

A photograph of a USGS streamflow gauge installed in a river. The gauge is a metal box with a solar panel and a USGS logo. In the background, there is a river, a forested hill, and a rainbow in the sky.

US Geological Survey Streamflow Information Program

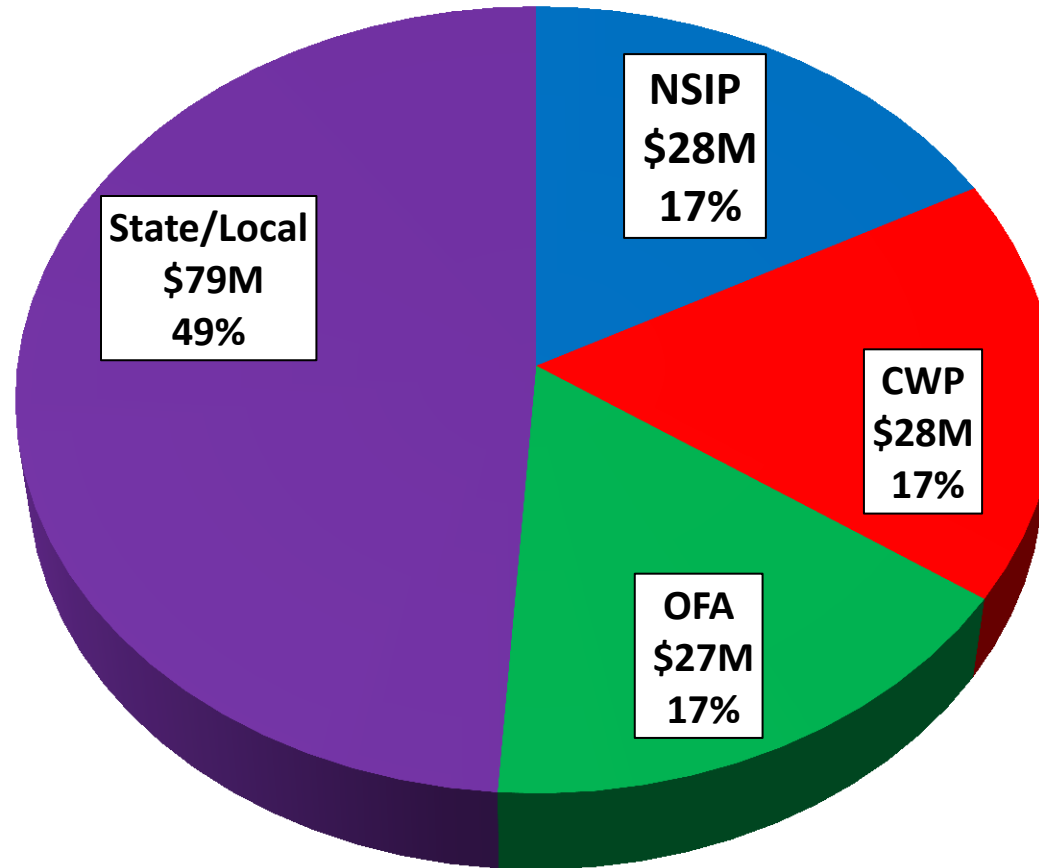
Western States Water Council
Meeting 07/17/2014

Streamgange Network Budget

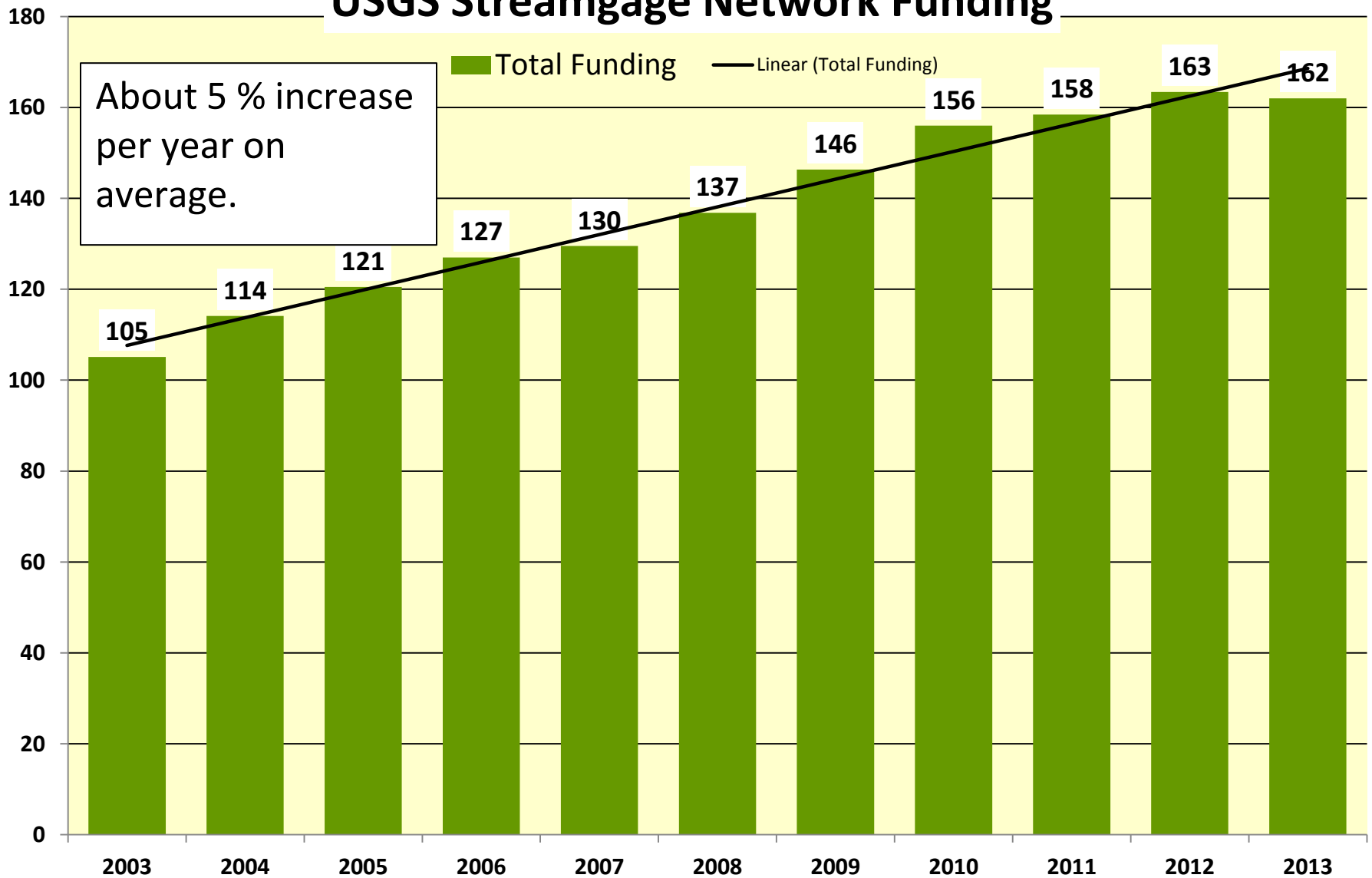
- National Streamflow Information Program and the Cooperative Water Program
- Historical
- Present
 - NSIP Review Team's Recommendations Affecting WSC Budget Expenditures
 - Status of the NSIP
- Future



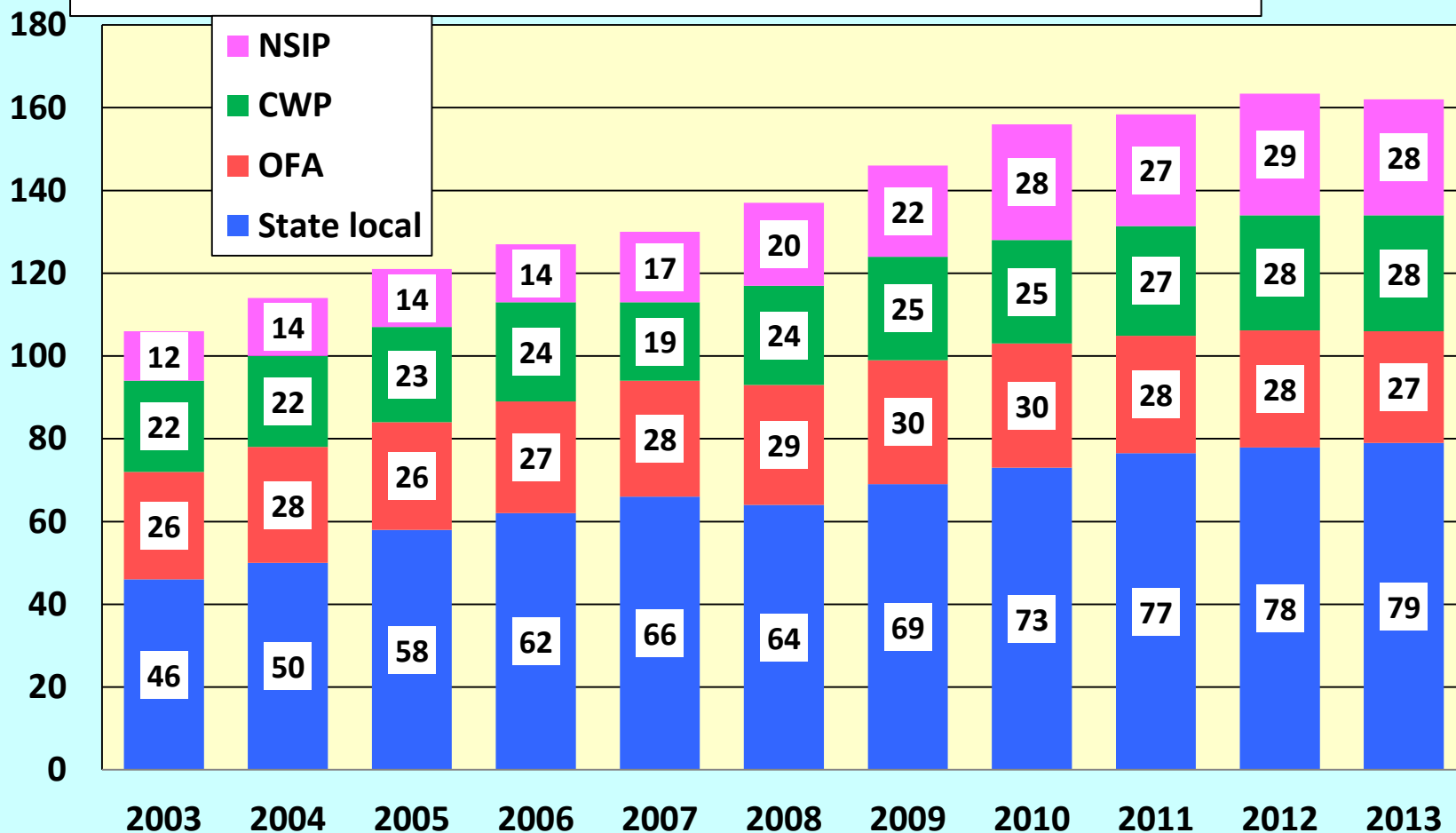
USGS Streamgauge Network Funding, FY 2013 \$161.5M



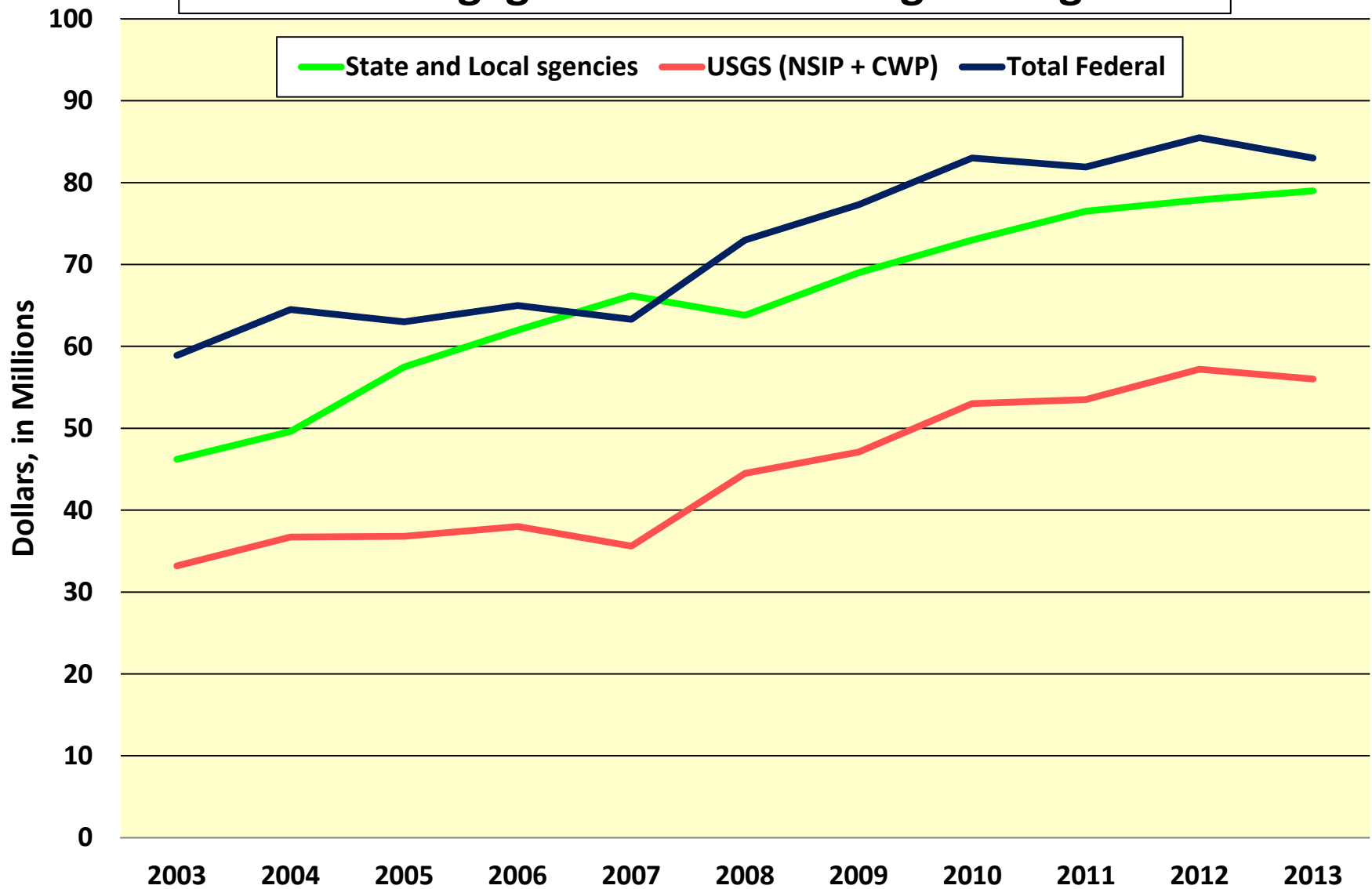
USGS Streamgauge Network Funding



USGS Streamgauge Network Funding Through Time 2003 – 2013 (In \$Million)

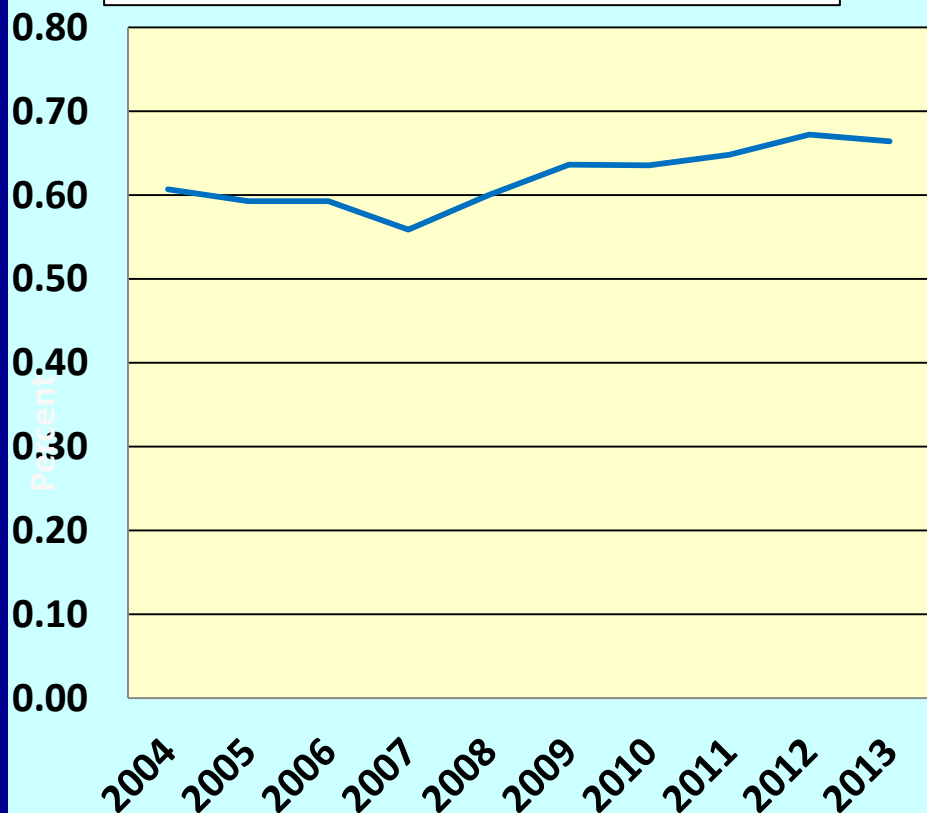


USGS Streamgage Network Funding Through Time

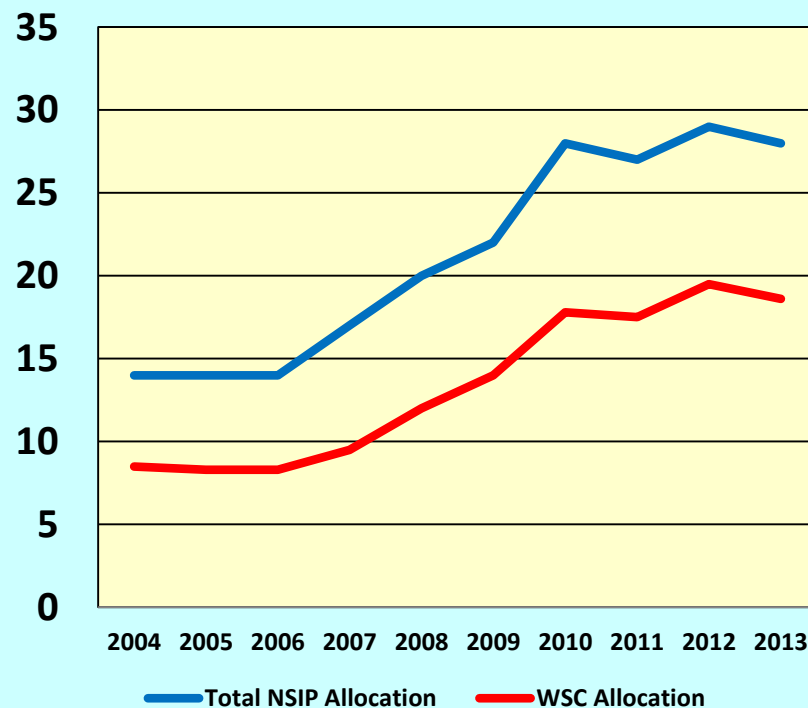


NSIP Funds to Water Science Centers

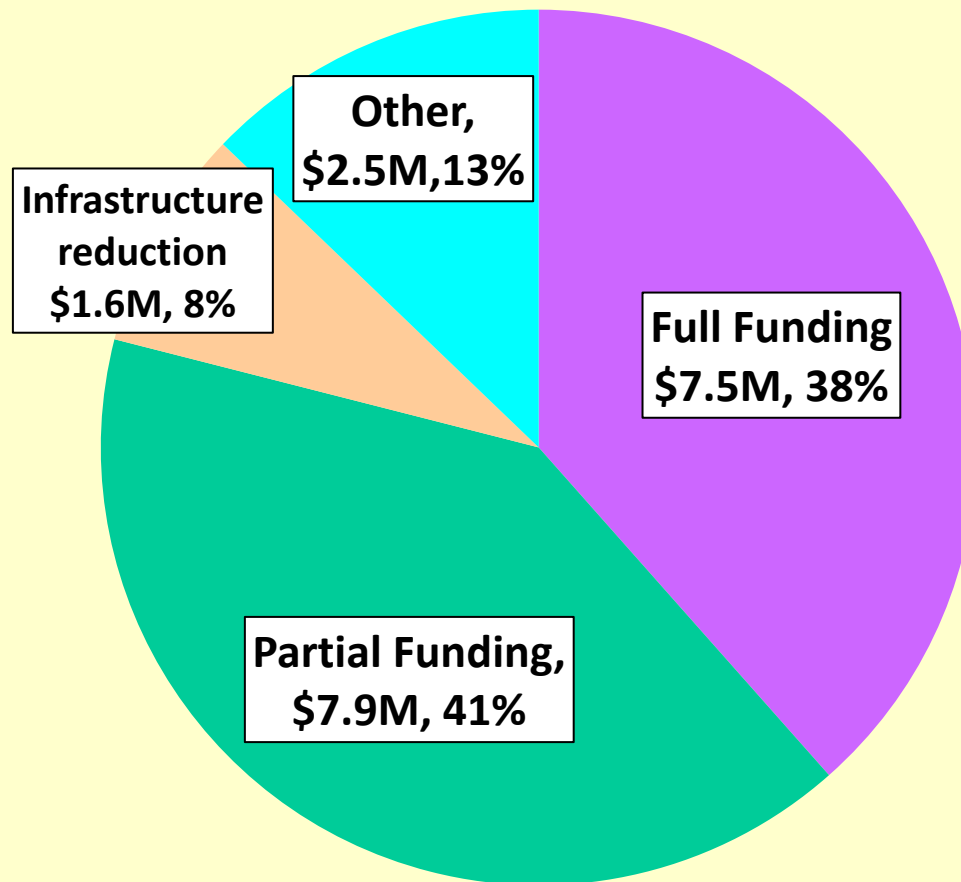
Percent Total NSIP Allocation Distributed to Water Science Centers



Total NSIP and WSC Allocation by Year
In Million Dollars



2012 Water Science Center Reported Use of NSIP Funding Allocation



NSIP Review Team's Recommendations that Impact Funding

- ❖ WSCs to allocate future NSIP increases towards streamgage O&M only.
 - ❖ Not for infrastructure/overhead
- ❖ WSCs to allocate future NSIP increases towards fully funding NSIP designated streamgages.
 - ❖ No small amounts to optimize the number of streamgages in operation.



NSIP Review Team's Recommendations that Impact Funding

- ❖ WSCs will provide an annual “top ten” streamgages to the NSIP PC.
- ❖ Regional assessments - experts team be established to define NSIP regional assessments and priorities.
 - ❖ 1 – 2 FTEs at current funding level

NSIP Review Team's Recommendations that Impact Funding

❖ Flood and droughts

❖ Flat or increasing funding

- ❖ Collect low flow data at planned NSIP streamgages to provide spatial definition and to have data at NSIP streamgages when starts.

❖ Tribal lands

❖ Overlooked in NSIP design

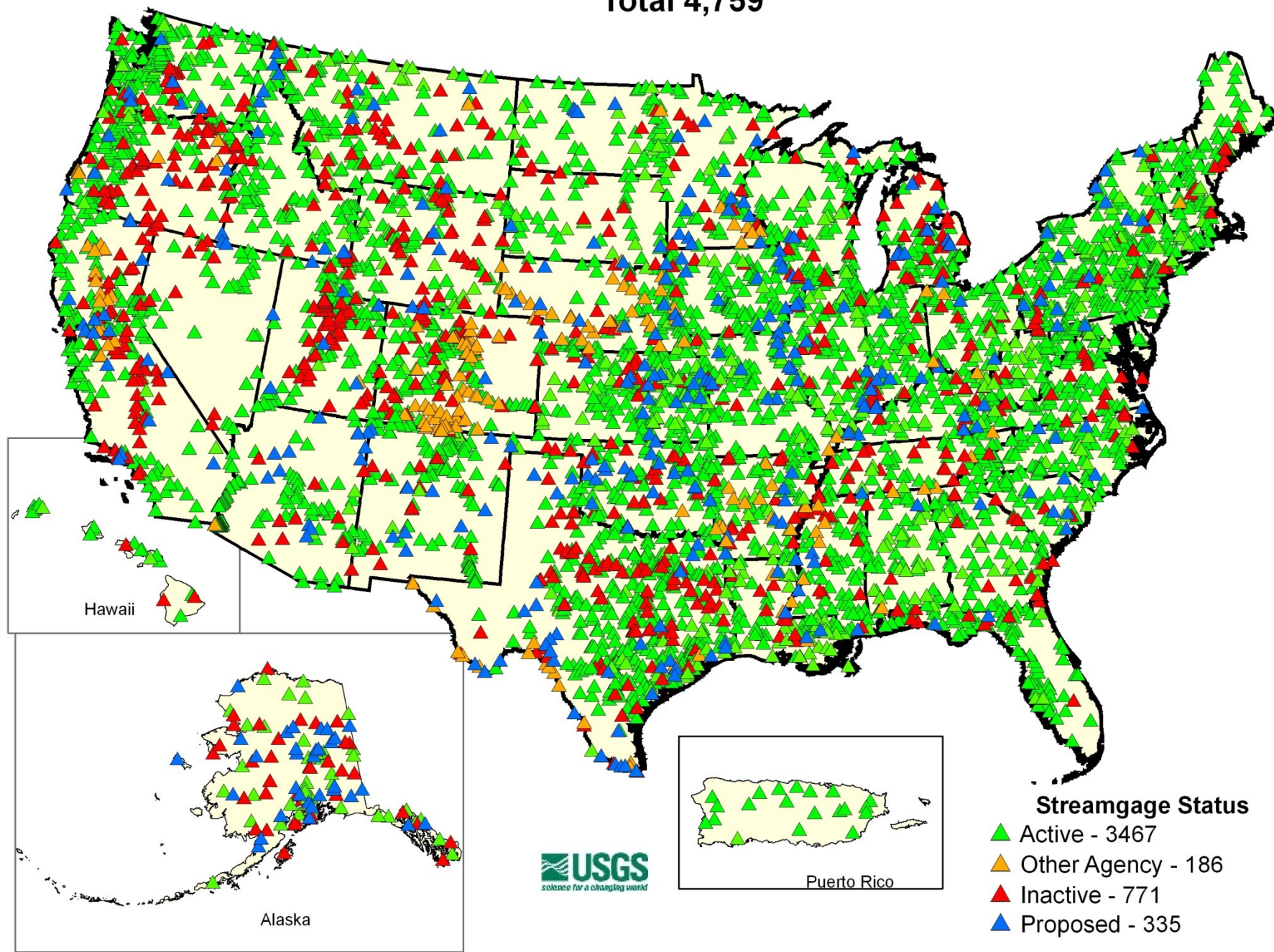
❖ Team recommends adding to the NSIP network

- ❖ Would add about 50 streamgages to NSIP network

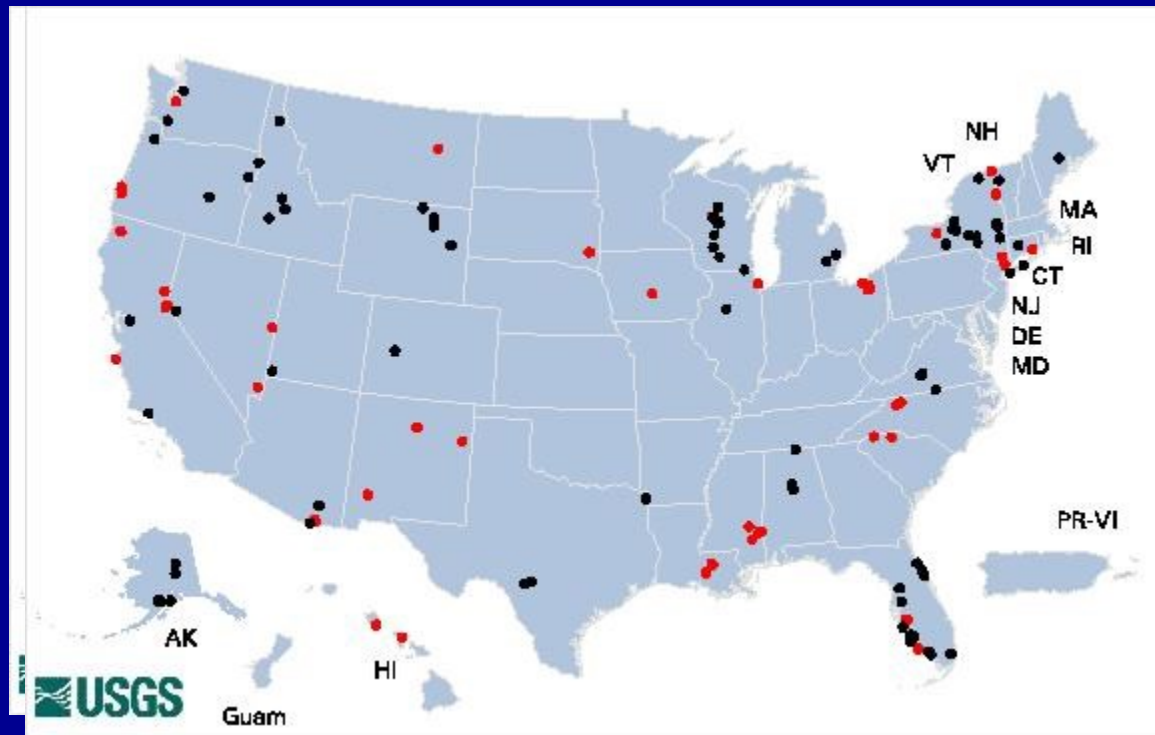


Status of USGS National Streamflow Information Program Streamgages

Total 4,759



Threatened/Endangered Streamgages (red) and Recently Discontinued Streamgages



http://streamstatsags.cr.usgs.gov/ThreatenedGages/ThreatenedGages_str.html

NSIP Federal Need Streamgange Prioritization Process

Highest priority, based on number of Federal needs met
Compacts and Decrees Federal Need—.

Numeric assignment:

- 20 if single need met;
- 21 if 2 needs met
- 22 if 3 needs met;
- 23 if 4 needs met
- 25 if 5 needs met

Forecasting Federal Need

Numeric assignment:

- 7 if single need met;
- 9 if 2 needs met but not Sentinel
- 10 if 2 needs met, one is a Sentinel;
- 12 if 3 needs met but one not a Sentinel;
- 13 if 3 needs met, one is a Sentinel
- 14 if 4 needs met.

Sentinel Federal Need

Numeric assignment:

5 if single need met;

7 if 2 needs met

8 if 3 needs met;

Major Basins plus Borders Federal Need

Numeric assignment

3 if single need met;

5 if 2 needs met

Water Quality Federal Need

- One streamgage had 23 points – Colo River near Colo – Utah State line (09163500)
- 18 streamgages had 22 points – 16 in WSWC states, all active, 11 of the 19 fully NSIP funded.
- 151 with 21 points, 139 active, 59 fully funded

Top 20 Percent Prioritized NSIP Streamgauge Status and Comparison

		Top 20 Percent Highest Ranking NSIP Streamgages							
	Planned			No. 20%					
	NSIP	No. 20%	Average	Streamgages	Percent Top	Highest	No. Full	No. Partial	No. Zero
State	Streamgages	Streamgages	Ranking	Active	20% Active	Ranking	NSIP Funded	NSIP Funded	NSIP Funded

All States

Total	4756	954	565	880		792	369	236	286
Average	93.3	18.7	11.1	17.3	0.92	15.5	7.4	4.7	5.7

WSWC Only States

Total	2676	535	253	489		354	242	74	163
Average	148.7	29.7	14.1	27.2	0.92	19.7	14.2	4.4	9.6

WSWC Top 20 Percent Highest Ranking NSIP Streamgages

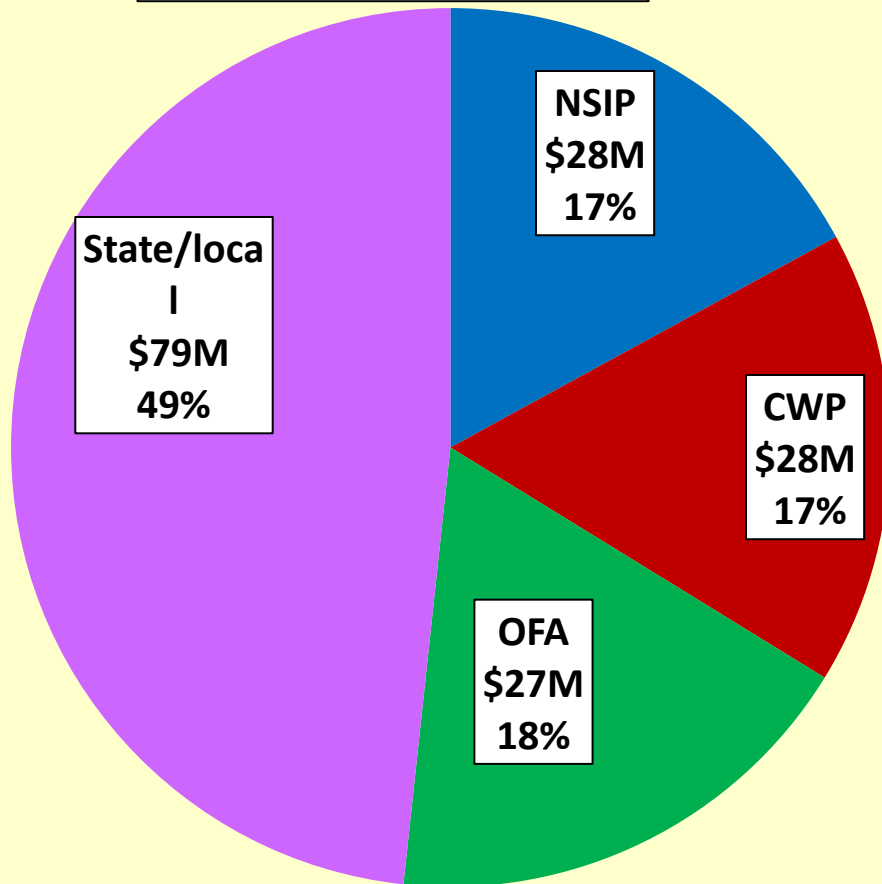
	Planned			No. 20%						
	NSIP	No. 20%	Average	Streamgages	Percent Top	Highest	No. Full	No. Partial	No. Zero	Percent Top
	Streamgages	Streamgages	Ranking	Active	20% Active	Ranking	NSIP Funded	NSIP Funded	NSIP Funded	20 NSIP Funding
AK††	127	25	10	19	0.76	13	14	3	2	0.68
AZ	140	28	20	25	0.89	21	11	6	1	0.61
CA	218	44	8	40	0.91	13	32	0	8	0.73
CO	210	42	21	40	0.95	23	26	7	7	0.79
ID	110	22	10	22	1.00	12	9	2	11	0.50
KS	188	38	10	33	0.87	21	27	5	6	0.84
MT	157	31	17	24	0.77	22	5	2	24	0.23
NE	117	23	15	23	1.00	21	10	6	7	0.70
ND	63	13	12	12	0.92	22	4	4	5	0.62
NM	115	23	21	22	0.96	22	9	9	5	0.78
NV	55	11	11	10	0.91	21	3	3	5	0.55
OK	128	26	19	25	0.96	22	3	12	11	0.58
OR	182	36	9	32	0.89	13	15	7	14	0.61
SD	60	12	12	12	1.00	21	3	2	7	0.42
TX	430	86	10	79	0.92	22	43	3	32	0.53
UT	138	28	17	28	1.00	22	19	0	9	0.68
WA	131	26	10	26	1.00	21				0.00
WY	107	21	21	17	0.81	22	9	3	9	0.57
Total	2676	535	253	489		354	242	74	163	
Average	148.7	29.7	14.1	27.2	0.92	19.7	14.2	4.4	9.6	0.58



Consequences of a Fully Funded NSIP to Funding Partners

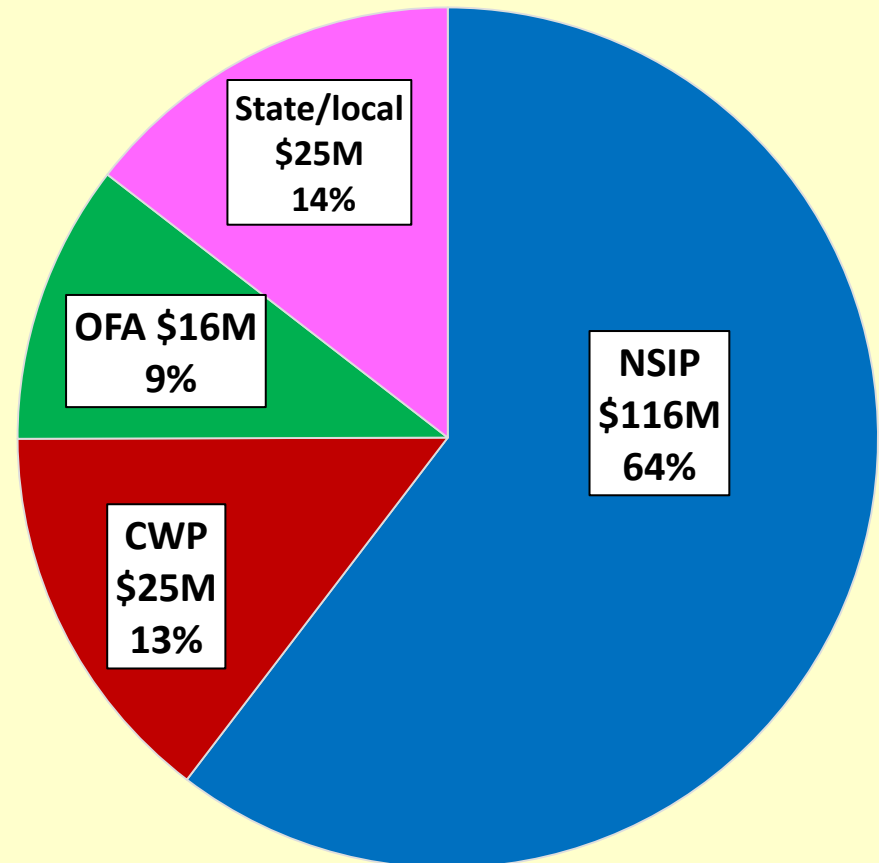
NSIP Funding 2013

\$161M, 8000 Streamgages



NSIP Fully Funded

\$182M, 9660 Streamgages

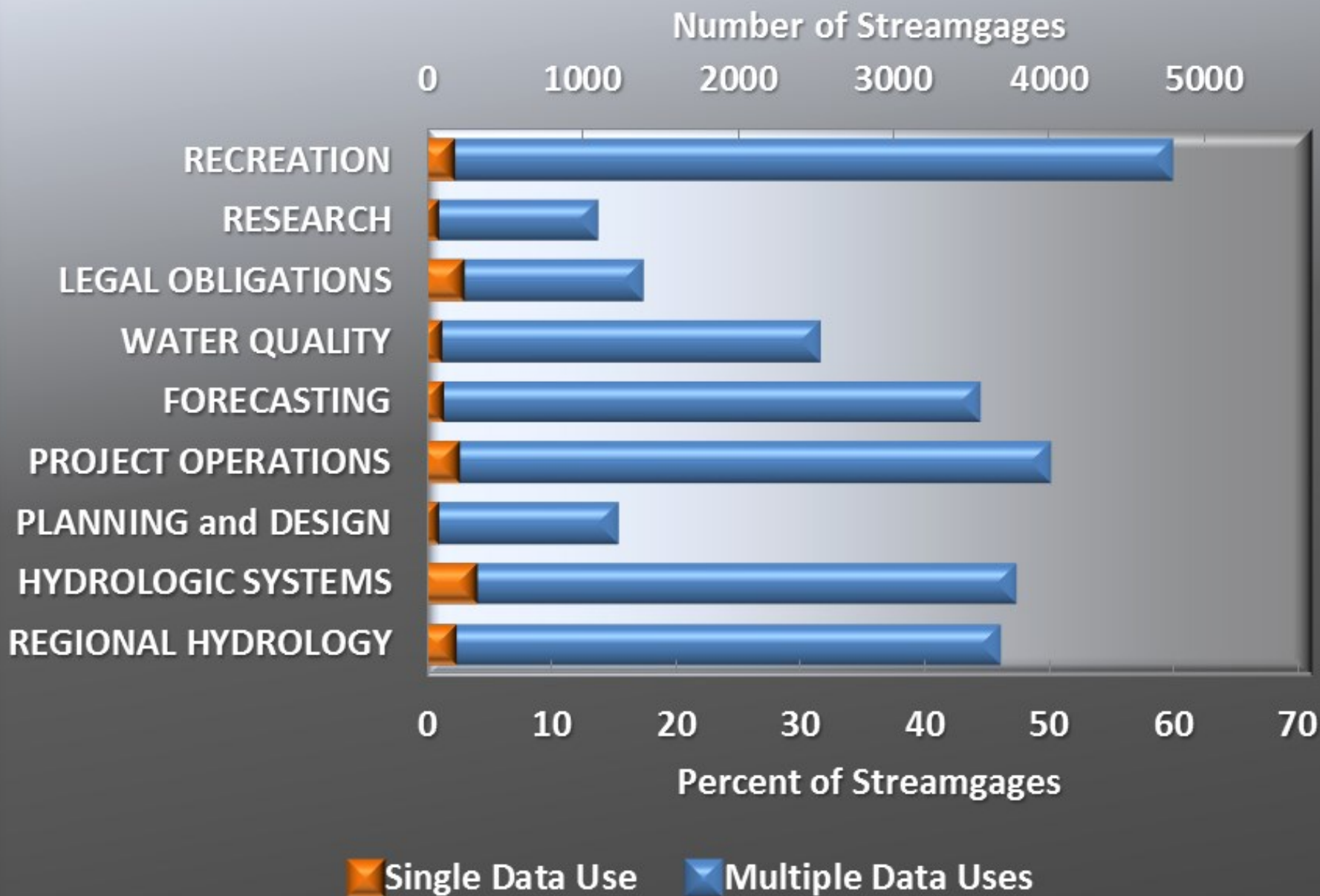


	One Time NSIP Investment	Annual NSIP Investment	Fixed Cost Savings (40%)	Existing Streamgage	Total Partner Savings/Year
Alaska	4,181,400	3,610,340	360,670	381,480	742,150
Arizona	1,722,100	3,113,000	493,120	691,200	1,184,320
California	5,478,700	10,111,580	3,940,950	1,185,480	5,126,430
Colorado	5,883,150	4,089,580	664,740	758,400	1,423,140
Idaho	2,211,650	2,374,660	563,040	420,020	983,060
Kansas	4,593,320	3,061,160	536,110	817,020	1,353,130
Montana	4,012,450	2,839,650	545,720	651,000	1,196,720
Nebraska	3,391,260	1,804,150	274,750	328,320	603,070
Nevada	1,043,320	2,071,970	628,160	474,240	1,102,400
New Mexico	2,296,720	2,372,350	623,340	643,500	1,266,840
North Dakota	1,469,450	1,175,820	261,130	244,130	505,260
Oklahoma	2,833,670	2,391,200	580,000	673,920	1,253,920
Oregon	5,041,730	3,482,900	779,560	588,530	1,368,090
South Dakota	1,331,400	1,233,960	291,600	264,960	556,560
Texas	12,630,450	7,580,020	1,812,600	1,779,840	3,592,440
Utah	3,492,070	2,374,540	489,910	607,920	1,097,830
Washington	2,572,970	3,273,600	869,180	910,980	1,780,160
Wyoming	2,896,100	1,734,260	293,430	203,360	496,790
Total	67,081,910	58,694,740	14,008,010	11,624,300	25,632,310
Max	12,630,450	10,111,580	3,940,950	1,779,840	5,126,430
Average	3,726,773	3,260,819	778,223	645,794	1,424,017
Min	1,043,320	1,175,820	261,130	203,360	496,790

Monitoring AND Assessment



Data Uses Supported by All 8,024 Streamgages



Number of Data Use Categories in All Streamgages

