, or failing to comment on proposed project conditions.

EPA and other federal agency comments, conditions and other actions can delay certification. It is not uncommon for example for 404 permitting applications to be elevated to Corps/EPA Headquarters for consideration.

The complexity and long duration of the FERC licensing and relicensing process is a major contributing factor in those States with related 401 certification requests pending. FERC’s Integrated Licensing Process (ILP) takes a minimum of five years to complete.
Some States have separate environmental review requirements, such as the California Environmental Quality Act (CEQA) process required for non-governmental entities (which can be time consuming). The federal NEPA process is the starting point for CEQA. Further, the California State Water Resources Control Board, consistent with maintaining a transparent and public process, provides a public comment opportunity on draft certification decision before issuance. As project licenses typically range from 30-50 years, this is considered to be important, though this is not a required step.

Oregon has a separate state hydropower licensing process, in parallel to the federal process.

2. How long does it usually take for your State to act on a certification application? Is there a specific goal or timeline for action?

This varies by State, but all are within the one year period allowed by law. The majority, on average, fall between 40-90 days, while some may process certification requests within a couple of weeks. Action on a request can depend on a number of factors, such as a 30-day public comment period requirement. Other reasons for delay are listed below under Question #3.

States generally do have a process and specific rules outlining a formal timetable or goal for action, but where there is not, every effort is made to issue the certification or a waiver in a timely manner.

Alaska has a goal of processing 401 certification requests within 10 days after the close of the public notice and comment period.

Similarly, the Texas Commission on Environmental Quality (TCEQ) reviews 401 certification requests in parallel with federal licensing and 404 permitting activities, and based on a memorandum of agreement (MOA) with the Corps Southwestern Division, TCEQ makes a decision within 10 days of the Corps having reached a permitting decision (certification is required before a permit is issued).

3. Does the State currently have a backlog of certification applications? If so, what is the size of the backlog? What types of licenses or permits are most likely to be delayed? What are the primary reasons for delays (incomplete applications, study requirements, state staff or other resource limitations, etc.)?

The vast majority of states have no backlog of certification actions, but a few do. Delays are typically due to submission of an incomplete application, completion of study requirements, and constraints on state resources, including staff limitations. Often, 401 certification is a part-time duty for staff, assigned as needed. State turnover is another problem. Often 401 certification responsibilities are assigned to entry level staff. Given the length of the FERC permitting process, staff may change over time.

California reported the most delayed FERC projects and certification requests (only 2-3 staff are devoted to requests). California is working on certification for sixteen FERC licensed projects where their license
has expired. Most should be completed within two years. Post-licensing monitoring of certification and permitting conditions, which may involve continuing studies given the uncertainty regarding future conditions, also place an increasing burden on staff time.

Oregon does have two large hydropower projects which haven’t been certified within one year of the original application, one due to ongoing federal activities. Ongoing mitigation studies have delayed the other.

At least one state will no longer accept 401 certification applications as complete until required federal actions have already been approved or completed.

4. What actions has the state taken to simplify or expedite the certification process (such as interagency MOUs, online applications, etc.)? Please provide references and copies.

States have undertaken various process improvements, including coordinating state and federal environmental reviews, some through formal memoranda of understanding.

The Alaska Department of Environmental Conservation has developed a waiver process applied to individual 404 permits issued by the U.S. Army Corps of Engineers. Criteria are based on the potential risk of a particular activity that may affect water quality, such as the size of the wetlands fill, the type of activity, the proximity to a waterbody and the particular wetlands functions and values.

On November 19, 2013, The California State Water Resources Control Board (SWRCB) executed a memorandum of understanding (MOU) with FERC that covers coordination of pre-application activities that include “consultation, environmental scoping, study planning, and submittal of and commenting on the applicant’s preliminary licensing proposal.” A copy of the MOU is available online at:


Also, with the support of the California Hydropower Reform Coalition and FERC licensees, SWRCB is ramping up staffing resources and increasing fees. Three 401 certification requests were completed within an eight month period. Each project request is also assigned a back-up staff person to assure continuity. There are templates for standard letters and more common certification conditions, and SWRCB is developing a program manual and training staff on up-to-date techniques.

For large, complex projects the Colorado Department of Public Health and Environment works with applicants prior to formal filing of a certification request to streamline the review process and minimize requests for additional information. In 2010, Colorado executed an MOU with FERC, and also hired a contractor to identify a number of small projects that were reviewed and certified, but the contract was not renewed. FERC has not informed the State of new conduit or other small scale hydropower project licensing applications, though some potential projects have come to light through public information and conversations with Corps staff.
Idaho has used settlement agreements to develop FERC 401 certifications.

New Mexico has expedited the certification process through the use of general permits and established procedures. The “New Mexico Implementation Plan” governs the process for issuing NPDES permits.

Oklahoma meets regularly Corps staff to coordinate procedures for public notice and processing of permit and certification applications.

Oregon Department of Environmental Quality (DEQ) staff work with applicants on study design and data review early on to ensure a 401 request is complete. Oregon also has a statute outlining state review of hydropower relicensing in coordination with federal relicensing to avoid duplication through a Hydroelectric Application Review Team (HART) with staff from DEQ, the Department of Water Resources, and the Department of Fish and Wildlife. Other state agencies may participate as well.

HART may provide applicants with an estimate of costs for relicensing work, including certification, and one applicant entered into an agreement to pay the state agencies’ costs. HART addresses relicensing, but state agencies coordinate as needed for any new project to reduce inefficiencies. Also, DEQ invoices all 401 certification applicants for costs incurred in processing, providing the revenue necessary for timely action, including re-assigning staff work.

A Texas/Corps MOA implements a tiered classification system for projects that require an individual CWA 404 permit, which require certification reviews for proposed projects that directly impact aquatic resources of greater than three acres or 1500 linear feet of stream (Tier II projects). For Tier I projects (below that threshold), TCEQ waives certification if the permit applicant agrees to incorporate specific best management practices.

In Wyoming, electronic delivery of certification requests directly from the USACE (Corps) Wyoming Regulatory Office to the Department of Environmental Quality facilitates timely review and processing. WY DEQ encourages project proponents to contact the agency prior to submitting their 404 application to the Corps. Lastly, Wyoming has categorically certified several nationwide permits, further expediting the process.

5. What public information regarding 401 certification is available from the State (include state websites and addresses)?

Many States provide information in advance to assist applicants in navigating the 401 certification process, including online resources. This may include current program activity, staffing, current project-specific webpages, 401 certifications issued, etc. FERC also posts 401 certification information on its website. Further, Corps Districts may post information on 404 permit applications.

AK:  http://dec.alaska.gov/water/wwdp/wetlands/index.htm
CA: http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/


This is Idaho’s 401 certification website. The 401 certification list of projects is on these webpages:


MT: All FERC related 401 water quality certifications are posted on the FERC website. Montana shares the public notice with the Army Corps of Engineers for individual 404 related 401 water quality certifications.

NV: http://ndep.nv.gov/bwqp/401cert.htm

NM: Section 404 program can be found at http://www.nmenv.state.nm.us/swqb/404/. The website for the NPDES program can be found at http://www.nmenv.state.nm.us/swqb/Permits/.


OR: http://www.deq.state.or.us/wq/sec401cert/hydro.htm


TX: The TCEQ maintains several public web pages containing information about the TCEQ 401 certification program. Each page can be accessed from the following URL: http://www.tceq.texas.gov/permitting/401certification

UT: http://www.waterquality.utah.gov/permits/index.htm

WA:

WY: The USACE Wyoming Regulatory Office website provides a link to the Wyoming Department of Environmental Quality website that contains information on specific State 401 certification.
6. Do you anticipate an increase in the number of 401 certification requests in the future, and what might be the impact on State administrative resources?

Most states do not anticipate a significant increase in 401 certification requests. Some do. Some states have actually seen significant declines in requests. Again, most requests appear to be related to 404 permitting, which in turn increase with general economic conditions and related construction starts, oil and gas development, etc.

[Expansion of CWA jurisdiction as may be proposed by new rules could have an undetermined impact on the number of requests related to any increase in Section 404 permitting requirements.]

California expects an increase in requests due to FERC relicensing, license amendments, and new projects. Further, as described post-licensing monitoring of conditions, as well as non-hydropower certification requests will significantly impact the State’s administrative resources. FERC currently lists 115 non-federal hydropower projects in California, not including transmission line projects, with varying expiration dates. Since 2000, 22 FERC project licenses have expired, and another 26 will expire through 2029, necessitating either relicensing or surrender of the license. Decommissioning can also have water quality impacts. SWRCB is already involved in a number of relicensing pre-application activities. The Division of Water Rights Water Quality Certification Program also certifies non-hydropower projects that involve water rights.

Colorado does not anticipate a significant increase in the number of requests, but does anticipate 4-5 very large and complex project certification requests from water diversion and storage projects over the next 3-4 years.

Idaho does expect an increase in requests, as well as additional review requirements related to antidegradation reviews and analyses associated with federal permits, placing greater demands on static staff.

New Mexico noted drought limits the viability of hydropower projects.

Oregon has certified several projects through the federal relicensing process over the past several years. Currently there are only a few projects under relicensing review. Oregon anticipates on-going interest in retrofitting both irrigation and drinking water systems with small or micro hydro turbines, but many will be exempt from licensing and no 401 certification will be required. Many preliminary permit applications have not proceeded to licensing, making certification requirements difficult to estimate.
Federal Power Act

“Nothing contained in this chapter shall be construed as affecting or intending to affect or in any way to interfere with the laws of the respective States relating to the control, appropriation, use, or distribution of water used in irrigation or for municipal or other uses, or any vested right acquired therein.”

U.S. Code, Title 16, Chapter 12, Subchapter I, Sec. 821

WSWC 401 Survey

- States unanimously reported 401 certification is not of itself a major obstacle to permitting.
- The vast majority are acted on within 40-90 days, once accepted as complete, including public comment requirements.
- Most States do not anticipate a significant increase in 401 requests.
- Only CA and OR reported any backlog of 401 requests (and then only a few projects).
WSWC 401 Survey

Delays may result from:

- Incomplete requests – missing signatures, illegible maps, incomplete study requests, required documentation, such as CWA 404 applications, NEPA and other documents
- Failure to comment on proposed conditions and mitigation requirements
- The complexity/duration of the FERC process
- Elevation of 404 applications to EPA/Corps HQ
- Separate State review requirements (CEQA/CESA)
- Lack of State resources/staff, often junior staff

State Efforts to Streamline 401 Processing

- Providing advance application information online
- Ramp up State staffing/assign back up staffing
- Setting specific/general waiver/permit processes
- Coordinating state/federal NEPA review, etc
  - Only accepting 401 applications when FERC finds a proposal ready for environmental review and other required federal actions have been taken.
- Formal memoranda of understanding/processes
  - CA/FERC November 19, 2013 MOU
  - OR Hydro Application Review Team (HART)
  - CO/FERC 2010 Small Hydro MOU
  - ID settlement agreements
MEMO

TO: WGA Staff Council

FROM: Tony Willardson, Executive Director, Western States Water Council

DATE: September 20, 2013

RE: WGA and WSWC Actions and Interests Related to FERC Hydropower Licensing

The WGA and WSWC have been actively involved in protecting States’ rights and prerogatives in the federal hydropower licensing process for over two decades. The WSWC adopted related positions as early as 1991, and most recently in 2006 (attached). The latter largely formed the basis for the current WGA Water Quality Resolution (11-15) which states:

B.12 State Water Quality Certification: Section 401 of the CWA [Clean Water Act] requires applicants for a federal license to secure state certification that potential discharges from their activities will not violate state water quality standards. This certification authority is a vital tool for Western states as they continue to work closely with federal and private partners to restore fish populations under the Endangered Species Act and, in the face of consent decrees, to develop TMDLs for pollutant discharges into state waters in order to bring them into compliance with federal water quality standards. Section 401 of the CWA is operating as it should and states’ mandatory conditioning authority should be retained without amendment.

Of note the Clean Water Act includes the following savings clause:

Section 101(g) - It is the policy of Congress that the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated or otherwise impaired by this Act. It is the further policy of Congress that nothing in this Act shall be construed to supersede or abrogate rights to quantities of water which have been established by any State. Federal agencies shall co-operate with State and local agencies to’ develop comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources.

Further, the Clean Water Act - Section 401 requires “any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters…” to acquire certification from the State that “any such discharge will comply” with applicable state water quality standards to protect designated uses.

The Federal Energy Regulatory Commission (FERC) in issuing licenses for the development of non-Federal hydropower facilities requires that an applicant first acquire Sec. 401 certification from the State with any related conditions. These mandatory conditions are included unchanged in the FERC license.

The Federal Power Act of 1920 includes the following savings clause:

16 USC § 821 - State Laws and Water Rights Unaffected - “Nothing contained in this chapter shall be construed as affecting or intending to affect or in any way to interfere with the laws of the respective States relating to the control, appropriation, use, or distribution of water used in irrigation or for municipal or other uses, or any vested right acquired therein.”
The Congress has consistently recognized the primacy of state law in the allocation and administration of water rights for all uses because of the need for a comprehensive system of governance. Further, the Congress has also delegated its authority under the Clean Water Act to the states for the protection and conservation of water quality, consistent with state water quality standards and state water rights law and administration. Any federally licensed activity that results in an alteration or hydrological modification of surface waters must be preceded by a Section 401 certification that ensures compliance with all provisions of state law.

The WSWC has supported efforts to integrate and streamline state and federal hydropower licensing requirements, consistent with the States' mandatory conditioning authority under Clean Water Act Section 401 and Congress’ longstanding deference to the States with regard to the allocation of water for all uses, including hydropower. The WSWC has opposed administrative and legislative effort to weaken or eliminate States’ mandatory conditioning.

Given our past experience, maintaining the Governors' current position and this critical state prerogative is vital. The States' mandatory conditioning authority has been a point of contention with FERC and the hydro industry since the 1980s. There have been repeated unsuccessfully attempts to convince Congress to strip the States of this authority and allow FERC to balance all environmental and natural resources considerations.

The Supreme Court has twice addressed FERC hydropower licensing and State authorities. On May 21, 1990, in California v. FERC (Rock Creek Case), the Court unanimously affirmed FERC’s exclusive jurisdiction to determine minimum bypass flows for federally licensed hydropower projects to protect fish and wildlife, and invalidated California’s claim of authority under FPA Section 27 to impose additional requirements. Forty-nine States provided amicus support for California’s interpretation of Section 27 as protecting States’ rights.

The Court distinguished the holding from its California v. United States decision (1978) related to Section 8 of the Reclamation Act; and First Iowa (1946) which it interpreted as integrating rather than duplicating federal and state jurisdictions, saying that the Federal Power Act envisioning a broader and more active oversight role for FERC in hydropower development.

However, on March 31, 1994, in PUD No. 1 of Jefferson County v. Washington Department of Ecology, the Court upheld the State Supreme Court’s holding that “the antidegradation provisions of the State’s water quality standards require the imposition of minimum stream flows, and that § 401 authorized the stream flow condition and conferred on States power to consider all state action related to water quality in imposing conditions on § 401 certificates.” The Supreme Court held: “Washington’s minimum stream flow requirement is a permissible condition of a § 401 certification.”

As it now stands, States must certify that any federal action, including FERC licensing, is consistent with State adopted water quality standards and States may impose mandatory license conditions. FERC must include those conditions in any license.

The Council has in the past tried to work with FERC and the hydropower industry and would support WGA efforts in this regard. In 1992, the WSWC suggested to FERC development of a Memorandum of Agreement that would formally recognize state water rights permitting processes and provide greater consideration of state water planning decisions, while providing better information for FERC decisionmaking, greater certainty for licensees, and State protection of mandated instreamflows. FERC abruptly ended our discussions after about 18 months.

Areas for future discussion might include the timing and completeness of the request for State certification, when the one-year period mandated by the FPA for action begins, the potential use of eminent domain, and subordination of hydropower to future upstream water development.
Tab Q – WSWC Letter commenting on the Proposed Rule on Use of U.S. Army Corps of Engineers Reservoir Projects for Domestic, Municipal & Industrial Water Supply
May 12, 2017

Theodore Brown  theodore.a.brown.civ@mail.mil
Chief, Policy and Planning Division
COE/DOD
441 G Street, NW,
Washington, DC 20314

RE: Proposed Rule on Use of U.S. Army Corps of Engineers Reservoir Projects for Domestic, Municipal & Industrial Water Supply

Dear Chief Brown:

On behalf of the Western States Water Council, I am writing to comment on the Corps’ proposed rule on the use of reservoir projects for domestic, municipal, and industrial water supply, published in the Federal Register for public comment on December 16, 2016.

As previously expressed in our letter to Assistant Secretary Jo-Ellen Darcy on August 6, 2013, our member states have serious concerns over the lack of substantive state participation in the development of the rule. State input for such a water supply rule is critical, particularly where the Corps policies will result in a disproportionate impact on western water resources, where the laws differ significantly from the laws governing riparian water users along rivers in the East. The Western States have primary, often exclusive authority over the protection, development, and management of waters within their boundaries, including natural surface waters flowing through Corps reservoirs and dams. We believe that the Corps’ assertions of broad authority over surface waters and the potential interference with the lawful exercise of state water rights are contrary to over 100 years of deference afforded state water laws by the Congress and the Supreme Court of the United States.¹

The proposed rule fails to distinguish between “surplus waters,” defined by the Corps in relation to storage and authorized purposes, and the “natural flows,” defined as waters that would be available for use in the absence of federal dams and reservoirs. Natural flows are under exclusive jurisdiction of the states. For those natural flows that are located within a federal reservoir (water not stored), the Corps should grant an easement for access to the natural flow as long as the easement does not interfere with the Corps authorities. The States’ authority allows the states to determine whether sufficient natural flows exist when granting state water rights.

The Corps’ definition and quantification of “surplus waters” must explicitly exclude the “natural flows.” The proposed rule indicates that it is not intended to upset the balance between federal

¹ See, e.g., the 1866 Mining Act (43 USC §661); the 1877 Desert Land Act (43 USC §321); the 1920 Federal Power Act (16 USC §§802, 821); the Clean Water Act (33 USC §§1251(b) and (g)); the 1902 Reclamation Act (43 USC §383); the 1944 Flood Control Act (33 USC §701-1); the 1958 Water Supply Act (43 USC §390b); Martin v. Lessee of Wadell, 41 U.S. 367, 410 (1842); Pollard v. Hagan, 44 U.S. 212 (1845); Kansas v. Colorado, 206 U.S. 46 (1907); California Oregon Power v. Beaver Portland Cement Co., 295 U.S. 142 (1935); California v. U.S., 438 U.S. 645, 653-664 (1978); PPL Montana v. Montana, 565 U.S. 576 (2012).
purposes and state prerogatives to allocate water. However, without making a clear distinction between Corps’ “surplus waters” and state “natural flows,” the rule will do precisely that. The Corps must recognize the legal right of the states to develop, use, manage, control, distribute, and allocate the states’ surface waters. Any Corps policy to require storage contracts subject to surplus determinations, time limitations, right-of-way requirements, and fees to access these “natural flows” within a reservoir boundary would be a violation of the states’ rights.

The proposed rule also fails to recognize critical differences between the climate, hydrology, and water laws of the Eastern and Western States. Unlike the wetter climate of the East, precipitation is often scarce in the West, and numerous reservoirs capture and moderate the “natural flows.” Corps’ reservoirs primarily provide non-consumptive flood control, hydropower and navigation benefits, but may be a significant source of municipal and industrial water. Further, the scale of the Corps’ projects in the West is often much larger than in the East. Reservoirs capture large volumes, which may comprise a greater percentage of the average annual flow, and can cover hundreds of square miles. Withdrawals of “natural flows” for consumptive uses by the state or state water rights holders may often be de minimus compared to storage and releases for authorized federal purposes.

Water law differences are also substantial. For example, Eastern riparian property owners may withdraw waters from adjacent sources without a state permit. In the West, under state-granted water rights, water must be appropriated, withdrawn, and often transferred long distances from the point of diversion to the point of use. Water users under a prior appropriations legal framework also often have vested private property rights in water, granted and administered by the states. These may be entitled to Constitutional protections and may not be taken for public purposes without just compensation. Securely established water rights are vital to the Western States’ economies and their ability to grow. By ignoring regional differences, the proposed rule threatens to undermine the legal structure long-established in the West to allocate limited water resources.

The proposed rule notes that the Corps intends to initiate a positive dialogue “with all interested parties, resulting in a final rule that will more effectively accomplish Congressional intent regarding the utilization of Corps reservoirs for water supply.” We request that the Corps enter into an open and authentic dialogue with the states designed to achieve a mutually acceptable policy that reflects the Constitutional division of powers, state primacy over water resources allocation, and the realities of western water law, with a flexible but consistent approach that accounts for the significant physical, hydrological, and legal differences that exist between the states.

Thank you for considering our comments and concerns, as well as our request to engage more fully with the states. We look forward to continuing our collaborative relationship with the Corps to address these and other water management issues in the West.

Sincerely,

Jerry Rigby, Chairman
Western States Water Council
Tab R – Water Rights Protection
Chairman Lamborn, Ranking Member Huffman, and Members of the Subcommittee, the Western Governors’ Association (WGA) appreciates the opportunity to provide written testimony addressing states’ rights to manage and allocate their water resources. WGA is an independent organization representing the Governors of 19 western states and 3 U.S.-flag islands. The Association is an instrument of the Governors for bipartisan policy development, information-sharing, and collective action on issues of critical importance to the western United States. The Governors appreciate the opportunity to provide background testimony relevant to the Subcommittee’s work on water resources policy.

Water is a precious resource everywhere but especially in the arid West. Water regimes are different in the West – our hydrology and the legal structures governing water rights and usage are distinct from the rest of the nation. The Western Governors have adopted a policy resolution (WGA Policy Resolution 2015-08, Water Resource Management in the West) that articulates a fundamental fact and principle recognized by both Congress and the United States Supreme Court:

States are the primary authority for allocating, administering, protecting and developing water resources, and they are primarily responsible for water supply planning within their boundaries. States have the ultimate say in the management of their water resources and are best suited to speak to the unique nature of western water law and hydrology.

The Governors’ statement is the starting point of WGA’s work on water policy and should be the starting point of any federal action on water as well. In recent years, however, several federal regulatory proposals have inadequately recognized state authority over water. In WGA Policy Resolution 2015-08, Water Resource Management in the West, Western Governors assert:

The federal government has long recognized the right to use water as determined under the laws of the various states; Western Governors value their partnerships with federal agencies as they operate under this established legal framework. While the Western Governors acknowledge the important role of
federal laws such as the Clean Water Act, the Endangered Species Act and the Safe Drinking Water Act, nothing in any act of Congress or Executive Branch regulatory action should be construed as affecting or intending to affect states' primacy over the allocation and administration of their water resources.

Nowhere is the need for substantive consultation between states and the federal government more critical than in the water arena. WGA Policy Resolution 2017-01, Building a Stronger State-Federal Relationship, states that:

Each Executive department and agency should be required to have a clear and accountable process to provide each state – through its Governor as the top elected official of the state and other representatives of state and local governments as he or she may designate – with early, meaningful and substantive input in the development of regulatory policies that have federalism implications. This includes the development, prioritization and implementation of federal environmental statutes, policies, rules, programs, reviews, budgets and strategic planning.

Certain previously proposed rules, regulations, and directives have threatened to disrupt the traditional balance of state and federal power over water management and protection, and preempt state water resource authority. Western Governors have consistently communicated concerns regarding the preemption of, and interference with, state water authority to federal agencies through public comments. WGA Policy Resolution 2017-01, Building a Stronger State-Federal Relationship, states that:

In the absence of Constitutional delegation of authority to the federal government, state authority should be presumed sovereign. Accordingly, federal departments and agencies should, to the extent permitted by law, construe, in regulations and otherwise, a federal statute to preempt state law only when the statute contains an express preemption provision or there is some other firm evidence compelling the conclusion that Congress intended preemption of state law, consistent with established judicial precedent.

While states have primary authority over their water resources generally, their authority over groundwater management and allocation is even more extensive and has not been expressly preempted by federal legislation. WGA Policy Resolution 2015-08, Water Resource Management in the West, affirms that:

States have exclusive authority over the allocation and administration of rights to use groundwater located within their borders…The federal government should not develop a groundwater quality strategy; instead, it must recognize and
respect state primacy, reflect a true state-federal partnership, and comply with current federal statutory authorities.

Western Governors communicated their concerns regarding a previously proposed Directive on Groundwater Resource Management, issued by the U.S. Forest Service (USFS), which included language that could have been construed to assert USFS ownership of state groundwater and lead USFS employees to make decisions regarding special use permits based on the amount of water withdrawn under a state-issued water right (79 FR 25815, May 6, 2014). Additionally, the proposed Directive instructed USFS employees to assume that surface water and groundwater are hydraulically connected, regardless of whether state laws treat these resources as separate. This assumption disregarded long-standing state laws and conflated separate authorities over groundwater and surface water.

Another previous proposal of USFS threatening states’ primary authority over water resources involved an addition to the agency’s handbook regarding ski area water rights (79 FR 35513, June 23, 2014). As the Western Governors stated in their formal comments on the proposal, some of the proposed language appeared to be an agency effort to utilize special use authorization as a means by which to manage water use and water rights on National Forest System lands and to add a layer of federal regulatory oversight to state-managed water rights systems. On December 30, 2015, USFS issued a modified directive that does not provide for ski area water rights to be acquired in the name of the United States; instead, the final directive focuses on sufficiency of water to operate ski areas on NFS lands.

The 2015 Clean Water Rule, promulgated by the Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (USACE), prompted Western Governors to submit comments expressing various process-related, as well as substantive, concerns. The Rule, which is the subject of agency review under an Executive Order dated February 28, 2017 (and currently stayed by the U.S. Court of Appeals for the Sixth Circuit), would create ambiguity in defining the jurisdictional bounds of the Clean Water Act (CWA). While the Rule exempts groundwater from its scope, a “shallow subsurface flow connection” – a term the Rule fails to define – could establish jurisdiction over isolated surface waters. Additionally, EPA’s Scientific Advisory Board (SAB) report on the connectivity of waters indicated support for using connectivity as a scientific basis for even broader CWA jurisdiction than was asserted under the Rule. Furthermore, no state representatives participated in the SAB review of EPA’s connectivity report. Accordingly, the review was deprived of the regulatory expertise, scientific resources, and on-the-ground knowledge possessed by state professionals. The EPA and USACE have recently begun renewed efforts to enact a rule that clarifies which water bodies fall under CWA jurisdiction. WGA, as well as individual states, have been approached by the agencies in order to seek their concerns and viewpoints. Western Governors applaud this outreach and look forward to a robust and ongoing dialogue between the states and federal agencies in the development of a new rule.
In December 2016, USACE proposed a Rule seeking to preempt states’ primary authority over waters impounded in USACE reservoirs. Western Governors submitted comments in response to the proposed Rule expressing concerns that: (i) federalism implications were not properly evaluated and discussed by the agency with the states; (ii) states were required to relinquish their primary authority over historic natural flows in the rivers, which was never contemplated by the applicable federal statutes under which USACE was developing the Rule; and (iii) the proposed Rule improperly denied access to divert and appropriate natural flows under state water law.

In conclusion, state authority is the cornerstone of effective water management in the West. This is not simply a matter of precedent; states are best situated to understand their own unique legal frameworks, local hydrology and citizen needs. Federal efforts to assume greater authority over water jeopardize the distinct advantages of on-the-ground resource management. Congress and the Supreme Court have squarely and repeatedly affirmed state authority over water through a litany of court opinions and statutes commanding federal deference to the states with respect to water management and allocation. Western Governors are committed to the preservation and responsible exercise of that authority. We welcome the opportunity to partner with the Subcommittee and federal agencies to maintain states’ authority over their water resources.
H. R. _____

To prohibit the conditioning of any permit, lease, or other use agreement on the transfer of any water right to the United States by the Secretaries of the Interior and Agriculture, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. Tipton introduced the following bill; which was referred to the Committee on ______________________

A BILL

To prohibit the conditioning of any permit, lease, or other use agreement on the transfer of any water right to the United States by the Secretaries of the Interior and Agriculture, and for other purposes.

1 Be it enacted by the Senate and House of Represent-atives of the United States of America in Congress assembled,

2 SECTION 1. SHORT TITLE.

3 This Act may be cited as the “Water Rights Protec-tion Act”.

4 SEC. 2. DEFINITIONS.

5 In this Act:
(1) Secretary.—The term “Secretary” means, as applicable—

(A) the Secretary of Agriculture; or

(B) the Secretary of the Interior.

(2) Water right.—The term “water right” means any surface water, groundwater, or water storage right filed, permitted, certificated, confirmed, decreed, adjudicated, or otherwise recognized by a judicial proceeding or by the State, in which the user acquires the right to put the water to beneficial use, including water rights for federally recognized Indian tribes.

SEC. 3. TREATMENT OF WATER RIGHTS.

The Secretary shall not—

(1) condition the issuance, renewal, amendment, or extension of any permit, approval, license, lease, allotment, easement, right-of-way, or other land use or occupancy agreement on the transfer of any water right (including joint and sole ownership) directly to the United States, or on any impairment of title, in whole or in part, granted or otherwise recognized under State law, by Federal or State adjudication, decree, or other judgment, or pursuant to any interstate water compact;
(2) require any water user (including any federally recognized Indian tribe) to apply for or acquire a water right in the name of the United States under State law as a condition of the issuance, renewal, amendment, or extension of any permit, approval, license, lease, allotment, easement, right-of-way, or other land use or occupancy agreement; or

(3) condition or withhold the issuance, renewal, amendment, or extension of any permit, approval, license, lease, allotment, easement, right-of-way, or other land use or occupancy agreement, in whole or in part, on—

(A) limiting the date, time, quantity, location of diversion or pumping, or place of use of a State water right beyond any applicable limitations under State water law; or

(B) the modification of the terms and conditions of groundwater withdrawal, guidance and reporting procedures, or conservation and source protection measures established by a State.

SEC. 4. POLICY DEVELOPMENT.

In developing any rule, policy, directive, management plan, or similar Federal action relating to the issuance, renewal, amendment, or extension of any permit, approval,
license, lease, allotment, easement, right-of-way, or other land use or occupancy agreement, the Secretary—

(1) shall—

(A) recognize the longstanding authority of the States relating to evaluating, protecting, allocating, regulating, permitting, and adjudicating water use; and

(B) coordinate with the States to ensure that any rule, policy, directive, management plan, or similar Federal action is consistent with, and imposes no greater restriction or regulatory requirement, than applicable State water law; and

(2) shall not—

(A) adversely affect—

(i) the authority of a State in—

(I) permitting the beneficial use of water; or

(II) adjudicating water rights;

(ii) any definition established by a State with respect to the term “beneficial use”, “priority of water rights”, or “terms of use”; or

(iii) any other right or obligation of a State established under State law; or
(B) assert any connection between surface
and groundwater that is inconsistent with such
a connection recognized by State water laws.

SEC. 5. EFFECT.

(a) EXISTING AUTHORITY.—Except as provided in
section 3, nothing in this Act limits or expands any exist-
ing legally recognized authority of the Secretary to issue,
grant, or condition any permit, approval, license, lease, al-
lotment, easement, right-of-way, or other land use or occu-
pancy agreement on Federal land that is subject to the
jurisdiction of the Secretary.

(b) RECLAMATION CONTRACTS.—Nothing in this Act
in any way interferes with any existing or future Bureau
of Reclamation contract entered into pursuant to Federal
reclamation law (the Act of June 17, 1902 (32 Stat. 388,
chapter 1093), and Acts supplemental to and amendatory
of that Act).

(c) ENDANGERED SPECIES ACT.—Nothing in this Act
affects the implementation of the Endangered Species

(d) FEDERAL RESERVED WATER RIGHTS.—Nothing
in this Act limits or expands any existing reserved water
rights of the Federal Government on land administered
by the Secretary.
(e) **FEDERAL POWER ACT.**—Nothing in this Act limits or expands authorities pursuant to sections 4(e), 10(j), or 18 of the Federal Power Act (16 U.S.C. 797(e), 803(j), 811).

(f) **INDIAN WATER RIGHTS.**—Nothing in this Act limits or expands any existing reserved water right or treaty right of any federally recognized Indian tribe.

(g) **FEDERALLY HELD STATE WATER RIGHTS.**—Nothing in this Act limits the ability of the Secretary, through applicable State procedures, to acquire, use, enforce, or protect a State water right owned by the United States.
Tab S – Groundwater Recharge
Ground Water Recharge Projects in the Western United States

Economic Efficiency, Financial Feasibility and Legal/Institutional Issues
(Part II)

A Cooperative Project by:

Western States Water Council

U.S. Department of the Interior
Bureau of Reclamation

December 1998
ACKNOWLEDGMENTS

The Principal Investigator for this work for the Western States Water Council has been Anthony G. Willardson, Associate Director, and he is primarily responsible for its contents. Earlier in its development, significant assistance was provided by Brad Crowder, an economist, formerly with the U.S. Bureau of Reclamation and now with the U.S. Environmental Protection Agency.

This report was prepared with the Bureau of Reclamation’s financial assistance, under a cooperative agreement, and Reclamation also provided for its publication. Oversight, on behalf of Reclamation, was initially provided by Bruce Glenn and subsequently by Doug Yoder. Their patience and encouragement were appreciated. Other Reclamation officials were also helpful.

The assistance of many project sponsors, their staff, and state and local officials is also gratefully acknowledged, particularly members of the Western States Water Council and others that reviewed and provided comments on the draft report.

This report is the second and final part of an ongoing economic, financial, institutional and legal review of ground water recharge projects in the western United States. The first report was a general conceptual framework for evaluating recharge opportunities and state-by-state summary of legal and institutional issues, which was completed in 1990. The extension by the Congress of this demonstration program, delays in the completion of the authorized recharge projects, and personnel changes, necessarily prolonged completion of this report. Hopefully, the result will be useful as Reclamation prepares its final program report to the Congress.

Reclamation and the project sponsors are to be commended for their efforts, in bringing these projects to fruition. This demonstration program has in fact had a significant influence on the spread of essential information, the development of legislation and administrative rules at the state level, and the transfer of appropriate technology, which will encourage and facilitate future recharge projects, programs and activities. Ground water recharge is an important alternative resource management tool, and its use is growing as a means of addressing challenging western water problems.

Comments and questions may be addressed to Anthony G. Willardson, Associate Director, Western States Water Council, 942 East 7145 South, Suite A-201, Midvale, Utah 84047-1763; (801) 561-5300; fax (801) 255-9642; or e-mail: nswwc.marsha@state.ut.us.

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GROUND WATER RECHARGE PROJECTS
IN THE WESTERN UNITED STATES

ECONOMIC EFFICIENCY, FINANCIAL FEASIBILITY
AND
LEGAL/INSTITUTIONAL ISSUES
(Part II)

INTRODUCTION

In response to concerns over declining water levels and ground water resource development and management challenges, Congress passed the High Plains States Ground Water Demonstration Project Act of 1983. It authorized the U.S. Department of Interior’s Bureau of Reclamation (Reclamation), to undertake a westwide ground water recharge demonstration program. The stated objective of the program was “to move from the research mode on ground water recharge to the pilot demonstration phase, and to lay the groundwork for larger operational programs in the future.” From a list of 41 project proposals submitted for consideration, Interior selected 21 for funding. Only thirteen subsequently reached the construction phase, which is ongoing. Ten projects have been completed so far.

Another provision of the legislation authorizing the program specifically directed the Secretary of Interior to “contract with the various High Plains States and other Reclamation Act States to conduct a study to identify and evaluate alternative means by which the cost of ground water recharge projects could be allocated among the beneficiaries of the projects within the respective states and identify and evaluate the economic efficiency of and the legal authority for utilizing ground water recharge in water resource development projects.” In 1989, the Western States Water Council and Reclamation entered into a cooperative agreement to accomplish the required study.

The Council completed its initial report in October 1990. It outlined western states’ experience with ground water recharge, or some times the lack thereof, and presented a general conceptual framework from which to evaluate the feasibility of ground water recharge programs and projects, compared to other alternatives. While addressing a broad general audience, this report also presented important economic principles for the development of appropriate cost sharing and financing policies and a detailed state-by-state review of legal and institutional issues. However, given none of the authorized projects had yet been constructed or operated, this initial report did not discuss specific case studies.
EXECUTIVE SUMMARY

In order to apply the general conceptual framework and economic principles from the initial report and evaluate individual projects, the Western States Water Council and Reclamation entered into a new cooperative agreement to prepare a number of case studies that would utilize information provided by sponsors and Reclamation to evaluate project effectiveness, identify economic and institutional problems, and recommend alternative solutions to improve public policymaking with respect to future ground water recharge programs and projects. Unfortunately, continuing delays in project construction and operation, reassignment of Reclamation personnel, and a general lack of data have made an analysis of projected and actual project costs and benefits impractical. However, there remains a wealth of information from which to draw valuable lessons for future policymaking.

While ground water recharge has been practiced in the West for decades, interest and experience with ground water recharge projects and programs are growing, prompted to a substantial degree by Reclamation’s ground water recharge demonstration program. Recharge opportunities offer a practical and promising alternative for the storage of vast amounts of water, as traditional surface water storage facilities become harder and harder to get approved and constructed. Ground water recharge also offers other unique advantages. Overall, it is an important tool that can enhance opportunities for conjunctive use of water resources and serve as a means to maximize efficient and beneficial use. Ground water recharge should be considered as part of any comprehensive conjunctive water use and management program.

However, the effects of recharge activities are very site specific. Management decisions with respect to recharge opportunities should focus on the specific problem that needs to be addressed and the potential advantages of recharge projects and programs. Unfortunately, at this point in time, there is little data available to evaluate demonstration program recharge project costs and benefits. Detailed benefit-cost analyses have not been required by Reclamation or undertaken by the sponsors. Heretofore, project sponsors’ willingness and ability to pay (or cost share) has been the primary measure of economic and financial feasibility. Further, recharge project costs have generally been recovered through general tax revenues or water and sewer bills, not individual assessments based on differential benefits. Still, enough information is available to recognize and evaluate potential federal and non-federal costs and benefits and justify program participation. Moreover, as these demonstration projects are completed and operated, they will provide an information base necessary for a more careful economic evaluation of future proposals.

While multipurpose ground water recharge projects are important, augmenting water supplies through aggressive conjunctive use is the primary purpose for most recharge projects. Further, most successful ground water recharge projects are municipal water supply projects, given higher water values. Recharge projects may provide a particularly valuable alternative for meeting peak demands. Still, agricultural recharge projects can also be successful by
utilizing existing infrastructure and low cost water supplies. Like surface water storage projects, ground water recharge projects offer an opportunity to augment supplies by storing water during "wet" periods or years, for withdrawal and use during droughts or other temporary shortages. As new demands for water in the West continue to grow, so will the importance of recharge programs.

However, recharge opportunities are not unlimited. Finding water available for recharge is a primary constraint. The extended drought of the late 1980s and early 1990s had a serious impact on many demonstration projects. In some cases, facilities stood idle or operated at a fraction of their capacity due simply to the lack of an available surface water supply for recharge.

State and federal environmental laws are also very important constraints on recharge activities. Federal legislative constraints include the Clean Water Act, Endangered Species Act, National Environmental Policy Act, and Safe Drinking Water Act. Federal water quality monitoring requirements and costs are a major issue. Some project sponsors withdrew from the program when monitoring costs became so high as to outweigh the benefit of an 80% federal cost share. More stringent federal and/or state non-point source pollution controls and ground water protection requirements would affect future recharge projects. The demonstration program should help to identify necessary and nonessential monitoring measures in the future.

Local planning and zoning requirements and other ordinances may also affect project costs and economic, financial or political viability. For example, in Utah, the Salt Lake County Water Conservancy District’s recharge facilities are located in developed residential areas and landscaping requirements imposed by the county significantly increased project costs.

Of particular note, state water laws and administrative policies are changing to accommodate recharge activities. Reclamation’s demonstration program has helped expedite these changes, which will pave the way for more projects in the future. States’ primary concerns with respect to ground water recharge projects involve the potential waste or degradation of surface and ground waters. Given the numerous potential public costs and benefits, government involvement in recharge activities should continue. Appropriate government action should include regulatory oversight, and financial assistance where there is a particular public benefit.

Moreover, there are opportunities to use more water from federal Reclamation projects for recharge. This is an important finding that can help lead to greater operational efficiencies. While some federally developed waters are important to the operation of demonstration program projects, perhaps the best examples of recharge opportunities involve non-program projects. Some of these include Arizona’s Granite Reef Project on the Salt River below Roosevelt Dam, the Las Vegas Valley Water District’s recharge program using waters drawn from Lake Mead in Nevada, and the recharge of water from the federal Central Valley Project (and California State Water Project) in Kern County. Banking water through recharge activities offers water managers greater system flexibility and reliability.

As is the case in the Central Valley Project in California, future construction and operation of successful recharge projects will depend in large part on the ability of different agencies to
find common or compatible purposes and work out collaborative working arrangements. Future project financing and cost sharing arrangements will similarly depend on the value placed on different project benefits by different entities and their willingness to pay for those benefits. With respect to future cost sharing, again the primary purpose for most recharge projects is augmenting water supplies, which is mainly a private or local government responsibility. Federal fiscal challenges make it unlikely much new federal money will be available to promote or participate in private or local public recharge activities, unless a clear and overriding federal benefit can be demonstrated. States may be asked to help fill the void by providing assistance with financing, perhaps through existing state water project development programs.

Recharge opportunities may or may not be the best or least-cost solution to a particular problem. Evaluation of recharge projects is really no different than for any surface water project, recognizing there are different costs and benefits. A careful review of specific water problems, the advantages and disadvantages of a solution involving ground water recharge, and the availability of other alternatives will be the key to successful implementation of future projects and programs. However, there is also a need for greater public awareness of ground water management issues and recharge opportunities. Hopefully, Reclamation’s demonstration program has helped raise such public awareness.

**Recommendations**

Given observations gathered from a review of Reclamation’s demonstration program projects and non-program projects, the following recommendations are made for improving future ground water recharge programs. Cost sharing and financing agreements should be designed so that beneficiaries pay project costs, to the extent practical, in order to promote economic efficiency and equity. Federal, state or local participation in any ground water recharge project should be based on a careful assessment of the perceived problem and the potential public benefits from the project, just like any other water project. Public financing and cost sharing should be based on public benefits. Where there is a clear federal or state benefit (economic, environmental or otherwise), federal or state entities should participate and help pay for recharge projects.

While some projects may produce few if any federal or state benefits, to the extent that other private or public financing is not available for an otherwise worthy project, the federal or state government may still play an important and appropriate role by financing a project on a reimbursable basis, with appropriate cost recovery. Existing federal and state water project development programs may be appropriately utilized to encourage recharge. Moreover, federal and state funding for cooperative ground water resources research and data collection programs that focus on specific problems and solutions, with the potential for widespread public benefits, should continue.

Federal environmental oversight and regulatory requirements have substantially and perhaps unnecessarily increased the cost of some projects under Reclamation’s demonstration program. Excessive federal and state oversight and regulatory requirements should be avoided. Water quality monitoring and other environmental protection requirements should be reasonably based on the
potential risk to the public health and welfare, given existing and potential future uses of recharged waters. Further, sponsors should be involved in the development and implementation of regulatory requirements and inter-agency agreements regarding their specific project.

Each state should examine its own legal and institutional systems to assure that they adequately address ground water recharge. Many states may need to carefully consider amending their statutes to encourage appropriate recharge activities. Recharge should be recognized as a beneficial use of water, and a right to recover recharged water should be established and reasonably protected (along with the public interest and the rights of third parties).

Further, public education and public participation programs that explain recharge project costs and benefits and involve stakeholders in the decisionmaking process should be encouraged.

Hopefully, this report and these findings and recommendations will be helpful in evaluating many recharge opportunities and identifying appropriate intergovernmental roles and responsibilities.

For the full report: Click here.
**WSWC Groundwater Reports**

*Water Reuse and Artificial Groundwater Recharge in the Western United States*, a report prepared by the staff of the Western States Water Council, November 2002, 75 pages


*Western State Ground Water Management*, Norman K. Johnson, October 1986 update, 86 pages

*Western State Ground Water Management*, Anthony G. Willardson, Research Analyst, October 1982, 111 pages
Tab T – WSWC/NARF Symposium on the Settlement of Indian Water Rights Claims
### SYMPOSIUM ON THE SETTLEMENT OF INDIAN RESERVED WATER RIGHTS CLAIMS

#### DRAFT AGENDA

**MONDAY, AUGUST 7, 2017**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>5:00 – 7:00 pm</td>
<td>Early Registration</td>
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**TUESDAY, AUGUST 8, 2017**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>7:00 am</td>
<td>Registration</td>
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| 8:00 am | Western Water Law and Indian Reserved Water Rights: A Primer  
Professor Robert Anderson, University of Washington, School of Law |
| 9:00 am | **Introductory Remarks**  
John Echohawk, Executive Director, Native American Rights Fund  
Tony Willardson, Executive Director, Western States Water Council |
| 9:30 am | **Invocation** – by invitation                                                              |
| 9:30 am | **WELCOME**  
Montana Lieutenant Governor Mike Cooney  
John Tubbs, Director, Montana Department of Natural Resources |
| 10:00 am | **KEYNOTE ADDRESS**  
Alan Mikkelson, Acting Commissioner, Bureau of Reclamation |
| 10:30 am | Break                                                                                       |
| 10:45 am | **NEGOTIATION OF INDIAN WATER RIGHTS CLAIMS: THE BASICS**  
Gathering Background Information and the Role of Technicians in Negotiations  
MODERATOR –  
Mark Macarro, Chairman, Pechanga Band of Luiseño Indians  
Kansas Department of Agriculture (confirmed)  
Christopher Banet, Water Resources Manager, Southwest Region, Bureau of Indian Affairs |
| 12:30 pm | Lunch Break (on your own)                                                                     |
| 2:00 pm | **Identifying Parties and Issues and How Negotiations Bind Larger Groups**  
MODERATOR –  
Maria O’Brien, Attorney, Modrall Sperling  
San Luis Rey Indian Water Authority (confirmed)  
Duane Mecham, Department of Interior, Solicitor’s Office |
| 3:30 pm | Break                                                                                       |
4:00 pm  THE ROLE OF GROUNDWATER IN SETTLEMENTS

OVERVIEW AND MODERATOR – John Thorson, Federal Water Master, Lummi Decree
Faye Bergan, former Legal Counsel, Montana Reserved Water Rights Compact Commission
Stanley Pollack, Assistant Attorney General, Navajo Nation Department of Justice (invited)
Ruth Thayer, Bureau of Reclamation

5:30 pm  Adjourn

6:00 pm  Reception

WEDNESDAY, AUGUST 9, 2017

9:00 am  THE ADMINISTRATION’S SETTLEMENT POLICY

Presentation
Alan Mikkelson, Acting Commissioner, Bureau of Reclamation
Pam Williams, Secretary’s Indian Water Rights Office

10:30 am  Break

10:45  Response Panel

MODERATOR –
Norman Johnson, Assistant Attorney General, Utah Attorney General’s Office
Ryan Rusche, Tribal Attorney, Confederated Salish & Kootenai Tribes (invited)
Vanessa L. Ray-Hodge, Attorney, Sonosky, Chambers, Sachse, Mielke & Brownell

11:45 am  Administration Policy Q&A

12:00 pm  LUNCH (on your own)

1:30 pm  DESCRIPTION OF THE BLACKFEET NATION’S WATER RIGHTS SETTLEMENT

MODERATOR –
Gerald Lunak, Water Resources Director, Blackfeet Nation
Jeanne Whiteing, Attorney, Whiteing and Smith
Jay Weiner, Assistant Attorney General, Montana Office of the Attorney General
Fain Gildea, Secretary’s Indian Water Rights Office (invited)

3:00 pm  Break

3:15 pm  BLACKFEET NATION PRESENTATION

6:00 pm  DINNER
9:00 am  **SETTLEMENT LEGISLATION: GETTING BILLS THROUGH CONGRESS**

**Congressional Outlook for Indian Water Rights Settlements**

Mike Andrews, Majority Staff Director and Chief Counsel, Senate Indian Affairs
Ken Rooney, Minority Senior Counsel, Senate Indian Affairs
House Natural Resources Staff (invited)
Senate Energy and Natural Resources Staff (invited)
House Native American Caucus Staff (invited)

10:45 am  **Break**

11:00 am  **Response Panel**

**MODERATOR** –

Stephen Greetham, Chief General Counsel to the Chickasaw Nation Division of Commerce and as the Nation’s Special Counsel on Water and Natural Resources
Ryan Smith, Shareholder, Brownstein Hyatt Farber Schreck
Cynthia Chandley, General Counsel, CMOC International (invited)
Tracy Goodluck, Deputy Director, Secretary’s Indian Water Rights Office

12:15 am  **WRAP-UP/SUMMARY**
Steve Moore, Staff Attorney, Native American Rights Fund

12:45 pm  Adjourn
Tab U – Legislation and Litigation Update
This summary describes developments regarding notable legislation and litigation that pertain to WGA/WSWC policies or are otherwise of interest. It focuses primarily on developments that have taken place since the beginning of the 115th Congress. This update is current as of June 12, 2017, and the legislative portion is organized in reverse chronological order according to bill number. For some bills, this document uses modified versions of summaries prepared by the Congressional Research Service.

### NOTABLE LEGISLATION

<table>
<thead>
<tr>
<th>Bill Number(s)</th>
<th>Summary</th>
<th>Dates/Status</th>
<th>Sponsor(s)</th>
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<tr>
<td>Discussion Draft</td>
<td><strong>Issue: Reclamation Title Transfer</strong>&lt;br&gt;&lt;br&gt;<strong>Title: Reclamation Title Transfer Act.</strong> The bill would facilitate the transfer title of eligible Reclamation facilities—including dams and appurtenant works, water rights, infrastructure distribution and drainage works and associated lands—to qualified non-federal entities, such as State or local government, Indian tribe, municipal corporation, public agency or water district that held or holds a federal water service or repayment contract, water rights settlement contract or exchange contract for water from the eligible facility to be transferred. The Secretary of the Interior must determine that the entity has the capacity to manage the conveyed property for the same purposes under Reclamation Law.&lt;br&gt;&lt;br&gt;The bill would direct the Secretary of the Interior, without further authorization from Congress, to convey all right, title and interest by a written agreement. Not less than 30 days before any conveyance, the Secretary is to transmit to the House Natural Resources Committee and the Senate Energy and Natural Resources Committee notice including written consent from the qualifying entity and reasons for supporting the conveyance.&lt;br&gt;&lt;br&gt;The Secretary is to establish criteria for determining eligible facilities, including requirements that the transfer: (1) “will not have an unmitigated significant effect on the environment;” (2) it is “consistent with the Secretary’s responsibility to protect land and water resources held in trust for federally recognized Indian Tribes;” (3) ensures “compliance with international treaties and interstate compacts;” and (4) the qualifying entity provides “consideration for the assets to be conveyed, compensation to the United States worth the equivalent of the present value of any repayment obligation…or other income stream…from the assets to be transferred…..” No conveyance may adversely impact power rates or repayment obligations. Proposals are to be considered a categorical</td>
<td></td>
<td>Rep. Doug Lamborn (R-CO) proposed the draft legislation before the House Natural Resources Committee</td>
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exclusion process under the National Environmental Policy Act. The Secretary is to report annually as part of Interior’s budget submission on actions under the Act, including a list of conveyances.

Following conveyance, the property “shall not be considered to be a part of a Federal reclamation project.” The entity receiving the property “shall comply with all applicable Federal, State, and local laws and regulations in its operation of the conveyed property.” The U.S. “shall not be liable for damages of any kind arising out of any act, omission, or occurrence based on its prior ownership or operation of the conveyed property, except for damages caused by acts of negligence…”

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<tr>
<th>Discussion Draft</th>
<th><strong>Issue:</strong> Federal Conditional Permitting</th>
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<tr>
<td><strong>Title:</strong> Water Rights Protection Act. The bill would prohibit the Departments of the Interior and Agriculture from conditioning any permit, lease, or other use agreement on the transfer of any water right to the U.S. Tipton noted that federal attempts over several decades to manipulate the federal processes “to circumvent long-established state water law and hijack privately-held water rights sounded the alarm for all non-federal water users that rely on these water rights for their livelihood. The Water Rights Protection Act is commonsense legislation that provides certainty by upholding longstanding federal deference to state water law.”</td>
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<td>WGA provided testimony on the bill, stating that, “Nowhere is the need for substantive consultation between states and the federal government more critical than in the water arena.” Consultation requires each federal agency to have a clear and accountable process to provide each state with early, meaningful, and substantive input in the development of regulatory policies with federalism implications. That process involves communicating with the governor and any state and local representatives the governor designates.”</td>
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<td><strong>5/18/17:</strong> Subcommittee on Water, Power, and Oceans held hearings</td>
<td><strong>Representative Scott Tipton (R-CO) introduced a discussion draft of the Water Rights Protection Act at a hearing before the House Natural Resources Subcommittee on Water, Power, and Oceans on May 18.</strong></td>
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<th><strong>H.R. 2371</strong></th>
<th><strong>Issue:</strong> Hydropower</th>
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<td><strong>Title:</strong> Western Area Power Administration Transparency Act. The bill would require a pilot project to provide increased transparency on the WAPA’s costs, rates, and other financial operational dealings for utility ratepayers and taxpayers.</td>
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<td><strong>5/4/17:</strong> H.R. 2371 introduced in the House and referred to Committee on Natural Resources</td>
<td><strong>Representative Paul Gosar (R-AZ) introduced H.R. 2371 with 10 bipartisan co-sponsors from AZ, CA, and SD</strong></td>
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<th><strong>S. 1012</strong></th>
<th><strong>Issue:</strong> Drought</th>
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<td><strong>Title:</strong> New Mexico Drought Preparedness Act. The bill would provide for drought preparedness. Section 3 authorizes $30M for the Secretary of Interior to carry out a water acquisition program in basins in New Mexico through lease, purchase or contract from willing lessors or sellers, consistent with state law, to enhance: (1) streamflow for fish and wildlife (including endangered species), water quality, and river ecosystem restoration; and (2) to “enhance stewardship and conservation of working</td>
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<td><strong>5/2/17:</strong> S. 1012 introduced in the Senate, referred to Committee on Energy and Natural Resources</td>
<td><strong>Senator Tom Udall (D-NM) introduced S. 1012, with co-sponsor Martin Heinrich (D-NM)</strong></td>
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land, water, and watersheds in the Basins....” The Secretary may provide funds to a federally established nonprofit entity with particular expertise in western water transactions.

Section 4 authorizes $18M so the Secretary of the Interior may, in cooperation with water districts and Pueblos, provide funding and technical assistance for the installation of metering and measurement devices and the construction of check structures on irrigation diversions, canals, laterals, ditches and drains intended to ensure efficient use, reduce actual consumptive use, or not increase the use of water, and improve the measurement and allocation of acquired water. Further, the Secretary “shall” provide for the development of a comprehensive plan for the San Acacia and Isleta reaches to balance river maintenance, water availability, use and deliver, as well as ecosystem benefits.

Section 5 addresses Middle Rio Grande peak flow restoration and directs the Secretary of the Army to continue existing temporary deviations in operations of Cochoiti Lake and Jemez Canyon Dam, and evaluate the benefits with a report to Congress, while a permanent reauthorization of the reservoirs is pursued. The goal is to restore natural river processes, including a Spring peak flow, as a means of increasing the spawning and recruitment of the endangered Rio Grande silvery minnow and overbanking flows necessary to maintain a healthy bosque and Southwestern willow flycatcher habitat, as well as channel capacity, and to increase irrigation and municipal water projects operational flexibility. The Secretary is to first obtain approval for any deviation from the Cochiti and Santa Ana Pueblos and the Rio Grande Compact Commission.

Section 6 directs the Secretary of the Army to enter into an arrangement with the National Academy of Sciences to carry out a study on water and reservoir management and operation issues for Rio Grande reservoirs, including: (1) an evaluation of reservoir authorizations and legal requirements; (2) physical-hydrologic understanding; (3) potential constraints in light of climate change projections; (4) opportunities to optimize storage; (5) identified water use, supply and accounting impacts; (6) operational considerations; and (7) recommendations for future management. The report merits “due deference.”

Section 7 would authorize emergency financial assistance under the Reclamation States Emergency Drought Relief Act of 1991, Title XII of the Food Security Act of 1985, and other federal laws to assist New Mexico and other western states with eligible water projects to assist in addressing “drought-related impacts to water supplies or any other immediate water-related crisis or conflict.” Financial assistance would also be available to organizations and entities, including tribal governments, engaged in collaborative processes for environmental restoration.

Eligible water projects include: (1) installing pumps, temporary barriers or gates for water diversion and fish protection; (2) drought-relief ground-water wells for Indian tribes and wildlife refuges; (3) acquisition of water from willing sellers; (4) agricultural and urban conservation projects with multiple benefits; (5) emergency temporary water exchanges; (6) planting cover crops; (7) emergency pumping projects; (8) reducing demand consistent with a comprehensive program for environmental restoration.
and settlement of water rights claims; (9) innovative on-farm water conservation; (10) protect, restore
or enhance fish and wildlife habitat or other environmental improvements; (11) promoting
groundwater recharge and reducing groundwater depletion; (12) technical assistance for irrigation
improvement practices; (13) brackish water development and aquifer storage and recovery; (14) lining
ditches and canals; (15) municipal water supply planning assistance, including hydrological
forecasting, identification of alternative water supplies, and guidance on potential water transfer
partners; and (16) any other “assistance the Secretary determines to be necessary to increase available
water supplies, maintain the health of river ecosystems, or mitigate drought impacts.”

Section 8 reauthorizes the Secure Water Act (Section 9504 of the Omnibus Public Land Management
Act of 2009) and provides that the Commissioner of the Bureau of Reclamation “may” waive cost-
sharing requirement to address emergency drought situations and prioritize projects that “expeditiously
yield multiple water supply benefits…, prevent any other immediate water-related crisis or conflict,”
and demonstrate “innovative conservation tools or methods that balance instream and out-of-stream
water supply needs, including water conservation and water marketing.” It also raised the authorized
ceiling by $100M. Section 9 authorizes another $100M under the Reclamation States Emergency
Drought Relief Act. Section 10 extends the Rio Grande Pueblo Irrigation Infrastructure
Reauthorization through 2014, and authorizes another $6M.

The Secretary of Agriculture, under Section 11, may allocate financial assistance consistent with the
Food Security Act of 1985 to establish “special conservation initiatives at the local, state or regional
level to assist producers in implementing eligible activities on agricultural land in the western States”
for: (1) mitigating the effects of drought on agriculture and the environment; (2) improving water
quality and quantity, including reducing groundwater depletion; (3) restoring, enhancing, and
preserving fish and wildlife habitat; and (4) promoting innovative and collaborative conservation tools
and approaches.

Section 12 expands authority under the Conservation Reserve Program to cover “water quantity, or
habitat impacts related to agricultural production activities…,” as well as the Special Conservation
Reserve Enhancement Program “including improving water conservation and drought mitigation.”

Of particular note, Section 13 declares: “An action taken by any of the Secretaries or other entity under
this Act or an amendment made by this Act shall comply with applicable State laws….” It further
declares: “Nothing in this Act or an amendment made by this Act affects, is intended to affect, or
interferes with a law of the State relating to the control, appropriation, use, or distribution of water, or
any vested right acquired under the law.”

S. 728/H.R. 1731/S. 738

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<tr>
<th><strong>Issue:</strong> Abandoned Mines</th>
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<tr>
<td><strong>Title:</strong> Revitalizing the Economy of Coal Communities by Leveraging Local Activities and Investing More (RECLAIM) Act. The bill would amend the Surface Mining Control and Reclamation Act of 1977 to provide funds to States and Indian tribes for the purpose of promoting water conservation, fish and wildlife habitat restoration, and drought mitigation.</td>
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3/27/17: S. 728 and S. 738 introduced in the Senate, referred to the Energy and Natural Resources Committee. H.R. 1731

Senator Mitch McConnell (R-KY) introduced S. 728 with co-sponsor Senator...
economic revitalization, diversification, and development in economically distressed communities through the reclamation and restoration of land and water resources adversely affected by coal mining carried out before August 3, 1977. The bill would authorized the appropriation of $200M each year from FY2018-FY2022, for projects reasonably likely to promote economic and community development in the area.

S. 728 and H.R. 1731 are identical bills, and the Democrat version, S.738, differs in several policy details, but is identical to a bill introduced by Rep. Harold Rogers (R-KY) in the 114th Congress (H.R. 4456). “All funding under the Democrats' proposal would be based on how much coal a state mined in 1977, as states with more coal mining then are likely to have more eligible sites. Under the GOP bill, 80 percent of funding would be based on that calculation, with 20 percent distributed based on how much a state or tribe paid in reclamation fees between 2012 and 2016. Priority 1 and 2 sites — those posing a threat to public health, safety and property — would be eligible. While preferred, only Priority 3 sites — environmental restoration — would have to prove their economic impact. Eligible communities would qualify based on local employment data, per-capita income and other economic indicators as well a demonstrated reliance historically on coal. The Republican bill also adds a planning requirement that public meetings should be held on project proposals. Republicans also tacked on a provision that would move the headquarters of the Appalachian Regional Commission out of Washington, D.C.” E&E News, Dylan Brown, 4/3/17

S.714

**Issue: Water Resource Management**

No Title. A bill to amend Public Law 103-434 to authorize Phase III of the Yakima River Basin Water Basin Water Enhancement Project for the purposes of improving water management in the Yakima River basin

Senator Cantwell’s press release states that the reintroduced bill “addresses water security needs in the Yakima River Basin, which is one of the Columbia River Basin’s most significant tributaries, through an unprecedented, collaborative approach that has become a national model for water management. The bill authorizes key elements of a plan to meet the long-term water needs of both humans and nature through a combination of conservation, restoration, fish recovery and drought relief measures.”

*This bill is similar to a bill Senator Cantwell introduced June 2015 (S. 1694) and passed as part of the bipartisan energy bill, the North American Energy Security and Infrastructure Act (S. 2012), but differences between the House and Senate were never resolved in 2016.*

S. 692/H.R. 1971/H.R. 2355

**Issue: CWA Technical Assistance**

**Title: Water Infrastructure Flexibility Act** The bill would provide technical assistance, outreach and training for compliance the CWA and Safe Drinking Water Act, including information about financial assistance and regulatory flexibility, opportunities to develop integrated plans, and promotion of green

introduced in the House, referred to Committees on Natural Resource and Transportation and Infrastructure.

4/5/17: House Natural Resources Subcommittee on Energy and Mineral Resources held hearings on H.R. 1731

Shelley Moore (R-WV)

Senator Joe Manchin (D-WV) introduced S. 738, with 4 Democrat co-sponsors from OH, PA, and VA

3/23/17: S. 714 introduced in the Senate, referred to Committee on Energy and Natural Resources

3/30/17: ENR reported S. 714 favorably without amendment

Senator Maria Cantwell (D-WA) introduced S. 714 with co-sponsor Senator Patty Murray (D-WA)

3/21/17: S. 692 introduced in the Senate, referred to Committee on Environment and Public Works

Senator Deb Fischer (R-NE) introduced S. 692, with 8 bipartisan co-sponsors from AR,
infrastructure on a local and regional level. It also requires the revision of the financial capability
guidance, “Combined Sewer Overflows—Guidance for Financial Capability Assessment and Schedule
Development” (February 1997) and “Financial Capability Assessment Framework” (November 2014).

The bills S. 692 and H.R. 1971 are identical. H.R. 2355 is almost identical, but drops the provision that
priority should be given to municipalities that demonstrate affordability concerns, and adds a provision
about the guidance, to consider the degree to which customer assistance programs address the rates of
low-income users.

See also below, H.R. 465, Water Quality Improvement Act

| Bill | Issue | Title: Clean Water for Rural Communities Act. | The bill’s purpose is to ensure a safe and adequate municipal, rural, and industrial water supply for various counties in Montana and North Dakota that are part of the Dry-Redwater Regional Water Authority System and the Musselshell-Judith Rural Water System, authorizing a cooperative agreement to provide federal cost-share assistance for the planning, design, and construction of the water systems, according to Reclamation feasibility studies and reports. | 3/28/17: Subcommittee on Fisheries, Water, and Wildlife held hearings on S. 692 (S. Hrg 115-12) 4/5/17: EPW ordered S. 692 reported with an amendment (report No. 115-87, with errata sheet) 4/6/17: H.R. 1971 introduced in the House, referred to Transportation and Infrastructure and Energy and Commerce 5/4/17: H.R. 2355 introduced in the House, referred to T&I and E&C 5/18/17: House T&I held a hearing on integrated infrastructure, including testimony on these bills. 5/25/17: S. 692 placed on legislative calendar | MD, MI, MO, NJ, OH, and OK | Rep. Lloyd Smucker (R-PA) introduces H.R. 1971, with co-sponsor Rep. Robert Latta (R-OH) |
| S. 677/H.R. 1654 | Issue: Surface Water Storage Projects | Title: Water Supply Permitting Coordination Act. | The bill would authorize the Secretary of the Interior to coordinate Federal and State permitting processes related to the construction of new surface water storage projects on lands under the jurisdiction of the Secretary of the Interior and the Secretary of Agriculture and to designate the Bureau of Reclamation as the lead agency for permit processing. In general, Reclamation would serve as a point of contact for project applicants, State agencies, Indian tribes and others. It would coordinate preparation of unified environmental documentation and coordinate federal agency reviews, beginning with a preapplication meeting to explain applicable | 3/21/17: S. 677 introduced in the Senate, referred to the Committee on Energy and Natural Resources | Senator Steve Daines (R-MT) introduced S. 685, with co-sponsor Jon Tester (D-MT) |
| S. 685 | Issue: Rural Infrastructure | | | 3/21/17: S. 685 introduced in the Senate, referred to the Committee on Energy and Natural Resources | Senator John Barasso (R-WY) introduced S. 677, with 5 Republican co-sponsors from AZ, ID, NV, and WY | Rep. Tom McClintock (R-CA) introduced H.R. 1654 with 8 Republican co-
processes, data requirements, and submission necessary to complete required federal agency reviews. Reclamation would establish a schedule and timeframe for agency action, and consult with the cooperating agencies to set deadlines and a project schedule. Reclamation would also prepare a unified environmental review document, maintain a consolidated administrative record, ensure that all project data is submitted and maintained in generally accessible electronic format (to the extent practicable) and make such data available to cooperating agencies, the project applicant and the public, as well as appoint a project manager. Cooperating agency responsibilities are also detailed.

<table>
<thead>
<tr>
<th>Issue: Indian Water Rights</th>
<th>4/27/17: House NR amended H.R. 1654, ordered reported by a vote of 24-16</th>
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<tbody>
<tr>
<td><strong>Title:</strong> Navajo Utah Water Rights Settlement Act. The bill includes a water settlement fund to be used for the construction of drinking water infrastructure, domestic and municipal water supply, and the financing of distribution infrastructure on the Navajo Nation in exchange for limiting the legal exposure and litigation expenses of the federal government and the State of Utah. The agreement quantifies the Navajo Nation’s right to use 81,500 acre-feet of water annually, from water sources on or adjacent to the Navajo Reservation within Utah’s boundaries. The federal contribution would be authorized up to $198.3M, which includes $11.1M to a trust account to assist the Navajo Nation with the expenses of operating, maintaining, and replacing the water development projects, and $1M for programmatic costs, including the preparation of a hydrographic survey of historic and existing water uses on the Reservation. The bill includes a provision that the total federal obligation would increase or decrease based on construction costs from the June 2014 cost indices. Utah would contribute an additional $8M for planning, design and construction of water development projects, with payments spread over three years.</td>
<td>3/15/17: S. 664 introduced in the Senate and referred to Committee on Indian Affairs</td>
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<thead>
<tr>
<th>Issue: CWA Technical Assistance</th>
<th>Senator Orrin Hatch (R-UT) introduced S. 664</th>
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<td><strong>Title:</strong> Small and Rural Community Clean Water Technical Assistance Act. The bill would amend the CWA (33 USC 1281, 1383, 1301(d)) to provide technical assistance for qualified nonprofit small treatment works serving less than 10,000 people. The bill would authorize $15M to be appropriated each year FY2018-FY2022. The EPA Administrator would be authorized to use the funds to provide grants or cooperative agreements to qualified nonprofit small treatment works technical assistance providers to provide to owners and operators of small treatment works onsite technical assistance, circuit rider technical assistance programs, multi-State, regional technical assistance programs, and onsite and regional training, to assist the small treatment works in achieving compliance with this Act or obtaining financing under this Act for eligible projects. The bill was amended to add medium treatment works serving between 10,001 and 75,000, with authorization to appropriate $10M each year for FY2018-FY2022.</td>
<td>3/22/17: H.R. 1673 introduced in the House, referred to several committees</td>
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<tr>
<th>Issue: State Revolving Funds</th>
<th>Rep. John Conyers (D-MI) introduced H.R. 1673, with 30 Democrat co-sponsors,</th>
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<td><strong>Title:</strong> Water Affordability, Transparency, Equity, and Reliability (WATER) Act. The bill would amend the Internal Revenue Code relating to the establishment of trust funds to create a Water</td>
<td>3/2/17: S. 518 introduced in the Senate, referred to the Environment and Public Works Committee 3/28/17: Subcommittee on Fisheries, Water, and Wildlife held hearings (S. Hrg. 115-12) 4/5/17: EPW ordered S. 518 reported with an amendment (No. 115-71) 5/17/17: S. 518 placed on legislative calendar</td>
</tr>
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</table>
Affordability, Transparency, Equity, and Reliability Trust Fund in the Treasury. Funds would be limited to $34.9M in any fiscal year, and would be allocated between the Clean Water and Safe Drinking Water programs, as well as household well water systems under the USDA Consolidated Farm and Rural Development Act.

Rep. Conyers said the bill “funds a massive investment in our public water utilities and creates thousands of jobs in every community…More than 11,200 community water systems have lead service lines, some of which provide water to schools. The EPA estimates roughly $697B is needed to upgrade our drinking water and wastewater systems over the next 20 years. Without adequate federal support, communities often have to compensate for the funding gap by raising service rates, which some households cannot afford, leading some…to be cut off from water and sewer service…The WATER Act would allow states to issue grants to replace lead service lines and would establish a School Drinking Water Improvement Grant program to provide funding to public primary and secondary schools that wish to test, repair, replace or install the infrastructure necessary for drinking water foundations or bottle filling stations. Additionally, the WATER Act creates a new grant program to help households install, repair, replace and upgrade septic tanks and drainage fields. The legislation also amends the existing Tribal grant program to increase the amount of assistance from 1.5 percent of Drinking Water SRF funds to 3 percent.”

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<tr>
<th>Bill</th>
<th>Issue: State Revolving Funds</th>
<th>Title: Drinking Water Affordability Act. The bill would amend the Safe Drinking Water Act (42 USC 300g and 300j)) to authorize activities FY2018-FY2024, to modify loan terms, and to exempt public water systems from redundant federal cross-cutting requirements if States impose an equally stringent requirement. The bill also requires reports from EPA on best practices for streamlining application processes and efficient administration of SRFs, and a GAO report on a study of cost-effective and economically feasible rehabilitation or replacement of drinking water infrastructure, with an assessment of barriers that preclude communities from using such materials and technologies.</th>
<th>3/21/17: H.R. 1653 introduced in the House, referred to Committee on Energy and Commerce</th>
<th>Rep. Robert Latta (R-OH) introduced H.R. 1653 with co-sponsor Rep. David McKinley (R-WV)</th>
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<td>H.R. 1653</td>
<td>Issue: State Revolving Funds</td>
<td>Title: Water Infrastructure Trust Fund Act. The bill would amend the Internal Revenue Code relating to the establishment of trust funds to create a Water Infrastructure Trust Fund in the Treasury, with funds available without further appropriation for EPA capitalization grants under the CWA (33 USC 1377) and the Safe Drinking Water Act (42 USC 300j-12)</td>
<td>3/21/17: H.R. 1647 introduced in the House, referred to several committees</td>
<td>Rep. Earl Blumenauer (D-OR) introduced H.R. 1647 with co-sponsor Rep. John Duncan (R-TN) and Daniel Lipinski (D-IL)</td>
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<td>H.R. 1647</td>
<td>Issue: Water Infrastructure Resiliency</td>
<td>Title: Secure and Resilient Water Systems Act. The bill would require community drinking water systems to identify their source water and distribution system vulnerabilities to climate change, drought, extreme weather; source water degradation due to threats from industrial activity, pipelines and storage tanks, contaminated sites, agricultural activity, and oil and gas exploration; and threats from intentional acts, including intentional contamination, sabotage, and theft of chemicals. These threats are magnified by climate change. To address these vulnerabilities, this legislation would require community water systems to (1) conduct vulnerability assessments of their systems, (2) develop and implement resilience plans, and (3) report on the implementation of the plans.</td>
<td>3/16/17: H.R. 1579 introduced in the House, referred to the Committee on Energy and Commerce</td>
<td>Rep. Scott Peters (D-CA) introduced H.R. 1579 with co-sponsors Frank Pallone (D-NJ) and Paul Tonko (D-NY)</td>
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<td>Bill</td>
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<td>H.R. 1261</td>
<td>Issue: WOTUS/Navigable Waters</td>
<td><strong>Title: Federal Regulatory Certainty for Water Act.</strong> The bill amends the CWA (33 USC 1362) to define “navigable waters” as navigable-in-fact, or permanently or continuously flowing bodies of water (streams, rivers, lakes, oceans) connected to navigable-in-fact waters. It explicitly excludes intermittent or ephemeral flows, wetlands, playa lakes, prairie potholes, wet meadows, wet prairies, and vernal pools unless they are adjacent to navigable waters with a continuous surface water connection.</td>
<td>2/28/17: H.R. 1261 introduced in the House, referred to the Committee on Transportation and Infrastructure</td>
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<td>S. 451/H.R. 1663</td>
<td>Issue: Water Infrastructure Funding and Research</td>
<td><strong>Title: Water Resources Research Amendments Act.</strong> This bill amends the Water Resources Research Act (42 USC 10301) to: (1) declare that additional research is required into increasing the effectiveness and efficiency of new and existing treatment works through alternative approaches, including non-structural alternatives, decentralized approaches, energy use efficiency, water use efficiency, and actions to extract energy from wastewater; (2) require each water resources research and technology institute to arrange for research that fosters the exploration of new ideas that expand understanding of water resources (currently, of water-related phenomena); (3) direct the Department of the Interior to report to specified congressional committees annually on each institute's compliance with matching fund requirements and provisions permitting the use of funds only to reimburse direct cost expenditures incurred for the conduct of the water resources research program; and (4) authorize appropriations for such institutes through FY2022.</td>
<td>2/27/17: S. 451 introduced in the Senate, referred to the Committee on Environment and Public Works</td>
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<td>H.J. Res. 77</td>
<td>Issue: Corps Water Control Manuals</td>
<td><strong>No Title.</strong> Provides congressional disapproval under chapter 8 of title 5, United States Code, of the rule submitted by the Army Corps of Engineers in December 2016 relating to the Apalachicola-Chattahoochee-Flint River Basin Water Control Master Manual, impacting water resources in Alabama, Florida, and Georgia.</td>
<td>2/16/17: H.J. Res. 77 introduced in the House, referred to the Transportation and Infrastructure Committee</td>
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<td>H.R. 1179</td>
<td>Issue: EPA Veto Authority, Environmental Lawsuits</td>
<td><strong>Title: Discouraging Frivolous Lawsuits Act.</strong> The bill would amend the Clean Water Act to streamline the permitting process for infrastructure projects, and hold special interest groups accountable for filing frivolous lawsuits that unnecessarily delay infrastructure projects at increased tax-payer expense. The bill would remove the EPA’s veto authority over Corps-issued permits on wetlands, reducing the uncertainty applicants experience when filing permits.</td>
<td>2/16/17: H.R. 1179 introduced in the House, referred to the Committee on Transportation and Infrastructure</td>
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| Bill Number | Issue: Clean Water Act – WOTUS Rule  
**Title: Stop WOTUS Act.** The bill would repeal the Waters of the United States (WOTUS) Rule, issued by the EPA and Corps under the Clean Water Act, which defines the scope of waters protected and regulated.  
Rep. Rick Allen provided the following background: “The rule would significantly broaden the definition to extend the federal government’s regulatory authority over nearly all bodies of water, including creeks, streams, and groundwater as well as drainage ditches, irrigation pipes and farmland ponds. The Administration failed to properly consult state and local governments in developing its rule, which undermines the federal-state partnership Congress intended to establish under the CWA.” | 2/16/17: H.R. 1105 introduced in the House, referred to the Committee on Transportation and Infrastructure | Rep. Rick Allen (R-GA) introduced H.R. 1105, with co-sponsor Blake Farenthold (R-TX) |
|---|---|---|---|
| H.R. 1071 | Issue: Safe Drinking Water Act  
**Title: Assistance, Quality, and Affordability (AQUA) Act.** To amend the Safe Drinking Water Act, to increase assistance for States, water systems, and disadvantaged communities; to encourage good financial and environmental management of water systems; to strengthen the Environmental Protection Agency's ability to enforce the requirements of the Act. The bill would increase federal investments in U.S. water systems to remove old lead pipes, and improve long-term resiliency and sustainability. It would authorize significantly higher funding levels for the Drinking Water State Revolving Fund for states to meet their most pressing local water system needs. | 2/15/17: H.R. 1071 introduced in the House, referred to the Committee on Energy and Commerce | Rep. Paul Tonko (D-NY) introduced H.R. 1071, with 19 Democratic co-sponsors, including from CA, CO, OR, and TX |
| H.R. 1068 | Issue: Safe Drinking Water Act  
**Title: Safe Drinking Water Act Amendments.** To enable needed drinking water standards, reduce lead in drinking water, plan for and address threats from climate change, terrorism, and source water contamination, invest in drinking water infrastructure, increase compliance with drinking water standards, foster greater community right to know about drinking water quality, and promote technological solutions for drinking water challenges. | 2/15/17: H.R. 1068 introduced in the House and referred to the Committee on Energy and Commerce | Rep. Frank Pallone (D-NJ) introduced H.R. 1068 with 10 Democratic co-sponsors, including from CA, CO, and OR. |
| S. 398 | Issue: Federal Allocation of Interstate Water Resources  
**No Title.** Directs the Secretary of the Army to modify the operation of certain water development projects in the Apalachicola, Chattahoochee, Flint (ACF) Rivers. The intent is to provide freshwater flows sufficient for the physical, chemical, biological and overall ecological integrity of the “components, functions, and natural processes” required for a thriving river system, floodplain and Apalachicola Bay – and thereby protect commercial and recreational fishing and shellfish. The bill is in response to a U.S. Army Corps of Engineers’ (Corps) environmental impact statement (EIS) and updated ACF water control manual that would provide for nearly all of Atlanta’s water needs through 2050, as well as an anticipated Supreme Court special master’s report that is expected to also favor Georgia.  
The bill would support and re-establish “thriving and diverse fish, wildlife and plant populations with species composition, diversity, adaptability, and functional organization similar to those found in the... | 2/15/17: S. 398 introduced in the Senate, referred to the Committee on Environment and Public Works | Senator Bill Nelson (D-FL) introduced S. 398 |
ecosystems prior to the construction of the [ACF] projects.” It is intended to restore and recover endangered, threatened and/or at risk species and prevent significantly harmful adverse impacts to the ecosystems. The bill directs the Corps to enter into an arrangement with the National Oceanic and Atmospheric Administration (NOAA) to study and evaluate existing studies, assessments and data related to freshwater flows, and recommend how to maintain such flows.

It would prohibit the Corps from issuing a final water control manual based on its 2016 EIS, and calls for development of a revised manual with operational modifications to carry out the purposes of the bill, including “to the maximum extent practicable, while providing system-wide balance in conservation storage through the maintenance of water levels in the same action zone for each of the [ACF] project reservoirs.” Further, the bill calls for an independent National Academy of Sciences peer review of each revised water control manual. Before a manual is issued, the Corps is to obtain written approval from NOAA, EPA, the FWS, and the U.S. Geological Survey.

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<th>H.R. 953</th>
<th><strong>Issue: FIFRA</strong></th>
<th>2/7/17: H.R. 953 introduced in the House, referred to Committees on Transportation and Infrastructure, and Agriculture 2/16/17: House Agriculture Committee held a mark-up session and ordered H.R. 953 reported. (H. Rept. 115-31) 5/24/17: H.R. 953 passed the House 256-165 5/25/17: H.R. 953 received in the Senate, referred to the Committee on Environment and Public Works 2/16/17: Rep. Bob Gibbs (R-OH) introduced H.R. 953, with 43 Republican and 4 Democrat co-sponsors</th>
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<td><strong>Title: Reducing Regulatory Burdens Act.</strong> To amend the Federal Insecticide, Fungicide, and Rodenticide Act and the Federal Water Pollution Control Act to clarify Congressional intent regarding the regulation of the use of pesticides in or near navigable waters, exempting certain pesticides from NPDES permitting.</td>
<td>The bill would overturn <em>National Cotton Council v. EPA</em> (6th Cir. 2009) Related to Position #359, allowed to sunset at the St. George, Utah meeting September 2016. See also S. 340.</td>
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<td><strong>Title: Buy America for Drinking Water Extension Act (H.R. 939).</strong> To amend the Safe Drinking Water Act to extend and expand the provision requiring the use of iron and steel products that are produced in the United States in projects funded through a State drinking water treatment revolving loan fund.</td>
<td>Title: Buy American Improvement Act (H.R. 904). Would amend 41 USC 83 to increase the requirement for American-made content and strengthen the waiver provisions. Section 208 includes</td>
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<tr>
<td><strong>Title: Buy America for Drinking Water Extension Act (H.R. 939).</strong> To amend the Safe Drinking Water Act to extend and expand the provision requiring the use of iron and steel products that are produced in the United States in projects funded through a State drinking water treatment revolving loan fund.</td>
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<td><strong>Issue:</strong> Water Quality</td>
<td><strong>Issue:</strong> Water Infrastructure Projects</td>
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<td><strong>Title:</strong> Sensible Environmental Protection Act. A bill to clarify Congressional intent regarding the regulation of the use of pesticides in or near navigable waters. The bill would amend FIFRA 7 USC 136a(f) and the CWA 33 USC 1342 to clarify which pesticides are exempt from NPDES discharge permits. It would require EPA and USDA to report to Congress on coordination between the agencies and the effectiveness of regulations regarding water quality and human health. Related to Position #359, allowed to sunset at the St. George, Utah meeting September 2016. See also H.R. 953.</td>
<td><strong>Title:</strong> Bureau of Reclamation Water Project Streamlining Act. To facilitate and streamline the Bureau of Reclamation process for creating or expanding water storage, rural water supply, and water recycling projects under Reclamation law. Sets forth provisions governing feasibility studies for surface water storage projects initiated by the Department of the Interior under the Reclamation Act of 1902 (project studies). Requires a project study initiated after enactment of this Act to: (1) result in the completion of a final feasibility report within three years; (2) have a maximum federal cost of $3 million; and (3) ensure that personnel from the local project area, region, and headquarters levels of the Bureau of Reclamation concurrently conduct the required review, while eliminating repetitive discussions of the same environmental issues. The bill sets forth factors for extending such timeline for complex projects, and sets requirements for Interior to complete reviews for project studies, set meetings, provide information and expedite project study completion, as well as other responsibilities. It also sets requirements for project NEPA compliance, sets forth responsibilities of the lead agency, and provides for a reduction of funds for such an agency that fails to render such a decision by a specified deadline. Directs Interior to: (1) survey the use by the Bureau of categorical exclusions in projects since 2005 and propose a new categorical exclusion for a category of activities if merited, and (2) establish a program to measure and report on progress made toward improving and expediting the planning and environmental review process. Requires Interior to develop and submit an annual Report to Congress on Future Water Project Development that: (1) identifies the project reports, proposed project studies, and proposed modifications to authorized projects and project studies that are related to the missions and authorities of the Bureau of Reclamation, that require specific congressional authorization, that have not been congressionally authorized, that have not been included in any previous annual report, and that, if authorized, could be carried out by the Bureau of Reclamation; (2) provides a description the benefits to the protection of human life and property, improvements to domestic irrigated water and power supplies, the national economy, the environment, or the national security interests; and (3) for</td>
<td>2/7/17: S. 340 introduced in the Senate, referred to the Committee on Environment and Public Works</td>
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<td>H.R. 689/S.285</td>
<td>Access to irrigation headgate on federal land for maintenance</td>
<td>Bolts Ditch Access and Use Act. Seeks to resolve maintenance issues for a ditch headgate located on wilderness land in Colorado’s White River National Forest. The parties have a stipulated settlement agreement on the point of diversion for the Bolts Ditch, removing it from the wilderness area absent other Congressional or Presidential authorization. S. 2524 would direct the USDA to issue a special use permit authorizing non-motorized access for routine maintenance on the Bolts Ditch headgate, but does not authorize new construction or reconstruction.</td>
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<td>S. 199/H.R. 648</td>
<td>Reclamation/Infrastructure</td>
<td>Authorizes the Department of the Interior, in cooperation with the state of Wyoming, to amend the Definite Plan Report for the Seedskadee Project to provide for the study, design, planning, and construction activities that will enable the use of all active storage capacity of Fontenelle Dam and Reservoir, including the placement of sufficient riprap on the upstream face of the Dam to allow such storage capacity to be used for authorized Project purposes.</td>
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<td>H.R. 660/S.216</td>
<td>Reclamation Aging Infrastructure</td>
<td>Bureau of Reclamation Transparency Act.</td>
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<td>H.R. 637</td>
<td>EPA Climate Change Regulations</td>
<td>Stopping EPA Overreach Act</td>
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<tr>
<td>S. 181</td>
<td>Water Infrastructure</td>
<td>No Title</td>
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commodity construction materials used in the project are produced in the United States. With written justification, exceptions would be made where the relevant materials are not produced in sufficient and reasonably available quantities, or purchasing the materials in the U.S. would increase the costs of the overall project by more than 25%.

*See WSWC Position #364.*

<table>
<thead>
<tr>
<th>Bill</th>
<th>Issue</th>
<th>Title</th>
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<th>Date</th>
<th>Sponsor Information</th>
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</thead>
<tbody>
<tr>
<td>H.R. 448</td>
<td>Water Conservation</td>
<td><strong>Water Conservation Rebate Tax Parity Act.</strong> To amend the Internal Revenue Code to expand the tax exclusion for certain conservation subsidies to include subsidies for water conservation or efficiency measures and storm water management measures.</td>
<td>1/11/17: H.R. 448 introduced in the House, referred to the Committee on Ways and Means</td>
<td>Rep. Jared Huffman (D-CA) introduced H.R. 448, with 33 Democrat and 4 Republican co-sponsors, including from AZ, CA, CO, NV, and TX</td>
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<td>H.R. 438</td>
<td>Salton Sea/Water Quality</td>
<td><strong>California New River Restoration Act.</strong> The bill directs EPA to establish a restoration program to build on, and help coordinate funding for, restoration and protection efforts relating to the New River, which was born out of the Colorado River’s occasional flows into the Salton Sink and the erosion of the New River channel and has significant water pollution problems from agricultural runoff, raw sewage, pesticides, and waste discharges from sources in Mexico and the Imperial Valley. The EPA program would implement projects, plans, and initiatives for the New River supported by the California-Mexico Border Relations Council, and work in consultation with applicable federal, state, regional, and international management entities. EPA would also provide grants and technical assistance to the state and various other entities to carry out the purposes of the program, with the federal cost share not to exceed 55%, and non-federal costs that may be provided by in-kind contributions of services or materials. EPA would provide annual reports to Congress on implementation and funding of the program.</td>
<td>1/11/17: H.R. 438 introduced in the House, referred to the Committees on Natural Resources and Transportation &amp; Infrastructure</td>
<td>Rep. Juan Vargas (D-CA) introduced H.R. 438 with co-sponsor Rep. Duncan Hunter (R-CA)</td>
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<td>S. 90/H.R. 428</td>
<td>BLM Property/Red River Banks</td>
<td><strong>Red River Gradient Boundary Survey Act.</strong> Directs BLM to survey the gradient boundary along the Red River in the States of Oklahoma and Texas, subject to approval of those states’ respective land offices. <em>Note: This is similar to H.R. 2130 and S. 1153 introduced in the 114th Congress, passed by the House 12/9/15.</em></td>
<td>1/10/17: S. 90 introduced in the Senate, referred to the Committee on the Judiciary; H.R. 428 introduced in the House, referred to the House Committee on Natural Resources</td>
<td>Senator John Cornyn (R-TX) introduced S. 90 with co-sponsor Senator Ted Cruz (R-TX)</td>
<td>Rep. Mac Thornberry (R-TX) introduced H.R. 428 with 13 Republican co-sponsors from Texas and Oklahoma</td>
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<tr>
<td>2/15/17</td>
<td>Senate received H.R. 428, referred to the Committee on Energy and Natural Resources</td>
<td></td>
<td><strong>S. Res. 12</strong> Issue: Clean Water Act/WOTUS Rule</td>
<td>A resolution expressing the sense of the Senate that clean water is a national priority, and that the June 29, 2015, Waters of the United States Rule should be withdrawn or vacated.</td>
<td></td>
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</tbody>
</table>
| 1/12/17    | S. Res. 12 introduced in the Senate, referred to the Committee on Environment and Public Works | Senator Deb Fischer (R-NE) introduced S. Res. 12, with co-sponsor Joni Ernst (R-IA) | **H.R. 519** Issue: Water Infrastructure/Tax Incentive **Title: Water and Agriculture Tax Reform Act.** | Amends the Internal Revenue Code to permit tax-exempt mutual ditch or irrigation companies to earn income from dispositions of certain real property and stock interests without affecting their tax-exempt status, but requires that such income be used to pay the costs of operations, maintenance, and capital improvements of such a company. Also establishes a rule regarding the organizational governance of mutual ditch or irrigation companies. Where state law provides that such a company may be organized in a manner that permits voting on a basis that is pro rata to share ownership on corporate governance matters, the tax-exempt status of the mutual ditch or irrigation company must be determined without taking into account whether its member shareholders have one vote on corporate governance matters per share held in the corporation. 

*Note: This is similar to H.R. 4220 and S. 384 introduced in the 114th Congress*

| 1/13/17    | H.R. 519 introduced in the House, referred to the Committee on Ways and Means | Representative Ken Buck (R-CO) introduced H.R. 519, with 11 bipartisan co-sponsors from AZ, CO, UT, WA, and WY | **H.R. 465** Issue: Clean Water Act **Title: Water Quality Improvement Act.** | To provide an integrated planning and permitting process for municipalities facing financial challenges in Clean Water Act (CWA) compliance. It was referred to the House Committee on Transportation and Infrastructure. The bill would allow municipalities to obtain permits for wastewater and stormwater management with the most cost-effective, technically-feasible, and protective approaches to CWA compliance. In coordination with the State—or the Environmental Protection Agency (EPA), where the State does not have delegated authority—the municipality can develop a plan that prioritizes the maximum health benefits for the resources expended.

In determining whether a plan is economically affordable, the state can take into consideration existing and potential future costs for implementation, including the economic and social impact on the service area; low-income households and cumulative costs that exceed 2% of annual household income; impact of increased costs on local industry; unemployment rates; bond ratings; the legal ability to pass increased costs through to ratepayers; and whether compliance with the CWA would require a municipality to divert resources away from essential capital improvements that would provide core public services to the community. When evaluating the technical feasibility of a plan, the state would consider naturally-occurring pollutants; natural, ephemeral, intermittent, or low-flow conditions or...
water levels; human-caused pollution that cannot be remedied; dams, diversions, or other types of hydrologic modifications that make CWA compliance impracticable; or other physical conditions related to the natural features of a water body unrelated to water quality that preclude compliance with the CWA. The bill directs EPA to coordinate with states to select 15 eligible municipalities to develop and implement integrated plans and permits as pilot projects, with annual reports to Congress.

The bill also directs EPA to update its 1997 financial capability assessment guidance, titled “Combined Sewer Overflows—Guidance for Financial Capability Assessment and Schedule Development” (EPA-832-B-97-004). The update would occur in consultation with representative municipal and State officials, including their representative regional or national organizations. Consultations would focus on how to assess the financial capability of municipalities to implement effluent limitations and other CWA control measures. The updated guidance would also take into consideration relevant studies and reports, and would provide a consistent reference point to aid parties in negotiating reasonable and effective schedules for implementation.

Note: The bill is similar to H.R. 6182, introduced in the 114th Congress. About that bill, Rep. Gibbs said: “Too many cities and towns in America are facing expensive EPA mandates with no real way to achieve them. One-size-fits-all policies out of Washington do not work when American mayors and administrators need flexibility. The Water Quality Improvement Act will write into law the EPA’s Integrated Planning Process, providing that flexibility. Our communities need to be given flexibility in complying with mandates that may not even be technically achievable or economically affordable. I am proud to support our nation’s cities, mayors, and their residents by introducing this bill.”

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<tr>
<th>S. 140</th>
<th><strong>Issue: Indian Water Rights Settlements</strong></th>
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<tr>
<td><strong>No Title.</strong> This bill amends the White Mountain Apache Tribe Water Rights Quantification Act of 2010 to specify that settlement funds may be used for the planning, design, and construction of the tribe’s rural water system.</td>
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<td><strong>Note:</strong> This Act is identical to S. 2959 passed by unanimous consent in the 114th Senate 9/29/16, and related to H.R. 5433 (introduced but no movement in committee)</td>
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<tr>
<th>H.R. 434</th>
<th><strong>Issue: Infrastructure Financing</strong></th>
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<tbody>
<tr>
<td><strong>Title:</strong> New Water Available To Every Reclamation State (New WATER) Act. The bill authorizes the Department of the Interior to provide financial assistance, including secured loans and loan</td>
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</table>

| 1/12/17: S. 140 introduced in the House, referred to Committee on Indian Affairs |
| 2/8/17: S. 140 passed out of committee, order to be reported favorably (115-7) |
| 5/8/17: Passed Senate unanimously without amendment |
| 5/11/17: House received S. 140 and referred to Committee on Natural Resources |

| 1/11/17: H.R. 434 introduced in the House, referred to Committee on Natural Resources |
| Senator Jeff Flake (R-AZ) introduced S. 140 with co-sponsor John McCain (R-AZ) |
| Rep Jeff Denham (R-CA) introduced H.R. 434 with bipartisan co-sponsors Rep. Doug |
guarantees, to non-federal entities that contract with the Bureau of Reclamation to carry out eligible water projects within the 17 Reclamation states, Alaska, or Hawaii. Eligible projects would cost at least $20M, with maximum federal assistance up to 80% of the total cost, and include (1) infrastructure projects for domestic, agricultural, environmental, municipal or industrial water supply; (2) enhanced energy efficiency in the operation of a water system; (3) accelerated repair and replacement of aging water distribution facilities; (4) desalination; and (5) acquisition of real property for water storage, reclaimed or recycled water, or wastewater integral to such a project. Loan repayment would begin within 5 years of project completion and last no more than 35 years. Federal financial assistance under this Act would not qualify as a federal action that triggers a NEPA review, but does not supersede compliance with relevant state, tribal, and local laws and permitting requirements. The bill would appropriate annual funds in graduated amounts: $20M for FY 2018; $25M for FY2019; $35M for FY2020; $45M for FY2021; and $50M for FY2022.

Note: This bill is similar to H.R. 6022 introduced in the 114th Congress.

### H.R. 417

**Issue: Safe Drinking Water Act**

No Title. Amends Section 1414(c)(4) of the Safe Drinking Water Act (42 U.S.C. 300g–3(c)(4)) to require EPA, to revise regulations about consumer confidence reports in order to increase their effectiveness and understandability. Currently, each community water system must mail their customers an annual consumer confidence report that provides information about local drinking water quality.

1/10/17: H.R. 417 introduced in the House, referred to Committee on Energy and Commerce


### H.R. 353/S. 161

**Issue: Weather Forecasting**

**Title: Weather Research and Forecasting Innovation Act.** NOAA would prioritize weather research through a focused, affordable, attainable, forward-looking research plan, while also encouraging innovations and new technology capacities, in order to restore our country's leadership in weather forecasting. It also directs NOAA to actively consider new commercial data and private sector solutions to further enhance our weather forecasting capacities.

Under Title I, in conducting research, the Under Secretary shall prioritize improving weather data, modeling, computing, forecasting, and warnings for the protection of life and property and for the enhancement of the national economy. Title I authorizes for FY2017-FY2018 for the Office of Oceanic and Atmospheric Research $111.5M, plus $85.8M for weather laboratories and cooperative institutes; $25.8M for weather and air chemistry research; and an additional $20M for a joint technology transfer initiative.

Title II addresses improving subseasonal and seasonal forecasts and provides for Forecast Communication Coordinators. Each state may request up to $100,000 on a 50%-50% matching basis for assistance from NOAA including funds to support an individual to serve as a liaison with NOAA.

1/6/17: H.R. 353 introduced in the House, referred to Committee on Science, Space, and Technology

1/9/17: House passed H.R. 353 on a motion by Rep. Lucas to suspend the rules for committee review due to bipartisan efforts over the past two Congresses to negotiate and compromise and move this legislation forward.

1/10/17: H.R. 353 received in the Senate.

1/17/17: S. 161 introduced in the Senate (Hurricane)

Rep. Frank Lucas (R-OK), introduced H.R. 353, with cosponsors Rep. Jim Bridenstine (R-OK), Lamar Smith (R-TX), Dana Rohrabacher (R-CA), Chris Stewart (R-UT), and Suzanne Bonamici (D-OR)

Senator Marco Rubio (R-FL) introduced S. 161
other federal agencies, the weather industry, counties, tribes and other interests, and to receive and disseminate forecasts and information.

Title III, NOAA Weather Satellite and Data Innovation, addresses completion and operationalization of the Constellation Observing System for Meteorology, Ionosphere, and Climate-1 and Climate-2 (COSMIC).

Title IV maintains a standing Environmental Information Services Working Group to advise on prioritizing weather research initiatives to produce real improvement in forecasting, as well as evaluate incorporating existing or emerging technologies or techniques in private industry.

*See full summary in the Nebraska briefing binder, Tab U, April 2017.*

<table>
<thead>
<tr>
<th>Issue: Restructuring Circuit Court of Appeals</th>
<th>Forecasting Improvement Act</th>
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<tbody>
<tr>
<td><strong>Title:</strong> Ninth Circuit Court of Appeals Judgeship and Reorganization Act (H.R. 196). Divides the U.S. Court of Appeals for the Ninth Circuit into: (1) the Ninth Circuit, composed of California, Guam, Hawaii, and Northern Mariana Islands; and (2) the Twelfth Circuit, composed of Alaska, Arizona, Idaho, Montana, Nevada, Oregon, and Washington. The President must appoint two additional judges for the former Ninth Circuit, three judges for the new Ninth Circuit, and two additional temporary judges for the former Ninth Circuit. The bill: (1) specifies the locations where new circuits are to hold regular sessions, (2) distributes active circuit judges of the former Ninth Circuit to the new circuits, (3) allows senior circuit judges of the former Ninth Circuit to elect assignment, and (4) authorizes administrative coordination between any two contiguous circuits.</td>
<td>3/29/17: H.R. 353 passed by the Senate, with an amendment by unanimous consent</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Title: Ninth Circuit Court Modernization and Twelfth Circuit Court Creation Act (H.R. 1598). This bill divides the U.S. Court of Appeals for the Ninth Circuit into: (1) a new Ninth Circuit that</th>
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<tr>
<td><strong>Title:</strong> Judicial Administration and Improvement Act (H.R. 250). Divides the U.S. Court of Appeals for the Ninth Circuit into: (1) a new Ninth Circuit, to be composed of California, Hawaii, Oregon, Washington, Guam, and the Northern Mariana Islands; and (2) a newly established Twelfth Circuit, to be composed of Alaska, Arizona, Idaho, Montana, and Nevada.</td>
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<tr>
<td>Title: Judicial Administration and Improvement Act (S. 276). Divides the U.S. Court of Appeals for the Ninth Circuit into: (1) a new Ninth Circuit, to be composed of California, Hawaii, Oregon, Guam, and the Northern Mariana Islands; and (2) a newly established Twelfth Circuit, to be composed of Alaska, Arizona, Idaho, Montana, Nevada, and Washington.</td>
<td>1/3/17: H.R. 196 introduced in the House, referred to the Committee on the Judiciary</td>
</tr>
<tr>
<td>Senator Jeff Flake (R-AZ) introduced S. 276 with co-sponsors John McCain (R-AZ) and Dean Heller (R-NV)</td>
<td>1/13/17: H.R. 250 introduced in the House, referred to the Committee on the Judiciary</td>
</tr>
<tr>
<td>Sen. Steve Daines (R-MT) introduced S. 295, with co-sponsors Dan Sullivan (R-AK) and Lisa Murkowski (R-AK)</td>
<td>2/2/17: S. 276 introduced in the Senate</td>
</tr>
<tr>
<td>Rep. Louie Gohmert (R-TX) introduced H.R. 1598, with co-sponsor Jeff Duncan (R-SC)</td>
<td>2/2/17: S. 295 introduced in the Senate</td>
</tr>
<tr>
<td>3/17/17: H.R. 1598 introduced in the House</td>
<td>3/17/17: H.R. 1598 introduced in the House, referred to the Committee on the Judiciary</td>
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<td><strong>Title:</strong> Circuit Court of Appeals Restructuring and Modernization Act (S. 295). Divides the U.S. Court of Appeals for the Ninth Circuit into: (1) a new Ninth Circuit, to be composed of California, Guam, Hawaii, and Northern Mariana Islands; and (2) a newly established Twelfth Circuit, to be composed of Alaska, Arizona, Idaho, Montana, Nevada, and Washington.</td>
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| H.R. 26 | **Issue: Regulatory Reform**  
**Title: Regulations from the Executive in Need of Scrutiny (REINS) Act.** The bill would require agencies to report to Congress whether a rule is classified as major or non-major, as well as provide a cost-benefit analysis that includes any jobs added or lost as a result of the proposed rule. A major rule would result in: (1) an annual effect on the economy of $100M or more; (2) a major increase in costs or prices for consumers, industries, agencies or regions; or (3) significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises. | 1/3/17: H.R. 26 introduced in the House.  
1/4/17: S. 21 introduced in the Senate, referred to the Committee on Homeland Security and Governmental Affairs  
1/6/17: H.R. 26 received in the Senate, referred to the Committee on Homeland Security and Governmental Affairs  
3/29/17: Senate Committee on Small Business and Entrepreneurship held hearings on H.R. 26  
5/17/17: HSGA ordered S. 21 to be reported without amendment  
Representative Doug Collins (R-GA) introduced H.R. 26, with 160 Republican co-sponsors | 
| S. 21 |  
Senator Paul Rand (R-KY) introduced S. 21, with 35 Republican co-sponsors | |
| H.R. 23 | **Issue: California Drought**  
**Title: Gaining Responsibility on Water (GROW) Act.** The bill is intended to make more water available to communities in California and bordering Western states, providing relief to California families, farmers, and communities by restoring water deliveries that have been drastically reduced over the last two decades as a result of various environmental lawsuits and state and federal regulations. The legislation requires regulators to comply with the bipartisan Bay-Delta Accord, consistent with the requirements of the Endangered Species Act. The bill is intended to cut red tape holding back major water storage projects that have been authorized for over a decade, to aid the entire Western United States during dry years. The bill also contains provisions recognizing state authority to manage and allocate water, and provisions to facilitate water transfers, management decisions, and conservation.  

Rep. Valadao stated: “This Western drought has had devastating consequences on my constituents in California’s Central Valley; our economy is stagnant and parents are struggling to provide for their | 1/3/17: H.R. 23 introduced in the House, referred to the Committees on Natural Resources and Agriculture  
Rep. David Valadao (R-CA) introduced the bill, co-sponsored by 13 Republican and 1 Democrat California co-sponsors |
children. Now, the entire country feels the consequences of this drought. While we were able to implement temporary provisions in the 114th Congress, a complete and long term agreement is still needed. My bill, the GROW Act, will enact policies to expand our water infrastructure and allow for more water conveyance while protecting the water rights of users across the state.”

During the 114th Congress, H.R. 2989, the Western Water and American Food Security Act as well as H.R. 2749, the Dams Accountability Maintenance and Safety Act, were both aimed at improving water supply to the Central Valley.

H.R. 21

S. 34

Issue: Regulatory Reform

Title: Midnight Rules Relief Act. To amend the Congressional Review Act (5 U.S.C. §§801-808) to allow consideration of joint resolutions of disapproval of multiple rules at once rather than the current procedure of considering only one regulation at a time, for rules submitted during the final year of a President’s term.

1/3/17: H.R. 21 introduced in the House
1/4/17: H.R. 21 passed the House by a vote of 238-184.
1/5/17: H.R. 21 received and S. 34 introduced in the Senate; both referred to the Committee on Homeland Security and Governmental Affairs
5/17/17: HSGA ordered S. 34 reported without amendment

Representative Darrell Issa (R-CA) introduced H.R. 21

Senator Ron Johnson (R-WI), Chairman of the Senate Homeland Security and Governmental Affairs Committee, introduced S. 34

NOTABLE LITIGATION

<table>
<thead>
<tr>
<th>Case Name</th>
<th>Issue – Nitrate Pollution and the Right to Clean Water</th>
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<tbody>
<tr>
<td>Board of Water Works Trustees of the City of Des Moines, Iowa v. Sac County Board of Supervisors as Trustees of Drainage Districts (5:15-cv-4020)</td>
<td>A downstream municipal water utility provider filed suit against upstream drainage districts over the issue of which political subdivision of Iowa must cover the costs of complying with state and federal clean water regulations, due to increased nitrate levels beyond the maximum allowed by law. The drainage districts exist to carry water away from swampy lands to reclaim low lying lands for tilling and other productive uses. The lawsuit alleged that the nitrate-contaminated groundwater drained into the water supply, threatening the ability of the water utility to provide clean drinking water at reasonable costs, despite recent infrastructure investments.</td>
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<tr>
<td>Court</td>
<td>The parties disagreed over whether the drainage districts qualify as a point source requiring an NPDES permit, and whether the drainage districts had authority to redress the injuries to the utility. The utility asserted property rights to obtain clean water from the river and to use its treatment plant and facilities without impairment from pollutants. It also argued that the state strategy to reduce pollution levels by 45% cannot be accomplished without addressing unregulated sources, because 92% of the nitrate comes from agriculture and drainage, while only 8% comes from regulated sources such as sewer systems. “It strains rationality to believe that 8% of the problem can create 45% of the solution.”</td>
</tr>
<tr>
<td>Relevant Dates</td>
<td>3/16/15: Lawsuit filed</td>
</tr>
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</table>
The federal court certified several state-law questions to the Iowa Supreme Court, then granted the defendants’ Motion for Summary Judgement, holding that the plaintiff’s claims were devoid of merit under state and federal law.

The drainage districts and the utility were both created by the Iowa legislature, and one political subdivision cannot challenge the validity of an act by another. The drainage districts have the power only to restore, maintain, or increase the flow of the water through the drainage system, and lack the statutory authority to regulate the nitrate use of the farmers or redress the harms to the utility. The court rejected the takings claim in part because the water is not the private property of the utility, but rather is a public resource, owned by the state in trust for the public. Private property interests are created and defined by state law, not the U.S. Constitution. Regarding the state strategy to reduce nitrate pollution, the court noted that this was a public policy argument best directed to the Iowa legislature, not an Equal Protection Clause violation under the U.S. Constitution as framed by the plaintiff.

### Case Names

<table>
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<tr>
<th>Case Name</th>
<th>Issue – Corps Water Storage and Allocation of Flow</th>
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<tr>
<td>Cobb County-Marietta Water Authority v. U.S. Army Corps of Engineers (1:17-cv-400)</td>
<td>Plaintiff Cobb-Marietta Water Authority (CMWA) was granted water rights by the State of Georgia at Allatoona Lake, a reservoir operated by the Corps. A 1963 contract with the Corps granted the CMWA the right to utilize a portion of the Lake to store 13,140 acre-feet of water for its customers. After investing hundreds of millions of dollars to generate man-made inflows into the Lake with “return flows” of recycled water, as well as water released from a CMWA-owned water supply reservoir upstream, which flows when released through the natural river channel to be withdrawn through CMWA’s existing intake structure in the Lake. The Corps has rejected the State’s allocation of inflows to CMWA, adopting instead its own federal water allocation rule implemented through a “Storage Accounting System,” which would allow the Corps to allocate to itself almost 95% of the CMWA inflows. The Corps asserts that these inflows become the property of the federal government, subject to allocation by the Corps, simply because they entered the federal facility. CMWA asks the Court (1) to review the Corps’ adoption of the Storage Accounting System as a final agency action under the Administrative Procedures Act and find it arbitrary, capricious, and an abuse of discretion; (2) to find that the Corps’ decision to override the State of Georgia’s water allocation authority is a violation of the structural federalism provisions of the 10th Amendment; (3) to find that the Corps violated NEPA by failing to prepare an Environmental Impact Statement, or Environmental Assessment and finding of no significant impact, related to its decision to adopt and implement its Storage Accounting System. On April 28, the Corps filed its Answer in response, largely denying CMWA’s characterization of the Storage Accounting System and other documents that speak for themselves. The Corps also raised the defenses that the court may lack subject matter jurisdiction, and that the court may not be able to grant the relief requested by CMWA, even if the court finds that the Corps has violated federal statutory provisions</td>
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### Courts

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<tr>
<th>Court</th>
<th>Relevant Dates</th>
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<tbody>
<tr>
<td>U.S. District Court, Northern District of Georgia</td>
<td>2/1/17: Case filed 4/28/17: Corps filed Answer</td>
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### Issue – Water Rights and Physical v Regulatory Takings

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<tr>
<th>Case Names</th>
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<tr>
<td>Klamath Irrigation v. U.S. (No. 1-591)</td>
<td>On December 21, the Court of Federal Claims issued a procedural ruling on pre-trial motions in the Klamath Project takings litigation, Klamath Irrigation v. U.S. (No. 1-591). The ruling states that the irrigators’ claims for 5th Amendment compensation for water rights, deprived in 2001 on the basis of the Endangered Species Act, will be analyzed under physical rather than regulatory takings principles.</td>
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Under a physical takings framework, the government has a categorical duty to compensate the owner for physically taking or destroying a private property interest for public use. A regulatory taking involves a more complex analysis to balance private and public interests—such as weighing the benefits to the endangered fish against the loss to the water rights owners for a restriction of their water use—before the court finds liability.

The court rejected Florida’s arguments for the court’s consideration under a regulatory taking framework, relying on *Casitas Municipal Water District v. United States*, 543 F.3d 1276 (Fed. Cir. 2008). The court noted that the irrigators had the right to use the water fully prior to the 2001 Reclamation and FWS decision to prevent water from traveling out of the Upper Klamath Lake and the Klamath River into the water users’ project canals, to preserve endangered species habitat. The physical taking of water away from the irrigators and its dedication to serve a public purpose prevented the irrigators from enjoying the rights to use the water.

The case is scheduled for trial in January, and will determine whether the irrigators can establish a “legally cognizable property interest, such as the right of possession, use, or disposal of the property,” and if so, what compensation may be due to the irrigators.

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<th>Relevant Dates</th>
<th>Case Names</th>
<th>Issue – Interstate Equitable Apportionment</th>
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<tr>
<td>12/21/16: Findings of Fact on cross-motions in limine – physical v. regulatory takings analysis</td>
<td>Florida v. Georgia, #220142</td>
<td>On October 31, U.S. Supreme Court-appointed Special Master Ralph Lancaster heard opening remarks in Florida v. Georgia, regarding whether Florida is entitled to an equitable apportionment of the waters of the Apalachicola-Chattahoochee-Flint River Basin (ACF Basin), and for any injunctive relief against Georgia to sustain an adequate flow of fresh water into the Apalachicola Region.</td>
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<td>1/30/17: Trial begins</td>
<td>Courts</td>
<td>The ACF Basin covers nearly 20,000 square miles, and the U.S. Army Corps of Engineers (Corps) operates a system of five federal dams along the three rivers. About 11% of the tri-state ACF Basin lies in Florida, 74% in Georgia, and 15% in Alabama. Florida argued that the ecosystem and economy of its Apalachicola Region are suffering due to Georgia’s unchecked upstream water consumption for its municipal, industrial, recreational, and agricultural uses, forcing Florida to shoulder the burden of Georgia’s growth. Florida also accused Georgia of bad faith negotiations, causing the 1997 ACF Basin Compact to disintegrate and leaving Florida no alternative but to redress its harms before the Supreme Court. Florida is seeking a cap on Georgia’s water withdrawals. Alabama, while not a party to the case, supports Florida’s position. Georgia has countered that: (1) the Corps controls the reservoirs that release water to Florida, and is an indispensable party to the case; (2) that the ecological harms Florida alleges are not the result of Georgia’s water withdrawals; and (3) that any economic benefits Florida might experience with the requested cap are outweighed by the economic harms Georgia would face.</td>
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<tr>
<td>Relevant Dates</td>
<td>Issue – Interstate Equitable Apportionment</td>
<td>Equitable apportionment cases are predominantly between Western states, where the doctrine of prior appropriation often governs. The State of Colorado filed an amicus brief on October 21, where it: (1) noted the differences between prior appropriation and riparian laws and that “equitable apportionment must be guided by the affected States’ laws governing the rights to use the waters;” (2) distinguished the facts and holding of Colorado v. New Mexico from the circumstances of Florida v. Georgia; and (3) emphasized that Florida, as the complaining state, has the burden to “prove by clear and convincing evidence that it has suffered injury as a result of Georgia’s use of water within its own borders. Absent such proof, there is no basis for the Court to prevent Georgia from exercising sovereign control over the natural resources within the State.” Colorado stated that a decision on the question of Florida’s burden of proof “could potentially inform the limits and extent of Colorado’s rights and obligations under its existing equitable apportionment decrees or interstate compacts, as well as options for apportioning water in the future.”</td>
</tr>
<tr>
<td>11/3/14: Complaint filed</td>
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<td>The Supreme Court received the Special Master’s Report on February 21, 2017, and any Exceptions to the Report are due by May 2017.</td>
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<tr>
<td>10/21/16: Colorado’s Amicus Brief filed</td>
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<td>The Special Master recommended that the Supreme Court deny Florida’s request for relief, finding that Florida had not met its burden.</td>
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<td>10/31/16: Trial before the Special Master begins</td>
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<tr>
<td>2/21/17: S. Ct. receive the Special Master’s Report</td>
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<tr>
<td>5/31/17: Florida filed Exceptions to the Special Master’s Report (replies due July 31st)</td>
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“Florida has failed to show that a consumption cap will afford adequate relief. The testimony and evidence submitted at trial demonstrates that the Corps can likely offset increased streamflow in the Flint River by storing additional water in its reservoirs along the Chattahoochee River during dry periods. The evidence also shows that the Corps retains extensive discretion in the operation of those federal reservoirs. As a result, the Corps can release (or not release) water largely as it sees fit, subject to certain minimum requirements under the RIOP. There is no guarantee that the Corps will exercise its discretion to release or hold back water at any particular time. Further, Florida has not shown that it would benefit from increased pass-through operations under normal conditions. Finally, without the Corps as a party, the Court cannot order the Corps to take any particular action. Accordingly, Florida has not proven by clear and convincing evidence that any additional streamflow in the Flint River resulting from a decree imposing a consumptive cap on Georgia’s water use would be released from Jim Woodruff Dam into the River at a time that would provide a material benefit to Florida.”

For more information, see the Special Master’s website, http://www.pierceatwood.com/florida-v-georgia-no-142-original, or http://www.scotusblog.com/case-files/cases/florida-v-georgia-2/

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<th>Case Names</th>
<th>Issue – State Authority over Interstate Groundwater, Equitable Apportionment</th>
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<tbody>
<tr>
<td>Mississippi v. Tennessee, No. 220143</td>
<td>On June 6, 2014, the State of Mississippi filed an original jurisdiction complaint against the State of Tennessee, the City of Memphis, and Memphis Light, Gas &amp; Water Division (MLGW) for wrongful conversion of groundwater from the Sparta-Memphis Aquifer (Aquifer). Mississippi alleges that groundwater pumping by MLGW in Tennessee has depleted water that is subject to Mississippi’s ownership and control because, absent the effects of the pumping, the water would remain in the Aquifer beneath Mississippi’s territory. Mississippi seeks declaratory and injunctive relief, as well as over $600 million in damages. Mississippi presented three questions: (1) Whether the Court will grant Mississippi leave to file an original action to seek relief from respondents’ use of a pumping operation to take approximately 252 billion gallons of high-quality groundwater; (2) whether Mississippi has sole sovereign authority over and control of groundwater naturally stored within its borders, including in sandstone within Mississippi’s borders; and (3) whether Mississippi is entitled to damages, injunctive, and other equitable relief for the Mississippi intrastate groundwater intentionally and forcibly taken by respondents.</td>
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<td>Hood ex rel. Mississippi v. City of Memphis, Tenn., 533 F. Supp. 2d 646 (N.D. Miss. 2008) (aff’d 570 F.3d 625 (5th Cir. 2009))</td>
<td>On August 12, the Special Master issued a Memorandum of Decision on various motions to dismiss and to exclude information from the record. The Special Master reviewed details of a previous complaint against the Memphis Defendants, Hood ex rel. Mississippi v. City of Memphis, Tenn. The U.S. District Court for the Northern District of Mississippi ruled that the doctrine of equitable apportionment has historically been the means by which disputes over interstate waters are resolved, that the aquifer in question had never been apportioned, and that, without an apportionment determining which portion of the aquifer’s water is the property of which state, the Court could not grant relief on Mississippi’s claims. The 5th Circuit affirmed, noting that the groundwater is an interstate source, and the amount of water to which each state is entitled must be allocated before one state may sue an entity for invading its share. The 5th Circuit also rejected Mississippi’s argument that it owns a fixed portion of the aquifer because it controls the resources within its state boundaries, reasoning that the Supreme Court has consistently rejected the argument advanced by different states that state boundaries determine the amount of water to which each state is entitled from an interstate water source (citing Hinderlider v. La Plata River &amp; Cherry Creek Ditch Co., 304 U.S. 92, 102 (1938)). That case was dismissed for failure to join Tennessee as a required party.</td>
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<td>Mississippi v. City of Memphis, 559 U.S. 901</td>
<td>The Special Master noted that Mississippi’s complaint explicitly disclaims a request for equitable apportionment and appears to implausibly allege that water in the aquifer lacks an interstate character. On its face, the complaint should probably be dismissed under FRCP 12(b). However, the Federal Rules of Civil Procedure are guidelines rather than strict mandates in original jurisdiction cases, and in</td>
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the absence of an interstate compact, the Supreme Court has authorized only one avenue, equitable apportionment, for states to pursue a claim that another state has depleted the availability of interstate waters within its borders. The Special Master, tasked with erring on the side of over-inclusiveness to assist the Supreme Court in making its ultimate determination, recommended that an evidentiary hearing be held on the limited issue of whether the aquifer and the water constitutes an interstate resource. “Evidence that would likely be relevant to this determination includes the nature and extent of hydrological and geological connections between the groundwater in Memphis and that in Mississippi, the extent of historical flows in the aquifer between Mississippi and Tennessee, and similar considerations.”

On October 26, 2016, the Special Master entered a Case Management Order in preparation for the evidentiary hearing, with discovery scheduled to be completed by July 30, 2017. On May 25, 2017, the Special Master extended the discovery deadline to August 31.

For more information, see [http://www.ca6.uscourts.gov/special-master](http://www.ca6.uscourts.gov/special-master)

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<th>Case Name</th>
<th>Issue – Reserved Water Rights include Groundwater as a Potential Source</th>
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| *Agua Caliente Band of Cahuilla Indians v. Coachella Valley Water District, et al.* | The Agua Caliente Band of Cahuilla Indians filed a lawsuit in May 2013, asking the Court to declare and quantify the existence of the tribe’s water rights as the senior rights in the Coachella Valley under federal law. In March 2015, the Court ruled on summary judgment that the Agua Caliente Band of Cahuilla Indians has a reserved right to water, and groundwater is a water source available to fulfill that right. The Court denied the Tribe’s claim for aboriginal title to groundwater. The water districts filed a petition with the 9th Circuit for interlocutory review of the portion of the District Court’s order addressing the inclusion of groundwater in the Tribe’s reserved right to water. The parties briefed the issue with written arguments by May 2016, and oral arguments are scheduled for October 18, 2016. The parties agreed to trifurcate the case, and proceeded forward with Phase 2 in a limited way. On February 23, the District Court ruled on the Motion for Partial Summary Judgment against the water district’s equitable defenses and arguments. The remainder of Phase 2 issues, which were stayed by the court pending the Ninth Circuit’s resolution of the water district’s appeal, will address whether the tribe owns pore space beneath the reservation, whether there is a right to water of a certain quality and how to quantify the tribe’s reserve water right. If necessary, Phase III will quantify the tribe’s rights to underground water and pore space and order injunctive relief. On March 7, 2017, the 9th Circuit upheld the California District Court’s summary judgment from Phase I of the trifurcated case. The 9th Circuit decision holds that the United States implicitly reserved a right to water when it created the Agua Caliente Reservation, and that the Tribe’s reserved water right extends to the groundwater underlying the Reservation. The court summarized hydrological considerations in the arid valley, noting that “even in a peak year the river system provides very little water for irrigation or human consumption.” Given the lack of perennial streams in the area and the importance of water for survival, “a reservation without an adequate source of surface water must be able to access groundwater.” The court expressed “no opinion on how much water falls within the scope of the Tribe’s federal groundwater right,” since that will be determined at a later phase of the case. However, even with water under state-law entitlements, “there can be no question that water [from the aquifer] in some amount was necessarily reserved to support the reservation created.” The court acknowledged that it was unable to find any controlling federal appellate authority explicitly holding that the federal reserved water rights doctrine in *Winters v. United States*, 207 U.S. 564 (1908), extends to groundwater. Instead, it pointed to *United States v. U.S. District Court, Central District of California, EDCV 13-883*.

| Courts | |
|---------| |
| U.S. District Court, Central District of California, EDCV 13-883 | |
| 9th Circuit (for interlocutory review) 5:13-cv-883 | |

| Relevant Dates | |
|---------------| |
| 5/2013: Agua Caliente filed suit | |
| 3/27/2015: Summary judgment re: groundwater available as part of reserved water right | |
| 10/18/16: Oral arguments on interlocutory appeal, 9th Cir. | |
| 3/7/17: 9th Circuit panel decision on Phase I reserved groundwater appeal from CA court | |
| 6/5/17: Tribe’s Motion to Lift Stay granted; CA Dist. Ct. proceeding with Phase II | |
Cappaert, 426 U.S. 128 (1976) and In re General Adjudication of All Rights to Use Water in Gila River System and Source, 989 P.2d 739 (Ariz. 1999) as persuasive and implied authority for its decision, emphasizing that Winters does not distinguish between surface and groundwater or prohibit the inclusion of groundwater among the reserved rights. “Apart from the requirement that the primary purpose of the reservation must intend water use, the other main limitation of the reserved rights doctrine is that the unappropriated water must be ‘appurtenant’ to the reservation.” The court determined that as long as the waters are attached to the reservation, it does not matter whether that water is above or below the ground.

The court noted that it previously held in its review of Cappaert “…that the Winters doctrine applies ‘not only to surface water, but also to underground water…. But on appeal, the Supreme Court did not reach this question.” Rather, the 9th Circuit panel said, Supreme Court hinted that reserved waters may include appurtenant groundwater when Cappaert held that “the United States can protect its water from subsequent diversion, whether the diversion is of surface or groundwater.” The 9th Circuit determined that “If the United States can protect against groundwater diversions, it follows that the government can protect the groundwater itself.”

The court also held that federal reserved water rights preempt conflicting state law. The water district argued that the Tribe does not need a federal reserved right to prevent the purpose of the reservation from being defeated, because (1) the Tribe has a correlative right to groundwater under California law; (2) the Tribe has not historically used groundwater; and (3) the Tribe is entitled to surface water under the Whitewater River Decree. The court rejected these arguments, noting that state water entitlements do not affect the analysis of the Tribe’s federally reserved water right, and that states do not have power to dispose of reserved rights.

The water district is appealing the 9th Circuit decision to the U.S. Supreme Court (petition for cert. due by July 5.) In the meantime, the California District Court has granted the Tribe’s motion to lift the stay and proceed with Phase II of the case, which deals with whether the Tribe beneficially owns the “pore space” of the groundwater basin underlying the Reservation, and whether a tribal right to groundwater includes the right to receive water of a certain quality. Phase III will focus on the quantification of the Tribe’s right.

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<th>Case Names</th>
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<td>Sierra Club v. Virginia Electric and Power Company, CA</td>
<td>On November 6, 2015 the Court denied a motion to dismiss, finding that the Sierra Club had standing to bring a lawsuit alleging that the energy company was discharging coal ash, contaminating groundwater with arsenic that eventually leads to a navigable body of water. Rather than try to argue that the groundwater is part of the “waters of the U.S.” under the CWA, the Sierra Club asserted that the groundwater acted as a “conduit” for the pollution, reaching the navigable water and creating a point source, requiring an NPDES permit. Notably, the First, Fifth and Seventh Circuits have each held that the CWA does not cover discharges that enter surface waters through groundwater. Other courts have held that hydrologically-connected groundwater is covered under the CWA.</td>
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<tr>
<td>U.S. District Court for the Eastern District of Virginia (2:15cv112)</td>
<td>On March 23, 2017, the District Court issued its ruling that the Coal Ash Piles constitute a point source that “channel and convey arsenic into groundwater that eventually discharges into the surrounding surface waters.” The defendant obtained discharge permits from the Virginia Department of Environmental Quality (VDEQ), for wastewater that enters the river through outfall pipes. The Sierra Club alleged violations of the CWA due to the unpermitted discharges into the groundwater. The Court agreed, holding that the arsenic discharge through hydrologically-connected groundwater is a violation of the CWA. Acknowledging that courts have disagreed on whether the CWA encompasses groundwater, the Court concluded, “Congress intended the CWA to protect the water quality of the nation’s surface water. Where the facts show a direct hydrological connection between ground water and surface water, that goal would be defeated if the CWA’s jurisdiction did not extend to discharges to that groundwater.”</td>
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<td>Fourth Circuit Court of Appeals (0:17-cv-1539)</td>
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<td>Relevant Dates</td>
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<td>11/6/15: Motion to Dismiss denied</td>
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<td>5/20/16: Sierra Club filed a Motion for Partial Summary Judgment</td>
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6/2/16: Virginia Electric and Power Company (dba Dominion Virginia Power) filed a Motion for Summary Judgement

6/24/16: Four-day trial

3/23/17: District Court ruling

4/26/17: Appeal to 4th Circuit

The Court determined that Congress intended the definition of “point source” in 33 U.S.C. §1362 to be interpreted broadly, and that the 3 million tons of Coal Ash Piles are discrete conveyances that channel the pollutants away from the power plant and directly into the groundwater. The Court relied in part on an EPA pronouncement in the preamble to a 1991 final rule, Amendments to the Water Quality Standards Regulation That Pertain to Standards on Indian Reservations, 56 FR 64876, which says that “the affected groundwater are not considered waters of the United States but discharges to them are regulated because such discharges are effectively discharges to the directly connected surface waters.”

Given that the defendant cooperated with the VDEQ and has been a good corporate citizen, the Court held that the defendant should not suffer civil penalties “for doing things that it, and [Virginia] thought complied with state and federal law.” Instead, the Court requested the parties to submit a remedial plan, including site monitoring and an application for a revised solid waste permit. The decision has been appealed to the 4th Circuit.

See prior summary of the Dominion Virginia Power case through the end of February 2016 in the Washington, D.C. briefing binder, Tab N, March 2016

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<th>Case Names</th>
<th>Issue - EPA’s/USACE’s Waters of the United States Rule</th>
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<td>North Dakota, et al. v. EPA et al., (D. N. Dak.), Case 3:15-cv-59</td>
<td>On June 29, 2015, the Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (USACE) published their Final Rule on the Waters of the United States (WOTUS) in the Federal Register (80 Fed. Reg. 37054). From June 29 to July 31, 69 plaintiffs filed 11 lawsuits, including 15 WSWC member states: Alaska, Arizona, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico (agencies), North Dakota, Oklahoma, South Dakota, Texas, Utah, Wyoming. Other plaintiffs include 15 additional states, 14 industrial groups, as well as environmental groups. Simultaneous petitions were filed in 2nd, 5th, 6th, 8th, 9th, 10th 11th and D.C. Circuit Courts from most of the same plaintiffs out of an “abundance of caution,” since certain EPA actions are generally exclusively reviewable by the Circuit Courts of Appeals under 33 USC §1369(b)(1). These petitions were consolidated before the 6th Circuit by order of the Multi-District Litigation (MDL) Panel. On February 22, a divided 6th Circuit panel ruled 2-1 that it has jurisdiction over the consolidated appellate court cases challenging the EPA and Corps’ WOTUS rule, rather than the District Courts, and denied the petitioners’ motions to dismiss. The 6th Circuit’s nationwide stay on the WOTUS rule implementation remains in effect.</td>
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<td>Texas, et al. v. EPA et al., (S. D. Tex.), Case 3:15-cv-162</td>
<td>On July 1, 2016 Oklahoma’s Attorney General appealed the U.S. District Court for Northern Oklahoma decision that it lacked jurisdiction to hear the case following the 6th Circuit’s “splintered” decision ruling that it had jurisdiction to hear the WOTUS rule challenges. Oklahoma argued that the 6th Circuit’s decision does not control the outcome of the case, noting that “…courts are obligated to independently assess jurisdiction in each case that comes before them.” It also added that oral arguments regarding jurisdiction in the 10th Circuit would help the court make the determination whether the state’s challenge to the WOTUS rule falls within the narrow category of EPA Administrator actions subject to direct appellate court review.</td>
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<td>Georgia et al. v. EPA (11th Cir) Case 2:15-cv-79</td>
<td>On August 16, the 11th Circuit stayed the WOTUS rule appeal proceedings in Georgia et al. v. McCarthy, ruling that, “It would be a colossal waste of judicial resources for both this Court and the Sixth Circuit to undertake to decide the same issues about the same rule presented by the same parties.” In the months since the 6th Circuit issued its order holding that it has original jurisdiction under CWA §1369(b)(1), the parties “have devoted considerable time and effort to the task of paring down the contents of the administrative record (which is more than a million pages long) and to developing a workable briefing schedule for briefing the merits of the challenges to the</td>
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<td>Consolidated 33 USC §1369 Petitions in 6th Circuit (Ohio) (from 2nd, 5th, 6th, 8th, 9th, 10th 11th and D.C. Circuit Courts): Murray Energy Corp. v. EPA</td>
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<td><strong>Courts</strong></td>
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<td>6th Circuit, 11th Circuit, District North Dakota, Southern District of Texas U.S. Supreme Court</td>
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On August 19, EPA and U.S. Army Corps of Engineers (Corps) filed their response brief to dismiss Oklahoma v. EPA, (10th Circuit), arguing that the 6th Circuit has exclusive jurisdiction over the challenges to the Clean Water Rule. “Plaintiffs are entitled to their day in court, and they shall have it—in the Sixth Circuit. They are not entitled to two separate days, in two separate courts, on the same claims.” They assert that even if the 6th Circuit’s decision were not controlling, under 33 U.S.C. §1369(b)(1), “…the Clean Water Act precludes district-court review of the limitations established by the Clean Water Rule.” Citing the recent decision in Georgia et al. v. EPA, they added, “Parallel court-of-appeals and district-court proceedings would also create protracted and duplicative litigation over preliminary matters in cases, such as this one, that are based on a large and complex administrative record.”

On September 2, 2016, the National Association of Manufacturers (NAM) petitioned the U.S. Supreme Court for a writ of certiorari, appealing the 6th Circuit’s decision that the challenge to the Waters of the United States (WOTUS) rule, filed by states, municipalities, environmental groups, and industries, falls under the Clean Water Act’s (CWA) judicial review provision, 33 U.S.C. § 1369(b)(1). NAM noted, “Although two [of the three 6th Circuit] panel members concluded that §1369(b)(1) [should preclude 6th Circuit jurisdiction], one of them reasoned that he was bound by ‘incorrect’ circuit precedent to take jurisdiction under §1369(b)(1)(F), which requires that agency actions ‘in issuing or denying any permit under’ §1342 be reviewed by the court of appeals.” Arguing against this interpretation of the statute, NAM said: “What should be a straightforward gatekeeping provision has in this and other cases generated widespread judicial disagreement, caused needless delay, and wasted valuable resources for no substantive purpose.” NAM also argued that allowing the 6th Circuit’s decision to stand denies the parties and the courts of the benefits of multilateral review of agency rulemaking.

On October 4, the 6th Circuit excluded most of the agency materials that state and industry petitioners argued should be included in the administrative record for judicial review, including Corps memoranda that show internal disagreement with the EPA. The court deferred to EPA’s interpretation of its Administrative Records Guidance, and held that the materials are deliberative and exempt from inclusion in the record to protect the quality of agency decisions by ensuring open and candid communications. The court allowed portions of an April 24, 2015 Corps memo with a factual and technical analysis of the WOTUS rule. The document says that as much as 10% of wetlands previously covered by the CWA would be out of reach under the WOTUS rule, a contrast to EPA’s estimates of a 4.65% increase in federal jurisdiction.

On October 7, 31 states filed a brief with the Supreme Court in support of the National Association of Manufacturers’ petition for writ of certiorari. The states note that EPA and the Corps have attempted to both expand their power under the WOTUS rule as well as narrowly restrict judicial review of the rule for those who would challenge it, limiting the broad definitional rule to a narrow class of specific EPA actions listed in 33 USC §1369(b)(1), reviewable only by Circuit courts. The states argue for: (1) a plain text reading of the statute that avoids rendering words or phrases superfluous; and (2) keeping the interpretation of the jurisdictional statute simple and straightforward to avoid the hazards of having to sue in multiple courts to protect their rights.

On November 8, 2016, members of Congress, including 21 Senators and 67 Representatives, filed an amicus brief in support of state, business, and municipal petitioners in the 6th Circuit. The brief provides insights regarding congressional statutory intent and legislative history of the CWA, noting that the members “have strong institutional interests in preserving Congress’s role in making law for the nation.” The brief emphasizes that Congress expanded jurisdiction beyond traditionally navigable interstate waters to include tributaries...
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<td>11/8/16</td>
<td>Minnesota District Court dismissed WOTUS case without prejudice due to 6th Cir. Jurisdiction</td>
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<td>11/8/16</td>
<td>(Washington Cattlemen's Association et al. v. EPA, 0:15-cv-03058)</td>
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<td>1/13/17</td>
<td>S. Ct. grants cert for NAM</td>
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<td>4/27/17</td>
<td>Opening round of briefs in NAM appeal</td>
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<td>5/4/17</td>
<td>EPA Administrator Pruitt recuses himself from the WOTUS cases in which Oklahoma is involved</td>
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for water quality purposes, but considered and declined to regulate land with ephemeral flows, non-point source precipitation runoff, wetlands, or groundwater, leaving these waters to state rather than federal control. The brief argues that the WOTUS rule “unlawfully expands federal jurisdiction to regulate land and water that is traditionally within the sole purview of the states, including wholly intrastate non-navigable ponds and wetlands as well as land over which water flows when it rains.” Congress intended to regulate water pollution with the CWA, not the quantity of flow nor wildlife habitat. EPA’s studies supporting the WOTUS rule, the brief continues, have no relevance to water quality in navigable waters, but to habitat studies and the role of ephemeral flows in recharging groundwater. Although “from a scientific standpoint, all water is connected…Congress did not grant the Agencies with limitless authority to regulate all water.”

On December 7, 2016, the Administration filed a brief in opposition to the Supreme Court petition for certiorari in National Association of Manufacturers v. Department of Defense, et al. The Administration argued that jurisdiction over the challenges to the EPA and Corps’ WOTUS Rule belong in the 6th Circuit, noting that five U.S. District Courts have concluded that they lack jurisdiction to review the rule. Additionally, the Administration argued that the 6th Circuit is “significantly far along the decisional path in resolving the challenges to the Clean Water Rule on the merits” and that any challenges to the 6th Circuit’s decision, including over jurisdiction, may be brought to the Supreme Court at the same time. On December 20, the National Association of Manufacturers (NAM) filed its reply, emphasizing that the CWA §1369 jurisdiction question “is a swamp that routinely mires challenges to CWA rules in inefficient, multi-court litigation over where the challenge belongs,” and is therefore an important question for Supreme Court review. NAM also pointed out the potential waste of taxpayer resources in continuing the 6th Circuit case, when President-Elect Donald Trump has promised to eliminate the WOTUS rule under his Administration.

On January 13, 2017 the U.S. Supreme Court granted certiorari in National Association of Manufacturers (NAM) v. Department of Defense. On March 6, 2017, the federal respondents filed a motion to hold the briefing schedule in abeyance due to the new Administration’s review of the WOTUS Rule. The motion was opposed by several other parties, and on April 3, 2017, the Supreme Court denied the motion.

On January 25, 2017, the 6th Circuit held the WOTUS cases in abeyance pending the Supreme Court ruling in NAM v. Department of Defense.

On April 3, 2017, the Supreme Court denied the Trump Administration’s request to stay proceedings on whether the 6th Circuit has jurisdiction to hear challenges of the WOTUS Rule. A hearing before the Court is expected to take place in October.

On April 27, 2017, several briefs were submitted to the Supreme Court in NAM v. Department of Defense, including NAM’s opening brief and a supporting amicus brief from 30 states. The parties request a reversal of the 6th Circuit’s decision that it has subject matter jurisdiction over the consolidated petitions. The briefs argue that the federal rule redefining the Waters of the United States (WOTUS) does not fall within the exclusive, original jurisdiction of the circuit courts of appeals under 33 U.S.C. §1369(b)(1), because the rule does not fit within one of the seven actions listed for judicial review. They oppose the federal argument that policy concerns for judicial efficiency should grant immediate appellate jurisdiction, noting the wisdom in allowing difficult issues to mature through full consideration by different courts. NAM pointed out that, “Stretching the text of §1369(b) past its breaking point to increase efficiency undermines the very purpose of the [law].”
**Case Names**

- Wyoming et al. v. Zinke, 10th Cir. #16-8068

**Relevant Dates**

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<td>3/20/15</td>
<td>Final Rule on hydraulic fracturing on federal land (80 FR 16128)</td>
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<td>3/26/15</td>
<td>Case filed (Plaintiffs: States of Wyoming, Colorado, and North Dakota, the Ute Indian Tribe, the Independent Petroleum Association of America, and the Western Energy Alliance)</td>
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<td>4/29/15</td>
<td>North Dakota intervenes 05/29/15: Wyoming and Colorado file Motion for Preliminary Injunction to halt the June 24 implementation of BLM’s hydraulic fracturing rule until the case is decided</td>
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<td>6/16/15</td>
<td>Utah intervenes 06/23/15: D. Wyo. issues temporary stay</td>
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<td>9/30/15</td>
<td>D. Wyo. issues nationwide preliminary injunction.</td>
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**Issue – BLM’s Hydraulic Fracturing Rule**

On March 20, 2015, the Department of the Interior finalized regulations to govern hydraulic fracturing on federal land. (80 FR 16128). State, tribal, and industry plaintiffs sued over the rule, arguing that the rule exceeds the BLM’s jurisdiction as limited by Congress under the 2005 Energy Policy Act, leading to the irreparable harm of an immediate loss of the states’ “exclusive sovereignty over hydraulic fracturing,” and that the rule is unnecessarily duplicative of state regulations.

On June 21, 2016 the U.S. District Court for Wyoming issued its decision, ruling that the DOI and BLM have no authority from Congress to regulate fracking on public and tribal lands. The Court explained that “regulation of an activity must be by Congressional authority, not administrative fiat.” The Court reviewed agencies’ sources of authority, noting that the provisions they cited merely: (1) dictated the terms of leases; (2) protected petroleum resources from the effects of water incursion and waste; and (3) required balanced management of the land to protect multiple uses and competing interests and prevent degradation of resources. The Court said none of the sources cited provided BLM with specific authority to regulate hydraulic fracturing or underground injections of any kind, nor did Congress delegate authority for environmental protection of underground water resources to BLM.

On June 24, BLM appealed the decision to the 10th Circuit. On August 19, bipartisan former officials from the Department of the Interior (DOI) filed an amicus brief in Wyoming et al. v. Jewel (10th Circuit), arguing that the Bureau of Land Management (BLM) has solid legal grounds for authority “to promulgate uniform rules to protect federal lands and natural resources from the risks posed by hydraulic fracturing.” The group asserts that the decision of the District Court of Wyoming threatens the ability of the DOI to fulfill Congress’ mandate to protect federal lands. They argue that Congress’ decision to remove fracking from U.S. Environmental Protection Agency’s (EPA) oversight under the Safe Drinking Water Act has no bearing on Interior’s long-standing authority over oil and gas activities on public lands that are under the stewardship of the federal government. The group relies on authorities granted by the Constitution’s Property Clause, “which grants Congress plenary authority over the land that the federal government superintends on behalf of all Americans,” as well as broad organic statutes, including the Mineral Leasing Act (MLA) and the Federal Land Policy and Management Act (FLPMA), which “grant the Department of the Interior broad authority to protect federal lands from injury caused by the activities of lessees of that land, including lessees who wish to conduct hydraulic fracturing operations on federal lands.”

On March 15, 2017 BLM filed a motion requesting the 10th Circuit to stay the case pending the outcome of new rulemaking efforts. The motion states that the BLM’s 2015 Final Rule does not reflect the policies and priorities of the new Administration, and that BLM expects to issue a notice of proposed rulemaking within 90 days, which would rescind the 2015 Final Rule. The Court postponed the oral arguments that were scheduled for March 22, but ordered supplemental briefing rather than staying the case for an indefinite period of time.

On May 5, 2017, BLM filed its supplemental brief requesting an abeyance during its new rulemaking efforts under its inherent power and the doctrine of prudential ripeness. BLM argues that it has the authority to make the rule and that Congress has never revoked that authority, but that the specific revisions of the rule “may no longer reflect BLM’s best judgment of how to exercise that authority.” BLM
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12/10/15: Agencies appeal the injunction
6/21/16: D. Wyo. issues ruling that agencies lack authority from Congress to create fracking rule
6/24/16: BLM appeals the D. Wyo. decision to the 10th Circuit
8/19/16: Bipartisan amicus brief from former DOI officials in support of BLM regulation

anticipated that its new Notice of Proposed Rulemaking would be published in the Federal Register by 6/13/17 (not available yet as of 6/16/17). “The United States does not wish to abandon its appeal and potentially forfeit any arguments in defense of its statutory authority. But there may be no need for the Court to decide whether BLM had statutory authority to promulgate the 2015 Rule, because BLM…may rescind the Rule.” The citizen group intervenors have no independent basis for standing to move the case forward “because a private party may not defend a government regulation that has been invalidated when the government chooses not to defend it.”

On June 5, the states of Colorado, North Dakota, Utah, and Wyoming, as well as the Ute Tribe, filed supplemental briefing in support of holding the appeals in abeyance until BLM advises the Court of the status of its reconsideration of the rule. Given that the rule was vacated by the District Court, and that the states exercise regulatory authority in the absence of the rule, they argue that the balance of harms weighs in favor of an abeyance. The states also agreed that the citizen groups have not yet shown that they have standing to pursue the appeal apart from BLM. North Dakota noted that if the enjoined rule is abandoned by BLM, the citizen groups would essentially be seeking an improper advisory opinion from the Court. The Ute tribe added that the citizen groups do not have standing with regard to Indian lands in any case. The tribe also pointed out that BLM does not have authority under FLPMA (or through the limited delegated enforcement authority from BIA) to make rules regarding Indian lands, either the enjoined rule or any new rule. The states emphasize that they do not agree with BLM that it has the authority to promulgate the rule.

BLM’s reply brief is due by 6/20/17.

*WGA’s energy resolution (#2013-09) recognizes that states have effectively regulated hydraulic fracturing and that “redundant federal regulation is not required.” (WSW #2019)

See prior summaries of the BLM Fracking Rule case through September 2016 in the St. George, Utah briefing binder, Tab M, September 2016, and through the end of February 2016 in the Washington, D.C. briefing binder, Tab N, March 2016

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<tr>
<td>New Mexico v. EPA et al., 1:16-cv-465</td>
<td>In May and August 2016, New Mexico and the Navajo Nation filed lawsuits in the U.S. District Court in New Mexico against the EPA and mining companies for injuries relating to releases of heavy metals and waste from the Gold King Mine and Sunnyside Mine, requesting relief under CERCLA, RCRA, CWA, and various tort claims. The two cases were consolidated in November 2016. EPA filed a Motion to Dismiss in February 2017, arguing (1) that CERCLA does not waive EPA’s sovereign immunity to suit when its sole connection to the site at issue arises from exercising its authority under CERCLA to respond to other entities’ legacy contamination; (2) that EPA does not fit the definitions of a liable party under CERCLA; and (3) that EPA is already engaged in remediation efforts, and that judicial review of those efforts is premature or prohibited, and that the parties have other means of participating in and commenting on the agency remediation process. Both New Mexico and the Navajo Nation have filed responses to EPA’s Motion to Dismiss, countering EPA’s arguments. They have also requested leave of the court to file amended complaints. As of May 24, 2017, the briefing is complete on EPA’s Motion to Dismiss and New Mexico and the Navajo Nation’s motions for leave to file an amended complaints.</td>
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<td>New Mexico v. Colorado (#220417)</td>
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<td>Navajo Nation v. EPA, 1:16-cv-931 (now consolidated with 1:16-cv-465)</td>
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On June 20, 2016 New Mexico filed a lawsuit in the U.S. Supreme Court against Colorado over responsibility for downstream contamination of New Mexico watersheds from the 2015 Gold King Mine spill, with similar CERCLA, RCRA, and tort claims. The CERCLA and RCRA statutes grant exclusive jurisdiction to U.S. District Courts, but the U.S. Supreme Court has exclusive jurisdiction over controversies between states under 28 USC §1251(a). New Mexico notes that this conflict of jurisdiction appears to be a matter of first impression for the Court. However, since its claims are intertwined with its EPA lawsuit, New Mexico suggested the Court consider referring the case to a Special Master for all discovery and pre-trial proceedings to conserve judicial resources and to ensure consistent pre-trial determinations in both lawsuits.

On October 21, 2016 Colorado filed its brief opposing New Mexico’s request for leave to file a complaint with the U.S. Supreme Court. Colorado notes that New Mexico’s basis for relief is that two Colorado agencies have regulatory authority over abandoned and inactive mines within the state. Colorado argues that Congress did not authorize the Supreme Court to hear state-verses-state actions under CERCLA RCRA, and that Congress never contemplated that states would be liable under those statutes for engaging in regulatory activities to reclaim abandoned and inactive mines and protect water quality. Colorado also argues that allowing New Mexico to file its complaint would convert the Supreme Court’s docket into a forum for interstate disputes regarding regulation of the countless number of potential sources of water pollution across the country. Colorado concludes by requesting that the Supreme Court either decline to exercise jurisdiction over the case, or allow Colorado to file a threshold dispositive motion to address New Mexico’s novel legal theories before the Court commits time and resources necessary to proceed with the case. On November 28, 2016, the Supreme Court invited the acting U.S. Solicitor General to file a brief in the case expressing the views of the United States.

On May 23, 2017, the United States filed its amicus curiae brief, arguing that New Mexico’s motion for leave to file a complaint be denied. The federal brief argues that the issue can be resolved in an alternative administrative forum and the court has substantial discretion to determine the practical necessity of original jurisdiction in the Supreme Court. The U.S. argues that the federal common law claims of public nuisance and negligence to address pollution have been displaced by the Clean Water Act (CWA). Rather than seeking more stringent discharge limitations in Colorado’s permit program through the court, the U.S. argues that New Mexico can petition EPA to withdraw Colorado’s authorization to administer its CWA program (33 USC §1342(c)). The brief also argues that CERCLA and RCRA provisions do not apply to Colorado, because it was not managing, directing, or conducting mine operations or disposing of hazardous substances under the meaning of the statutes. “Colorado’s cleanup activities at the Gold King Mine were an exercise of the State’s conventional police power…to address releases of hazardous substances caused by others.” In the alternative, the U.S. makes recommendations on resolving legal threshold issues and staying the case pending the resolution of New Mexico’s other consolidated Gold King Mine lawsuits in the district court, as the allegations are intertwined. “Given the substantial legal and factual overlap between the two actions, this Court would benefit from development and resolution of [these] issues in the district court, as well as the resolution of any appeal, which could be reviewed by this Court on a petition for a writ of certiorari.”

On June 6, 2017, New Mexico filed a response to the United States’ brief, arguing that Colorado’s “decade-long abdication of its regulatory duties” and active management and operation of the mining waste sites has served Colorado’s own economic and political interests at the expense of New Mexico’s sovereign interests, and subjects Colorado to the provisions of CERCLA and RCRA. New Mexico’s response notes that NPDES permits are not designed to deal with catastrophic events and ongoing pollution from abandoned mines. EPA has never withdrawn a state’s authority to administer the NPDES program “despite dozens of past requests to do so,” and even if it did, the result would likely be less environmental regulation and enforcement, contrary to the goals of New Mexico’s lawsuit. The recent Superfund designation--after nearly a decade of fighting EPA’s efforts, “ostensibly to protect local business interests and the property value of land and mine owners in Colorado”--does nothing to address the issue of actual economic and environmental harm and...
damages from the Gold King Mine spill. The response emphasizes that this leaves a gap that is central to New Mexico’s common law claims for relief. New Mexico also notes that the U.S. brief is biased and that its characterization of the issues is consistent with its arguments on behalf of EPA in the district court proceedings. New Mexico stresses that the Supreme Court’s exercise of original jurisdiction to address damages from interstate pollution is entirely proper and necessary, particularly “in this time of regulatory retrenchment…” and where the complaining state is powerless to prohibit the pollution.

For more information, see [http://www.scotusblog.com/case-files/cases/new-mexico-v-colorado/](http://www.scotusblog.com/case-files/cases/new-mexico-v-colorado/)

See previous summary of cases, including claims from each complaint, in the [St. George, Utah briefing binder, Tab M, September 2016](http://www.scotusblog.com/case-files/cases/new-mexico-v-colorado/).

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<th>Case Name</th>
<th>Issue – Rio Grande Compact</th>
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<td>Texas v. New Mexico and Colorado (#220141)</td>
<td>The state of Texas filed a lawsuit in the United States Supreme Court against the states of New Mexico and Colorado alleging that New Mexico is violating the 1939 Rio Grande Compact, which governs the distribution of Rio Grande water among the three states. New Mexico denies this allegation. The United States filed a motion to intervene on the grounds that the case affects the Department of Interior’s management of the Reclamation’s Rio Grande Project, its calculation of diversion allocations, and its responsibility to deliver water to intended Project beneficiaries and to Mexico pursuant to Treaty. New Mexico filed a motion to dismiss on the grounds that the language of the compact could not provide the relief requested by Texas, and that the United States is not a party to the Compact. The case was referred to Special Master in November 2014. Two political subdivisions (water districts supplied by and the sole direct beneficiaries of the Rio Grande Project) of New Mexico and Texas also sought to intervene on the grounds that they have compelling interest in the case not properly represented by their respective states.</td>
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<td>2/27/14: United States Motion to Intervene</td>
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<td>12/3/14: Elephant Butte Irrigation District Motion to Intervene</td>
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<td>4/22/15: El Paso County Water Improvement District No. 1 Motion to Intervene</td>
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<td>6/30/16: Status conference with the Special Master</td>
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<td>3/20/17: <a href="http://www.scotusblog.com/case-files/cases/new-mexico-v-colorado/">Special Master Report</a> received by the Supreme Court</td>
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<td>5/22/17: U.S. filed an Exception to the Report</td>
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On June 28, 2016, Special Master Gregory Grimsal issued the public draft of his first special report in Texas v. New Mexico (#220141). The draft report provides extensive historical context for the local, interstate, and international uses of and disputes over the Rio Grande, as well as attempts to resolve problems through treaty, compact and legislative efforts. The report makes recommendations to the U.S. Supreme Court on several preliminary motions, including: (1) denying New Mexico’s Motion to Dismiss Texas’ complaint, which alleges a claim under the text and structure of the compact; (2) rejecting the United States’ federal Reclamation claims as outside the interstate compact, but recommending that the Supreme Court exercise its discretion to hear the claims together since they impact the same project; and (3) denying the motions to intervene from the Elephant Butte Irrigation District and the El Paso County Water Improvement District No. 1, as both districts failed to satisfy the burden to establish compelling interests separate from the interests of New Mexico or Texas. On February 9, 2017, the Special Master submitted the First Interim Report with the same conclusions to the Supreme Court, officially received on March 20, 2017. The parties have until June 9, 2017, to file any Exceptions to the Report.


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<th>Case Name</th>
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<td>Crow Creek Sioux Tribe v. U.S., 1: 16-cv-760</td>
<td>On June 29, 2016 the Crow Creek Sioux Tribe filed suit in the U.S. Court of Federal Claims against the U.S. government, seeking damages of $200M for failure to fulfill its trust responsibilities, which include “refraining from self-dealing” and “providing accountings and consulting with the tribe about management of water resources on its reservation.” The tribe also sued for Fifth Amendment taking of the tribe’s water without just compensation. The complaint alleges that the U.S. has “squandered” the tribe’s water and ignored its reserved water rights in favor of non-Indian use, reclamation, urban development and consumption. Additionally, the U.S. has failed to</td>
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appropriately manage and protect the tribe’s water rights, “and has never attempted to even quantify or render an accounting of those rights.”

The U.S. government filed a 12(b)(1) jurisdictional Motion to Dismiss on the grounds that any breach of duty or taking of the tribe’s federal reserved water rights accrued five decades ago—with the authorization of the Pick-Sloan Plan and construction of the Big Bend and Fort Randall Dams—and that the claims are barred by the statute of limitations. The Tribe argued in response that the federal government’s duty to manage the Tribe’s natural resources is a continuing one, and that the breaches are accruing on a daily basis as the Corps of Engineers continues to manage water along the Missouri River with “diversions and releases of water for hydroelectric power, navigation, and other uses for the sole benefit of the Defendant and/or non-Indian uses.”

The Motion to Dismiss makes several arguments that the Tribe does not own particular molecules of water, only a right to use water, and that the Tribe cannot show “that the United States has taken some action that limits or prevents Plaintiffs from fully exercising its un adjudicated Winters doctrine rights,” particularly where the Tribe doesn’t allege that it has ever attempted to divert or use water from the Missouri River. “Plaintiff’s water right remains intact and the United States’ use of Missouri River water has [not] altered or diminished Plaintiff’s right to use that quantity of water necessary to fulfill the purposes of the reservation.” The U.S. added that there is no allegation that the flows of the Missouri River have been insufficient to meet the unquantified water rights, assuming the Missouri River ultimately becomes the Tribe’s primary or sole source identified to meet those rights. The Tribe countered that the U.S. is a trustee with a duty to preserve, assert, or defend the Tribe’s right to use the water, and instead of doing so, the U.S. has invaded that legally-protected interest by putting the water to its own use.

The U.S. government also argued that the Tribe cannot force it to devote its litigation resources to the quantification of the Tribe’s potential water rights claim to the Missouri River, noting that the Tribe may pursue water rights claims on their own behalf through an administrative adjudication or a congressionally approved settlement, but not through a federal lawsuit. The Tribe notes that accounting and quantification of the Tribe’s water rights are “merely incident of and collateral to a money judgment against the Defendant.”

On June 1, 2017, the case was dismissed for lack of standing and ripeness. The court noted that the U.S. trust responsibilities toward the tribe are robust, but general in nature, without requiring any specific action. “Absent statutory authority to direct the government to more affirmatively manage Indian natural resources, and absent an actual compensable injury, this court lacks jurisdiction to hear Crow Creek’s claim.” The court determined that opening discovery and pursuing expensive and time-consuming litigation to find evidence that the federal government has taken an amount of water that the Tribe could have used for another purpose would be a waste of both parties’ resources. “Damages for violation of Winters doctrine rights typically result from circumstances in which the Government’s diversion causes the tribes to experience a shortage of water needed for their reservations.” In this case, the Tribe did not point to an actual or imminent injury due to a shortage of water based on the diversions that have benefitted others. “The Tribe has not shown that it has a need for the water other than for its own consumption, or that the water it obtains pursuant to the Winters doctrine is insufficient for its intended purpose.” The court concluded that, at most, the Tribe’s efforts during the proposed discovery “could only establish the value of water that has been diverted from the Missouri River over a period of time. Such a value would not equate to damages suffered by the Tribe in the circumstances of this case.”
Tab V – State Reports
North Dakota

Legislative session has ended (they saved 3 of the days, so they could come back)

Estimated general fund revenue for the upcoming biennium is $4.6 billion, down from $6.0 billion approved during the 2015 session for the current biennium. The total budget for the biennium is $13.6 billion, down from $14.2 billion originally approved for the 2015-17 biennium.

HB 1020, the funding bill for the State Water Commission (SWC), includes a $298,875,000 appropriation from the Resources Trust Fund and Water Development Trust Fund plus a $75,000,000 line of credit, $50,000,000 of which will be utilized for projects that were committed in the 2015-2017 biennium and $25,000,000 for the upcoming 2017-2019 biennium. The total amount of money was allocated into four purpose funding buckets:

1. $120,125,000 for water supply projects;
2. $27,000,000 for rural water supply projects;
3. $136,000,000 for flood control projects; and
4. $15,750,000 for general water management.

HB 1390 – Subsurface drainage regulation is now wholly separate from surface drainage regulation. The State Engineer has no authority over subsurface drainage (other than to establish an application form). Local water resource districts are now the sole governing entity, but are extremely limited in their ability to regulate. Restrictions/denial of a permit only possible if within 30 days a downstream landowner within 1 mile presents “technical evidence” that the project will harm their property.

Legal Update – Jen Verleger argued the Wilkinson v. Land Board/State Engineer case before the N.D. Supreme Court on June 12. This case involves mineral ownership under a specific tract below the ordinary high watermark (OHWM) of the Missouri River, but could have broader implications for sovereign lands ownership and regulation, specifically with regard to how man-made structures impact the OHWM delineation.
• The Wyoming Department of Environmental Quality (DEQ) is proposing to add language to the Water Quality Rules and Regulations, Chapter 1, Wyoming Surface Water Quality Standards, to allow the Water Quality Administrator to grant temporary modifications to the water quality standards in circumstances where requirements to meet an ammonia and/or nutrient limit would result in substantial and widespread social and economic impacts (i.e. economic hardship). Such variances are provided for under the federal Clean Water Act.

• The State Engineer recently rejected a pipeline and reservoir permit application in southeastern Wyoming for the stated purpose of groundwater recharge. Reasons for rejection were (1) no unappropriated water in the source of supply, and (2) the proposed project could impair or conflict with existing rights. Both reasons above are premised on the fact that the surface and groundwater in this reach are so interconnected they constitute one source of supply. The decision is appealable.

• The western portion of Wyoming saw significant flooding on many rivers during June. Record or near record flood peaks were seen in the Snake River, Wind River and Green River drainages. Significant damage occurred in and around Riverton, Wyoming (Wind River) with most of the town narrowly missing being flooded.

• The State Engineer’s Office is reviewing comments received on a draft policy relative to the assignment of Wyoming’s pre-compact storage allocation in the Bear River basin. The state has 4,100 acre-feet of pre-compact storage that has yet to be assigned to a permitted use. These storage rights are exempt from storage restrictions when the basin is in storage regulation. A final policy is expected in July.

• The State Engineer recently modified the Horse Creek Order originally issued in the Horse Creek Basin relative to the administration of surface and ground water uses. The amended order keeps most restrictions in place, but increases the amount of groundwater allowed to be used for irrigation purposes. The basis for the modification was that all information pointed to underutilization of the groundwater resource during the last three years.

• The 2017 Wyoming Legislature changed the advertising and payment procedures for proofs of appropriations, including transfer of the burden of payment from counties to the appropriator. The office is now drafting emergency rules to allow the new regulation to go in to effect in early July.
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Tab XYZ – Sunsetting Positions for Fall 2017 WSWC Meetings (#372 - #377)
October 3, 2014

Tom Tidwell, Chief
U.S. Forest Service
1400 Independence Avenue
Washington D.C. 20250-1111

ATTN: Rob Harper
U.S. Forest Service
WFARP, 201 14th Street, SW
Washington D.C. 20250


Dear Chief Tidwell and Mr. Harper:

On behalf of the Western States Water Council, I am writing to comment on the proposed U.S. Forest Service’s (USFS) Proposed Directive on Groundwater Resource Management, published in the Federal Register for public comment on May 6 (FSM 2560). Attached to this letter are more specific comments. We appreciate the recognition of the importance of groundwater and the impact that USFS activities and USFS-permitted surface activities can have on this vital state resource, particularly in the West, where most USFS managed lands are located. Moreover, as any other landowner, we also recognize USFS authority to permit access to federal lands for lawful activities, including water resources development and operation of facilities to exercise state granted water rights.

While perhaps well intended, our member States have serious concerns over the lack of substantive state participation in the development of the directive, especially given that the States have primary, often exclusive authority, over the protection, development and management of waters within their boundaries, including surface waters arising on, and flowing across USFS lands, and groundwater below those lands. Groundwater is a state and not a federal resource. The problems that the directive may be intended to address are not apparent, nor is the protection of groundwater a primary USFS responsibility. Indeed, the U.S. Supreme Court held in California Oregon Power Co. v. Beaver Portland Cement Co., 295 U.S. 142 (1935), that states have exclusive authority over the allocation, administration, protection, and control of all non-navigable waters located within their borders.

We believe the USFS assertions of broad authority over groundwater and the potential interference with the lawful exercise of state water rights and permitted water uses on National Forest Service (NFS) lands are contrary to over 100 years of deference afforded state water laws by the Congress and the Supreme Court of the United States. Among other things, presumptive claims of any reserved right to groundwater are unsupported by legislation or opinions of the Court. Moreover, such claims are counterproductive and will only involve the USFS in extended litigation. Rather, USFS should partner with States to identify and address USFS needs. The existing compact between the State of Montana and USFS, as well as a Memorandum of...
Understanding between USFS and the State of Wyoming, may serve as appropriate options that may be emulated by USFS in other States. The Council and our federal partners have, working through our Western Federal Agency Support Team, also entered into continuing discussion on how best to fulfill legitimate federal water needs within state water law.

The directive to “apply federal reserved water rights to groundwater as well as surface water” is inappropriate and legally unsupportable as none of the USFS cited statutes and authorities mention groundwater, nor establish any basis to manage or allocate waters, nor reserve any federal rights to water. Further, no federal court has ever upheld a reserved right to groundwater. The U.S. Supreme Court in United States v. New Mexico, 438 U.S. 696 (1978) specifically denied USFS claims to implied reserved surface water rights claimed for fish, wildlife, and recreation uses and found that reserved rights made pursuant to the Act were limited to the minimum amount of water necessary to satisfy the “primary purposes” of the national forest reservation. These primary purposes include the production of timber and watershed protection to insure favorable surface water flows. Furthermore, the Court found that all other needs were secondary purposes that required state-issued water rights. The proposed directive cannot extend USFS authorities beyond the limits the Court has set. Even where reserved rights are recognized, the Congress has left it up to the States, under the McCarran Amendment, to quantify such rights in general state stream adjudications in state courts.

Limited USFS resources are already overextended, as evidenced by necessary “fire borrowing,” requiring careful consideration of national funding priorities. Even if it had the authority, the USFS is ill-equipped to undertake the extensive and costly processes and procedures that would be necessary to implement the directive. Moreover, much of the work the USFS envisions it would undertake or contract out would very likely duplicate existing capabilities of the States and other federal agencies.

Governors John Hickenlooper of Colorado and Brian Sandoval of Nevada, then Chair and Vice Chair of the Western Governors’ Association, wrote Secretary Tom Vilsack on July 2nd declaring, “Our initial review of the Proposed Directive leads us to believe that this measure could have significant implications for our states and our groundwater resources.” In an August 29th reply, Secretary Vilsack replied with an “open invitation to meet and discuss these directives.” The WGA and the Council are working closely together on this issue, and we would reiterate, as also stated in the Governors’ letter: “States are the exclusive authority for allocating, administering, protecting and developing groundwater resources…. This directive has significant negative federalism implications for the States.

We strongly urge you to take no final action on the directive until there has been an extended and extensive opportunity for USFS to work with our member States, the WGA, and the Council to identify and seek to resolve in a mutually acceptable manner the problems which the directive is intended to address. Notably, the directive mentions required consultation with the tribes, but not the States. We are prepared to enter into a substantive dialogue that would fulfill the requirements of Executive Order 13132 (“E.O.”) on Federalism. As stated therein, “One-size-fits-all approaches to public policy problems can inhibit the creation of effective solutions to those problems.” Sec. 2(f)

Moreover, the E.O. states: “National action limiting the policymaking discretion of the States shall be taken only where there is constitutional and statutory authority for the action and
the national activity is appropriate in light of the presence of a problem of national significance. Where there are significant uncertainties as to whether national action is authorized or appropriate, agencies shall consult with appropriate State and local officials to determine whether Federal objectives can be attained by other means.” Sec. 3(b)

The E.O. continues: “When undertaking to formulate and implement policies that have federalism implications agencies shall…where possible, defer to the States to establish standards; in determining whether to establish uniform national standards, consult with appropriate State and local officials as to the need for national standards and any alternatives that would limit the scope of national standards or otherwise preserve State prerogatives and authority….” Sec. 3(d)

Sec. 6 requires: “Each agency shall have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.”

We again request that the USFS enter into an authentic dialogue with the WGA, the Council, and the States towards achieving a mutually acceptable policy that reflects both the constitutional division of power and the on-the-ground realities of the West. The USFS should also recognize that a flexible and consistent state-by-state approach may be a more effective and more feasible way of addressing USFS needs than a national approach that does not account for the significant physical, hydrological, and legal differences that exist between the states. USFS should have consulted extensively with the States before publishing the proposed directive, and should now substantively engage the States, in order to define and remedy any perceived need to “clarify existing responsibilities and provide greater consistency and accountability….”

Thank you for your attention to our concerns, and we look forward to engaging in a productive dialogue with you and other USFS representatives.

Sincerely,

[Signature]

Patrick Tyrrell, Chairman
Western States Water Council
I. STATE PRIMACY OVER SURFACE WATER AND GROUNDWATER

The Congress and the U.S. Supreme Court have consistently recognized that states have primary authority and responsibility for the appropriation, allocation, development, conservation and protection of the surface water and groundwater resources. Congress has recognized States as the sole authority over groundwater since the Desert Land Act of 1877. Moreover, the Court held in California Oregon Power Co. v. Beaver Portland Cement Co., 295 U.S. 142 (1935), that states have exclusive authority over the allocation, administration, protection, and control of the non-navigable waters located within their borders.

While the proposed directive identifies States as “potentially affected parties” and recognizes States as having responsibilities for water resources within their boundaries, it does not adequately acknowledge the primary and exclusive nature of these responsibilities. Further, the proposed directive does not explain how it will ensure that it will not infringe upon state allocation and administration of water rights and uses for both surface water and groundwater. Consequently, the Council is concerned that the proposed directive could conflict with state water management and water rights administration.

First, the Council is concerned that the proposed directive will require the implementation of certain conditions and limitations as part of the approval or renewal of special use permits that may interfere with the exercise of state issued water rights. Such requirements may create a significant burden on existing surface water and groundwater right holders who need the special use permits to exercise their water rights and could limit or hinder the exercise of current and future rights as permitted by the States. For example, proposed conservation requirements could limit the full exercise of certain water rights. The proposal would also require special use permit holders to meter and report their groundwater use, which could be expensive and may run contrary to the laws of some states. Restrictions placed on injection wells, already regulated by state and federal laws, could affect groundwater recharge projects. These are just a few examples.

There is little information presented on the extent of groundwater use on USFS lands and the needs the directive is intended to address. Consequently, additional work is needed before adoption of the directive to better understand its implications for myriad projects and activities to ensure that the proposal does not impair the exercise of existing and prospective state granted water rights. The USFS should work with the state authorities, and state expertise and resources could help define the problem areas within the directive.

Second, the directive would require the USFS to evaluate all water rights applications on National Forest System (NFS) lands, as well as applications on adjacent lands that could adversely affect groundwater resources the USFS asserts are NFS groundwater resources. As any other landowner or water user, USFS has the right to participate in state administrative processes to ensure that USFS interests are represented. USFS may also condition activities on National Forest lands and permit land surface disturbances. However, to the extent that the directive purports to interfere with or limit the exercise of state granted groundwater rights and state water use permitting authorities on USFS lands, and particularly pertaining to uses on non-USFS property, the proposed directive is beyond the scope of the agency’s authority. The directive’s requirement could also impose an unnecessary burden on USFS staff and other resources, as
state water right administrators not only have exclusive water use permitting authority, but also have the expertise to evaluate any and all impacts on water resources and water users. The directive raises the possibility of USFS actions interfering with the exercise of valid pre-existing property rights to the use of state waters. It is inappropriate for the USFS to attempt to extend its administrative reach to waters and adjacent lands over which it has no authority.

Third, the proposal’s rebuttable presumption that surface water and groundwater are hydraulically connected raises another set of questions, including the standards and methods that may be used to rebut this presumption. In fact, groundwater and surface waters may or may not be hydrologically connected requiring extensive and expensive geohydrologic analyses, which the USFS is ill equipped to undertake on a large scale. Further, the management of groundwater and rights to the use of groundwater varies by state and is as much a legal question as it is a scientific question of connectivity. Moreover, if the USFS presumes to have authority to regulate groundwater uses, then their rebuttable presumption of a connection to surface water sources could lead to an unwarranted and contentious assertion of authority over surface water uses as well, which the U.S. Supreme Court has clearly rebuffed.

II. LEGAL BASIS OF THE PROPOSED DIRECTIVE

The Council has a number of questions about the legal basis for the proposed directive. While the proposal cites various federal statutes that it describes as directing or authorizing water or watershed management on NFS lands, it contains very little discussion or analysis of how these provisions specifically authorize the activities contemplated in the proposed directive. The proposal also does not address the limits of the USFS’s legal authority regarding water resources.

Instead of supporting the proposed directive’s activities, many of the authorities cited in the proposal support a more limited scope for USFS water management activities. For instance, none of the cited statutes mention groundwater specifically and many are primarily limited to the surface estate. Moreover, 16 U.S. Code Section 481 specifically provides that: “All waters within the boundaries of national forests may be used for domestic, mining, milling, or irrigation purposes, under the laws of the State wherein such national forests are situated….”

The Council is particularly troubled by language in the directive that would require application of the reserved water rights doctrine to groundwater. As noted in the Council’s attached position, the U.S. Supreme Court has recognized federal reserved rights to surface water, but no federal statute has addressed, nor has any federal court recognized, any federal property or other rights related to groundwater. Except as otherwise recognized under State water law, the Council opposes any assertion of a federal ownership interest in groundwater or efforts to otherwise diminish the primary and exclusive authority of states over groundwater.

It is also important to note that the U.S. Supreme Court narrowly interpreted the Organic Act, which the USFS cites as one of the legal justifications for the proposal, in United States v. New Mexico, 438 U.S. 696 (1978). Namely, the Court denied USFS claims to implied reserved surface water rights claims for fish, wildlife, and recreation uses and found that reserved rights made pursuant to the Act were limited to the minimum amount of water necessary to satisfy “primary purposes” of the national forest reservation, such as the conservation of favorable surface water flows and the production of timber. Furthermore, the Court found that all other
needs were secondary purposes that required state-issued water rights. Similarly, the Court’s other decisions regarding the reserved water rights doctrine have generally narrowed its scope by imposing “primary purpose” and “minimal needs” requirements. The proposal must ensure that it complies with the limits the Court has placed upon the recognition and exercise of implied federal reserved water rights.

Further, the assertion of reserved water rights in state general water rights adjudications and administrative proceedings can be contentious, time-consuming, costly, and counterproductive, often resulting in outcomes that do not adequately provide for federal needs. For this reason, different States and federal agencies have worked together to craft mutually acceptable and innovative solutions to address federal water needs. The State of Montana and USFS have entered into a compact that recognizes and resolves such needs. These types of negotiated outcomes are often much more capable of accommodating federal interests and needs and should be considered before asserting any reserved rights claims. At a minimum, the directive should require the USFS to consider alternatives to asserting reserved water rights claims, including those made in general state water rights adjudications and administrative proceedings.

III. THE LACK OF STATE CONSULTATION

The Council is especially concerned by the lack of state consultation in the development of the proposed directive and its assertion that it will not have substantial direct effects on the States, on the relationship between the federal government and the States, and the distribution of powers between the various levels of government. WSWC Position #371 (attached) notes that E.O. 13132 requires federal agencies to “have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.…”

As declared by the governors, the directive has the potential to significantly impact the States and their groundwater resources. Any federal action that involves the possible infringement on state water rights and the assertion of reserved water rights claims has, on its face, the ability to significantly impact state granted private property and water use rights, their administration, and state water management and water supply planning.

It is particularly perplexing that the USFS deems it necessary to consult with tribes under Executive Order 13175, but has determined that the States do not warrant similar consultation under Executive Order 13132. It is difficult to understand how the USFS will be able to carry out this proposal in coordination with the States, as the directive proposes, without robust and meaningful consultation with the States. Moreover, waiting until the public comment period to solicit state input, as the USFS has done in this instance, is dismissive and counterproductive. Timely and substantive discussions could have led to improvements in the directive before being proposed, recognized and incorporated State’s authorities and values, and avoided or minimized conflicts. The states should have been consulted much earlier in the development of this directive, especially given that it has apparently been under discussion for years.
IV. CONCLUSION

Secretary Vilsack’s letter to the Governors includes an invitation to meet and discuss the directive. The Council encourages a substantive dialogue with the States before the USFS takes any further action on this proposal. The Council is also ready to participate in a dialogue with the USFS to address questions and concerns raised herein regarding the proposed directive, as well as those raised by our member States in their comments, some of which have already been submitted.

We ask for your careful consideration of our concerns and those of our member States. We look forward to further dialogue with the USFS regarding this proposal, and hope the USFS will appropriately defer to the authority of the States to manage their groundwater and surface waters, as recognized by the United States Congress and the Supreme Court.
October 15, 2014

Gina McCarthy
Administrator
U.S. Environmental Protection Agency
William Jefferson Clinton Federal Building
1200 Pennsylvania Avenue, NW (1101A)
Washington, DC  20460

Jo Ellen Darcy
Assistant Secretary of the Army (Civil Works)
108 Army Pentagon
Washington, DC  20310-0108

Re:  Attention – Docket ID No. EPA-HQ-OW-2011-0880

Dear Administrator McCarthy and Assistant Secretary Darcy:

The Western States Water Council (WSWC), representing 18 western states on water policy issues, submits the following comments regarding the proposed rule the Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (the Corps) have developed to clarify the scope of Clean Water Act (CWA) jurisdiction. These comments are based on WSWC Policy #369 and prior WSWC letters and testimony regarding the development of this rule, which are attached and incorporated by reference.

Please note that the WSWC’s comments are applicable to all 11 sections of the Code of Federal Regulations (CFR) that are proposed for revision. However, for the purposes of this letter, the WSWC’s comments are keyed to the version of the definition of “Waters of the United States” that pertains to part 230.3 of the CFR and appears on pages 22,268-22,269 of the Federal Register notice dated April 21, 2014.

I.  WSWC POLICY #369

WSWC Policy #369 sets forth the unanimous, consensus position of the western states regarding federal efforts to clarify or redefine CWA jurisdiction. The WSWC urges EPA and the Corps to review this policy carefully and to incorporate its recommendations. Specifically, the WSWC urges EPA and the Corps to ensure that the rule:

A.  Gives as much weight and deference as possible to state needs, priorities, and concerns;

B.  Gives full force and effect to, and does not diminish or in any way detract from, the intent and purpose of CWA Sections 101(b) and 101(g);
C. Recognizes that Justice Kennedy’s “significant nexus” test in *Rapanos v. United States*, 547 U.S. 715 (2006), requires a connection between waters that is more than speculative or insubstantial to establish jurisdiction. The rule should also quantify “significance” to ensure that the term’s usage does not extend jurisdiction to waters with a de minimis connection to jurisdictional waters;

D. Complies with the limits Congress and the U.S. Supreme Court have placed on CWA jurisdiction, while providing clear and recognizable limits to the extent of CWA jurisdiction;

E. Specifically excludes water and features generally considered to be outside the scope of CWA jurisdiction, including:

1. Groundwater;
2. Farm ponds, stock ponds, irrigation ditches, and the maintenance of drainage ditches, as currently excluded under the CWA’s agricultural exemption;
3. Man-made dugouts and ponds used for stockwatering or irrigation in upland areas that are not connected to surface waters;
4. Dip ponds that are excavated on a temporary, emergency basis to combat wildfires and address dust abatement; and
5. Prairie potholes and playa lakes.

F. Acknowledges that states have authority pursuant to their “waters of the state” jurisdiction to protect excluded waters, and that excluding waters from federal jurisdiction does not mean that excluded waters will be exempt from regulation and protection.

More specific aspects of the WSWC’s policy are discussed in greater detail below.

II. **EPA’S CONNECTIVITY REPORT AND PUBLIC COMMENT EXTENSION**

While the WSWC appreciates the agencies’ decision to extend the public comment period for the rule, we note that the WGA requested in its August 27 letter (attached) an 89-day extension of the comment period. Such an extension would allow states to formulate thorough and thoughtful comments on the draft rule and its possible impacts, effects and implications, and also would allow for the review and consideration of the Science Advisory Board’s comments on EPA’s scientific report regarding the connectivity of differing waterbodies.

As stated in the WSWC’s November 5th letter (attached), “the overriding question in the rulemaking is not one of science, but of legal authority, namely the extent of federal authority
over water resources under Justice Scalia’s plurality opinion and Justice Kennedy’s concurring opinion in *Rapanos.*” Therefore, while it is important for the rule to be scientifically sound, the report should not be used to support a rule that improperly asserts that the scope of the CWA is unlimited.

III. STATE CONSULTATION AND IMPLEMENTATION OF THE RULE

The WSWC’s prior correspondence with EPA and the Corps expressed repeated concerns about the lack of significant state consultation in the development of the rule before its publication for public comment. While the WSWC remains concerned about the lack of state consultation in the rule’s development, it has since participated in a series of calls with EPA and the Corps after the rule’s publication for public comment. The WSWC appreciates your agencies’ willingness to speak with the WSWC about the rule during these calls. The WSWC also appreciates the efforts of EPA Region 8 Administrator Shaun McGrath and Region 8 Senior Advisor Joan Card in facilitating these discussions.

Nevertheless, there is still a significant need and opportunity for continued, sustained dialogue and consultation with the states in the revision and implementation of the rule, particularly on a state-by-state basis. Such consultation should treat states as co-regulators that are separate and apart from the general public, as envisioned by the CWA’s framework of cooperative federalism and as required by Executive Order 13132.

One way to facilitate continued dialogue and consultation with the states would be to establish a state-federal workgroup between EPA, the Corps, and the states as your agencies work to revise and implement the rule. Although such a workgroup would be unlikely to reach a consensus on every issue, it would help facilitate the types of dialogue, collaboration, and relationship-building needed to create a more workable and effective rule. One possible model could be the workgroup EPA established with the Environmental Council of States and the Association of Clean Water Administrators to discuss revisions to the National Pollutant Discharge Elimination System electronic reporting rule. Consensus is not necessarily sought but individual state participants discuss their individual views with the federal agencies. The WSWC would welcome the opportunity to help develop and participate in a similar workgroup to review the CWA rule.

IV. AREAS WHERE FURTHER CLARIFICATION IS NEEDED

The WSWC understands that the rule is intended to clarify the scope of CWA jurisdiction in light of recent U.S. Supreme Court decisions, particularly its *Rapanos* decision. However, as noted in the following subsections, further clarification is needed in a number of areas to realize this goal. The WSWC also believes that these areas represent an opportunity for your agencies and the states to work together in joint partnership as co-regulators, both on an individual basis and through the above-requested workgroup, to further refine the rule so that it will better accomplish its stated purpose of clarifying the extent of CWA jurisdiction.
A. Other Waters

As currently drafted, the rule states that jurisdictional determinations for so-called “other waters” will be made on a “case-specific basis,” provided that those waters “alone, or in combination with other similarly situated waters…located in the same region, have a significant nexus” to a traditional navigable water, interstate water, or the territorial seas.¹

While the rule and the related preamble are clear that other waters may be jurisdictional, the documents are less clear about how, when, or in which circumstances your agencies will perform case-by-case analyses to determine the jurisdictional status of these waters. This lack of clarity could be interpreted as implying that all other waters are potentially jurisdictional until EPA and the Corps determine otherwise at an indeterminate point in time. Such an implication has the potential to put landowners in limbo regarding the status of other waters located on their property and runs counter to the proposed rule’s stated purpose of increased clarity. It also requires landowners to prove a negative should they desire to develop their land, or risk the possibility of incurring fines and other penalties if your agencies subsequently determine that the water is jurisdictional.

Instead, the rule should ensure that the applicable permitting agency, such as the Corps for Section 404 jurisdictional determinations in most states, bears the burden of determining the jurisdictional status of other waters in a timely manner. To help achieve this goal, the rule should provide a specific deadline by which the applicable agency must make a jurisdictional determination for other waters after it receives a jurisdictional determination request from a landowner.

The WSWC urges your agencies to work with the WSWC and through the above-requested state-federal workgroup to determine a reasonable timeframe for jurisdictional determinations regarding other waters and to address any other issues associated with this proposal, including possible consequences and remedies in those situations where the permitting agency does not meet the specified deadline. The WSWC also proposes 180 days as an initial, possible starting point for discussions regarding the time period for your agencies’ other waters determinations.

B. Significant Nexus

As noted above, WSWC policy #369 states that federal efforts to clarify CWA jurisdiction should recognize that the “significant nexus” test Justice Kennedy set forth in Rapanos requires a connection between waters that is more than speculative or insubstantial to establish jurisdiction. The policy further states that federal CWA jurisdiction efforts should quantify “significance” to ensure that the term’s usage does not extend jurisdiction to waters with a de minimis connection to jurisdictional waters. While the WSWC appreciates language in the rule stating that effects to jurisdictional waters must be “more than speculative or insubstantial,” further work is needed to quantify the concept of significance, particularly the term “significantly

affects” in paragraph (u)(7), and to flesh out a transparent process for your agencies to use when making significance determinations.\(^2\)

To address this uncertainty, the WSWC believes the rule should use a specific, quantifiable measure or measures to determine significance rather than only stating that the water’s effect on another, jurisdictional water must be more than speculative or insubstantial. Under this proposal, waters that satisfy the specified measures would be presumed to have a significant connection to the waters identified in paragraphs (s)(1) through (3) of the rule, while waters that do not would be presumed to lack a significant connection. Under this general framework, parties could still provide evidence to rebut a presumption of significance or non-significance. Consequently, the use of specific, quantifiable measures would provide much needed clarity by providing a starting point for significance determinations.

The WSWC recognizes that further discussion between the states and your agencies is needed to develop the specifics of such a process, particularly in light of the considerable variety of hydrologic and geologic conditions that exist across the nation. As such, the WSWC urges your agencies to work with the WSWC and through the above-requested state-federal workgroup to identify and develop specific, quantifiable measures for determining significance consistent with the WSWC’s rebuttable presumption concept.

C. Agricultural Exemptions

The WSWC believes the CWA’s current agricultural exemptions are operating properly and that the rule should not alter or create unnecessary uncertainty about these exemptions. The WSWC understands that the rule is intended to preserve these exemptions, but the rule and the related interpretive rule regarding exempt activities under Section 404(f)(1)(a) have nevertheless created confusion and uncertainty about the scope and applicability of the CWA’s agricultural exemptions, as well as their interaction with state water quality programs.

Given this confusion, the rule should include language stating that:

“Nothing in this section shall be interpreted to limit or otherwise conflict with the exemptions set forth in 33 U.S.C. 1344(f) and in 33 C.F.R. 323.4 and 40 C.F.R. 232.3.”

In addition, the interpretive rule has created a significant amount of uncertainty concerning its possible implications for “normal farming, ranching, and silvicultural” activities. To resolve this uncertainty and to ensure that the current exemptions remain unchanged, your agencies should withdraw the interpretive rule, as the WSWC requested in its attached letter dated August 11, 2014. Notwithstanding the WSWC’s request that the rule be withdrawn, any effort to revise the rule should be done in joint partnership with the states, particularly to determine what constitutes exempt “normal farming, ranching or silvicultural activities.”

The WSWC stands ready to help facilitate further dialogue between your agencies and the western states to provide further clarity regarding the CWA’s agricultural exemptions. The

\(^2\) Id.
WSWC further believes that the above-requested state-federal workgroup could help ensure that the rule is revised and implemented in such a way that it fulfills your agencies’ stated goal of preserving the existing agricultural exemptions.

D. Groundwater

The regulatory reach of the CWA was not intended to be applied to the management and protection of groundwater. As such, the WSWC appreciates the rule’s exclusion of “groundwater, including groundwater drained through subsurface drainage systems.”3 Given the rule’s use of “shallow subsurface hydrologic connections” to establish jurisdiction between surface waters, the WSWC also appreciates the preamble’s statement that “nothing…would cause the shallow subsurface connections themselves to become jurisdictional.”4

However, once codified, the preamble language regarding shallow subsurface hydrologic connections will not be published in the CFR, leading to possible misinterpretations and confusion about your agencies’ intent and the jurisdictional status of such waters. Therefore, the WSWC requests that the groundwater exclusion in paragraph (t)(5)(vi) of the rule be amended to state as follows:

“Groundwater, including but not limited to groundwater drained through subsurface drainage systems and shallow subsurface hydrologic connections used to establish jurisdiction between surface waters under this section” (changes in italics).

E. Definitions Needed for Key Terms

The rule does not adequately define the following key terms: (1) shallow subsurface hydrologic connection; (2) bed and banks; (3) ordinary high water mark; and (4) uplands. Further consultation is needed between your agencies and the states to determine how to define these terms. The WSWC believes that the above-requested state-federal workgroup would provide a suitable forum for your agencies to work in partnership with the states to define these terms. In addition to these terms, further clarification is needed regarding the terms “floodplains” and “riparian” as used in the rule.

F. The Possibility for Unintended Consequences

The WSWC believes the programs operating under Sections 402 and 303 of the CWA are working as they should, and that much of the confusion involving CWA jurisdiction pertains to the 404 program. However, in striving to address the challenges involving Section 404, there is some concern that the rule could have related and unintended impacts to Section 402 and Section 303 programs. Where possible, EPA and the Corps should ensure that their efforts to address the current uncertainty regarding Section 404 through the development and implementation of the rule do not adversely affect other CWA programs. Additional and ongoing consultation with the

3 Id.
4 Id. at 22210.
states, particularly through the above-requested state-federal workgroup, will help minimize the potential for unintended consequences.

V. CONCLUSION

The WSWC appreciates the EPA’s and the Corps’ consideration of the above comments. As always, the WSWC stands ready to work with EPA and the Corps to support further dialogue and consultation between your agencies and the western states regarding this rule and any and all other issues involving the protection of our nation’s waters.

Sincerely,

Patrick T. Tyrrell, Chairman
Western States Water Council

Enclosures
RESOLUTION of the WESTERN STATES WATER COUNCIL regarding The Dividing the Waters Program Scottsdale, Arizona October 10, 2014

WHEREAS, the Dividing the Waters Program of the National Judicial College has served western judges overseeing complex water litigation for more than 20 years, providing information and training resources on water law and water conflicts to state, tribal, and federal judges; and

WHEREAS, five judicial officers with extensive experience in water adjudication lead Dividing the Waters for the benefit of their colleagues in the judiciary, making it a program by judges for judges; and

WHEREAS, the Program includes participating judicial officers from 12 western states who adjudicate a wide range of water cases, from statewide water right adjudications to conflicts over endangered species and water quality; and

WHEREAS, Dividing the Waters has received funding from public interest foundations for 22 years but foundation funding for education programs has dwindled in recent years and its current funder, the Stephen J. Bechtel Foundation, closes its doors at the end of 2016; and

WHEREAS, it is in the interest of the executive branch water agencies of the western states to ensure that the judicial officers who adjudicate water cases in their states have an understanding of the fundamentals of western water law and the latest information on water adjudication; and

WHEREAS, the recent recession has resulted in limited state funding for judicial branch education in many states, particularly for water and related natural resource topics; and

WHEREAS, Dividing the Waters provides a critical link between the executive branch water agencies and the judicial branch that adjudicates water conflicts in the western states;

NOW, THEREFORE, BE IT RESOLVED, that the Western States Water Council supports Dividing the Waters and urges public interest foundations and other interested entities to provide funding for the program.
RESOLUTION
on the
FEDERAL GOVERNMENT’S ROLE IN EXPEDITING
STATE GENERAL STREAM ADJUDICATIONS
Scottsdale, Arizona
October 10, 2014

WHEREAS, the western states use general stream adjudications to quantify and document relative water rights within basins, including rights to waters claimed by the United States under either state or federal law; and

WHEREAS, general stream adjudications give certainty to water rights, provide the basis for water right administration, reduce conflict over water allocation and water usage, and incidentally facilitate important market transactions for western water rights; and

WHEREAS, Congress recognized the benefits of state general adjudication systems when it adopted the McCarran Amendment (43 U.S.C. §666), which requires the federal government to submit to state court jurisdiction for the adjudication of its water right claims; and

WHEREAS, adjudications typically involve hundreds or even tens of thousands of claimants, and federal water right claims are typically the largest, most complex, and costly to resolve; and

WHEREAS, the United States Supreme Court held in United States v. Idaho, 508 U.S. 1 (1992), that the McCarran Amendment does not require the United States to pay the filing fees that many states use to help fund adjudications; and

WHEREAS, the Court’s holding shifted much of the costs of adjudicating federal claims in many states to private water users and state taxpayers, draining state resources and significantly inhibiting the ability of both state and federal agencies to conduct adjudications in a timely manner, threatening private and public property interests; and

WHEREAS, requiring federal agencies to pay filing and other fees and follow the same procedures as all other water right claimants would help ensure that their claims are legitimate and made in good faith;

NOW THEREFORE BE IT RESOLVED that the Western States Water Council recommends policy changes at the federal level as follows:

1. As a matter of policy, federal agencies should pay a fair share of the costs associated with adjudicating their claims in state adjudications. The federal government has discretion to adopt such a policy as a matter of fairness, even though not presently required to do so by law. Federal payment of filing fees was a common practice prior to the Court’s United States v. Idaho decision.

2. General stream adjudications pursuant to the McCarran Amendment should be brought in state and not in federal court. Actions brought in federal court divert substantial resources from state adjudications and are contrary to the intent of the McCarran Amendment.

3. There must be high-level federal involvement in negotiations and mediation that often occur with regard to federal claims within the context of ongoing adjudications in order to be effective. Experience has shown that without the involvement of federal participants who have the authority
to make decisions, achieving agreements can be illusory and delay mutually beneficial outcomes. Policy direction must be provided by the relevant federal agencies.

4. Federal agencies should be given policy direction to ensure that federal claims filed in state adjudications have a sound basis in fact and law. States continue to encounter questionable claims that can be very costly to evaluate, thus diverting limited state resources from completing general stream adjudications, and which are ultimately of no benefit to the United States.

5. Federal agencies should place a higher priority on educating their leaders and applicable staff regarding western water rights. Leadership and staff for some federal agencies often have an incomplete understanding of the nature of their claims, the processes needed to resolve them, and state water law, which can result in federal actions and policies that hinder or delay the adjudication process or infringe on state authority and water management. Educating federal leaders and staff regarding western water rights will improve federal participation in the adjudication process, thereby improving the process as a whole.

6. Federal agencies should consult with states before asserting water rights claims. Federal water rights claims, particularly reserved water rights claims, can be contentious, time-consuming, costly, and counterproductive, often resulting in outcomes that do not adequately provide for federal needs. States and federal agencies have worked together to craft mutually acceptable and innovative solutions to address federal water needs that are often more capable of accommodating federal interests. At a minimum, federal agencies should consult with states to consider alternatives before filing reserved water rights and other claims in adjudications.

7. Requiring the federal government to provide whatever evidence it may have to substantiate its claims at the time of filing would ensure that federal claims have a sound basis in fact, and also would facilitate timely review of those claims. Given the complexity and the contentiousness involving such claims, states are justified in asking the federal government to take this step. Doing so will expedite the process by: (1) minimizing the filing of questionable claims; and (2) providing a basis for states to ascertain early on the level of resources that states need to commit to the investigation of such claims.

(See also Positions #247, #272(a-b), #308 and #335)
Originally adopted October 9, 2002
Reaffirmed October 21, 2005, October 17, 2008, October 7, 2011
RESOLUTION
of the
WESTERN STATES WATER COUNCIL
in support of
INDIAN WATER RIGHTS SETTLEMENTS
Scottsdale, Arizona
October 10, 2014

WHEREAS, the Western States Water Council, an organization of eighteen western states and adjunct to the Western Governors’ Association, has consistently supported negotiated settlement of disputed Indian water rights claims; and

WHEREAS, the public interest and sound public policy require the resolution of Indian water rights claims in a manner that is least disruptive to existing uses of water; and

WHEREAS, negotiated quantification of Indian water rights claims is a highly desirable process which can achieve quantifications fairly, efficiently, and with the least cost; and

WHEREAS, the advantages of negotiated settlements include: (i) the ability to be flexible and to tailor solutions to the unique circumstances of each situation; (ii) the ability to promote conservation and sound water management practices; and (iii) the ability to establish the basis for cooperative partnerships between Indian and non-Indian communities; and

WHEREAS, the successful resolution of certain claims may require “physical solutions,” such as development of federal water projects and improved water delivery and application techniques; and

WHEREAS, the United States has developed many major water projects that compete for use of waters claimed by Indians and non-Indians, and has a responsibility to both to assist in resolving such conflicts; and

WHEREAS, the settlement of Native American water claims and land claims is one of the most important aspects of the United States’ trust obligation to Native Americans and is of vital importance to the country as a whole and not just individual tribes or States; and

WHEREAS, the obligation to fund resulting settlements is analogous to, and no less serious than the obligation of the United States to pay judgments rendered against it; and

WHEREAS, Indian water rights settlements involve a waiver of both tribal water right claims and tribal breach of trust claims that otherwise could result in court-ordered judgments against the United States and increase costs for federal taxpayers; and

WHEREAS, current budgetary pressures and legislative policies make it difficult for the Administration, the states and the tribes to negotiate settlements knowing that they may not be funded because either they are considered earmarks or because funding must be offset by a corresponding reduction in some other expenditure, such as another tribal or essential Interior Department program;
NOW, THEREFORE, BE IT RESOLVED, that the Western States Water Council reiterates its support for the policy of encouraging negotiated settlements of disputed Indian water rights claims as the best solution to a critical problem that affects almost all of the Western States; and

BE IT FURTHER RESOLVED, that the Western States Water Council urges the Administration to support its stated policy in favor of Indian land and water settlements with a strong fiscal commitment for meaningful federal contributions to these settlements that recognizes the trust obligations of the United States government; and

BE IT FURTHER RESOLVED, that Congress should expand opportunities to provide funding for the Bureau of Reclamation to undertake project construction related to settlements from revenues accruing to the Reclamation Fund, recognizing the existence of other legitimate needs that may be financed by these reserves; and

BE IT FURTHER RESOLVED, that Indian water rights settlements are not and should not be defined as Congressional earmarks; and

BE IT FURTHER RESOLVED, that steps be taken to ensure that any water settlement, once authorized by the Congress and approved by the President, will be funded without a corresponding offset, including cuts to some other tribal or essential Interior Department program.

(See also Nos. 250, 275, 310, and 336)
Originally adopted March 21, 2003
Revised and reaffirmed Mar 29, 2006, October 17, 2008, and October 7, 2011
WHEREAS, ground water is a critically important natural resource, especially in the mostly arid West; and

WHEREAS, ground water management – the protection of its quality and its orderly, rational allocation and withdrawal for beneficial use – requires cooperation among all levels of government; and

WHEREAS, states recognize the importance and role of comprehensive ground water planning in overall water management; and

WHEREAS, the federal government has a longstanding policy of deferring to the states to develop and implement ground water management and protection programs; and

WHEREAS, most western states have legal systems to allocate ground water rights and further have the responsibility for ground water quality protection; and

WHEREAS, the regulatory reach of the Clean Water Act was not intended and should not be applied to the management and protection of ground water resources contravening state water law, policies and programs; and

WHEREAS, nothing stated in this position is intended to apply to the interpretation or application of any interstate compact;

NOW THEREFORE BE IT RESOLVED that any federal ground water quality strategy must recognize and respect state primacy, reflect a true state-federal partnership, and provide adequate funding consistent with current federal statutory authorities.

(See also Nos. 215, 230, 249, 274, 309, and 337
Originally adopted March 14, 1997
Revised and Reaffirmed: