

# Federal Water Data Activities and Coordination

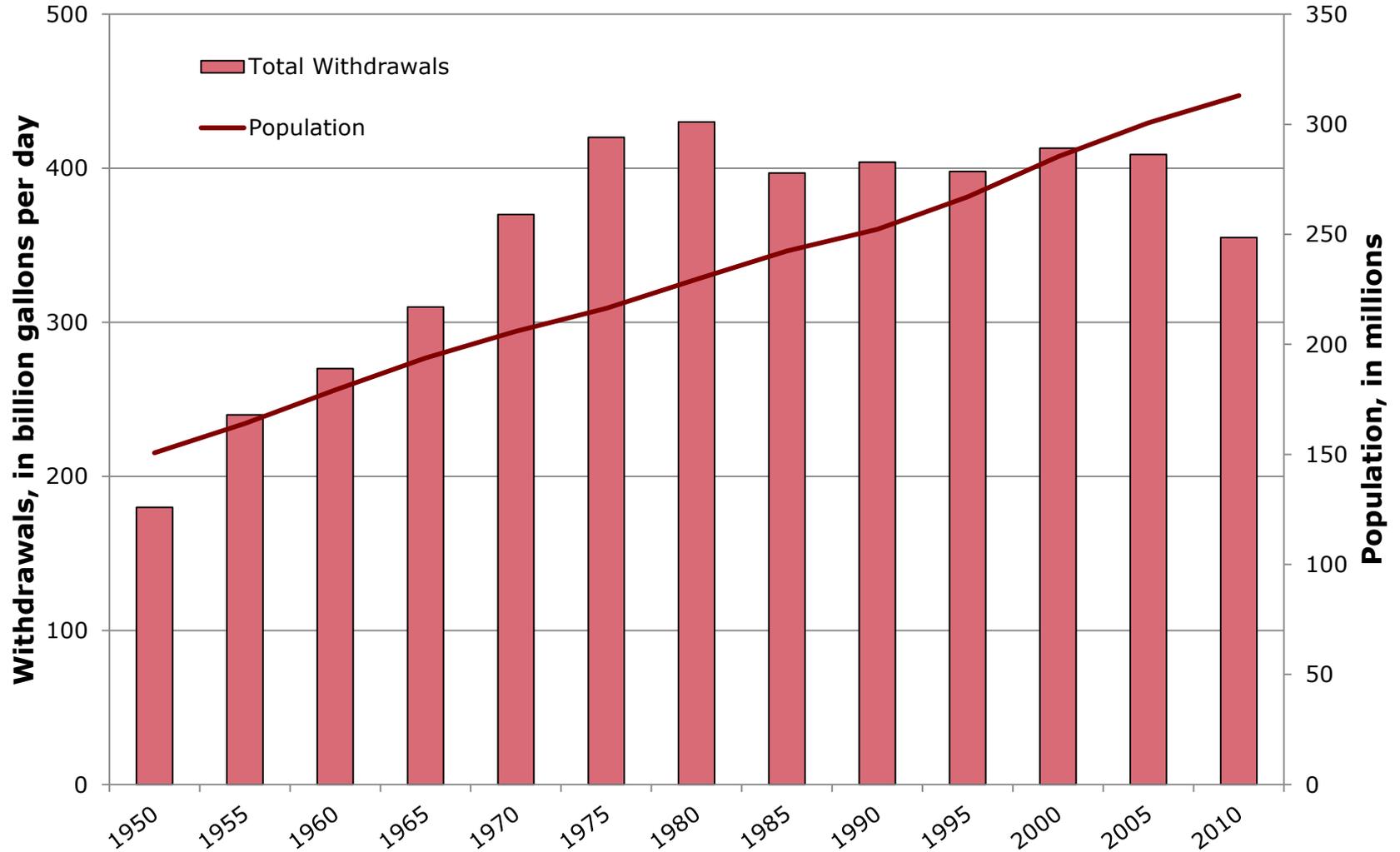
Western States Water Council Meeting, Water Resources  
Committee Meeting  
Tulsa, Oklahoma – April 16, 2015

Water budgets, which account for the water inputs, outputs and changes in storage within a watershed, have been widely referred to as the foundation for effective water resources management.

The USGS works in cooperation with local, State, and Federal environmental agencies to collect water-use information. USGS compiles these data to produce water-use information aggregated at the county, state, and national levels (five-year compilation)

## **Water Census – The National Water Use Information Program**

# Trends in population and total withdrawals, 1950-2010



# Where does Water Use Information come from?

It comes from a multitude of different sources!

## State Agencies



## Regional Agencies Industry



## Trade Associations



## Federal Agencies



## Private



- In a wide variety of ways! Often difficult to compare!
- Different coverage of water use sectors
- Different reporting thresholds
- Different frequencies of data collection
- Different formats



**How does water-use information arrive?**

- Provide means for data users and providers to better access (and exchange) water use information maintained by States and other entities (example-WaDE)
- Obtain as much site-specific data as possible about withdrawals, transfers, uses, consumption and return flows.
- Expand use of remote sensing for water use sectors.
- Expand our efforts to characterize the consumptive use of water.
- We need to quantify the uncertainty associated with water use data

## **How do we improve water-use information**

State water resource agencies are vital entities and primarily responsible for collecting data on water supplies in support of water allocations and water rights.

## Goals

- Developing water use and availability datasets that are integrated with USGS datasets
- Integrating any water use or water availability dataset of State water resource agencies into USGS datasets

# Water-Use Grants Program

# Water Use Grants Program

- \$12,500,000 authorized for Grants Program in 2009
- Each State can receive a maximum of \$250,000 in grant funding
- First appropriations for Program were in FY15; \$1,500,000

# Water Use Grants Program

- FY15 process will be non-competitive, each state will receive the same equal funding
- Beginning in FY16 the grants will be awarded as part of a targeted competitive process and announced through [Grants.gov](http://Grants.gov)

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*Ground-water monitoring networks are operated by many Federal, State, Tribal, and local agencies. Even though groundwater monitoring is done in many places and at many scales, there is no ready access to these data at the national level and there are no standards that address consistent data structure and quality. In aggregate, however, the data being collected by these many entities will provide a relatively comprehensive picture of the Nation's ground-water resources.*

## **National Ground-Water Monitoring Network Program: Motivation**

ACWI –directed by  
OMB - fosters  
collaboration on  
water information  
collection and  
sharing

Subcommittee on  
Ground Water  
(SOGW) directed  
to develop a  
nationwide  
ground-water  
monitoring  
framework - 2009

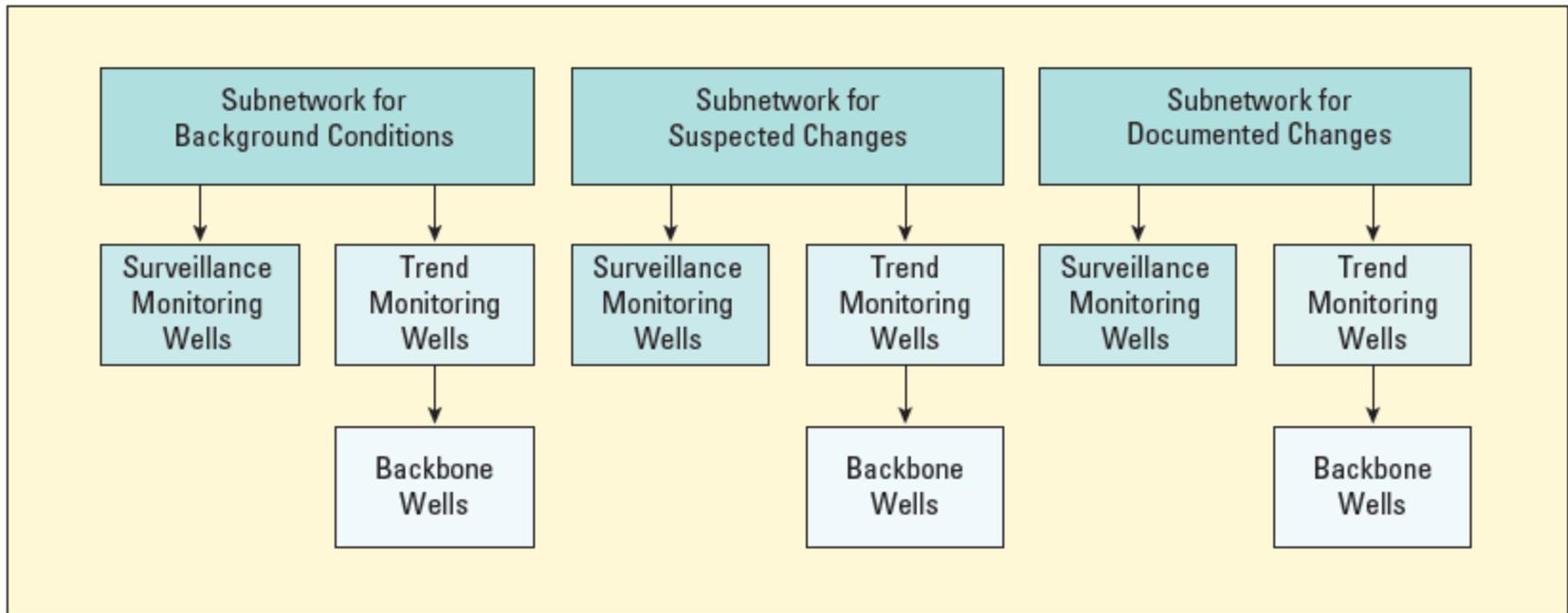
Pilot phase and  
USGS-developed  
Web Portal -2011

Revised framework  
incorporating  
lessons learned -  
2013

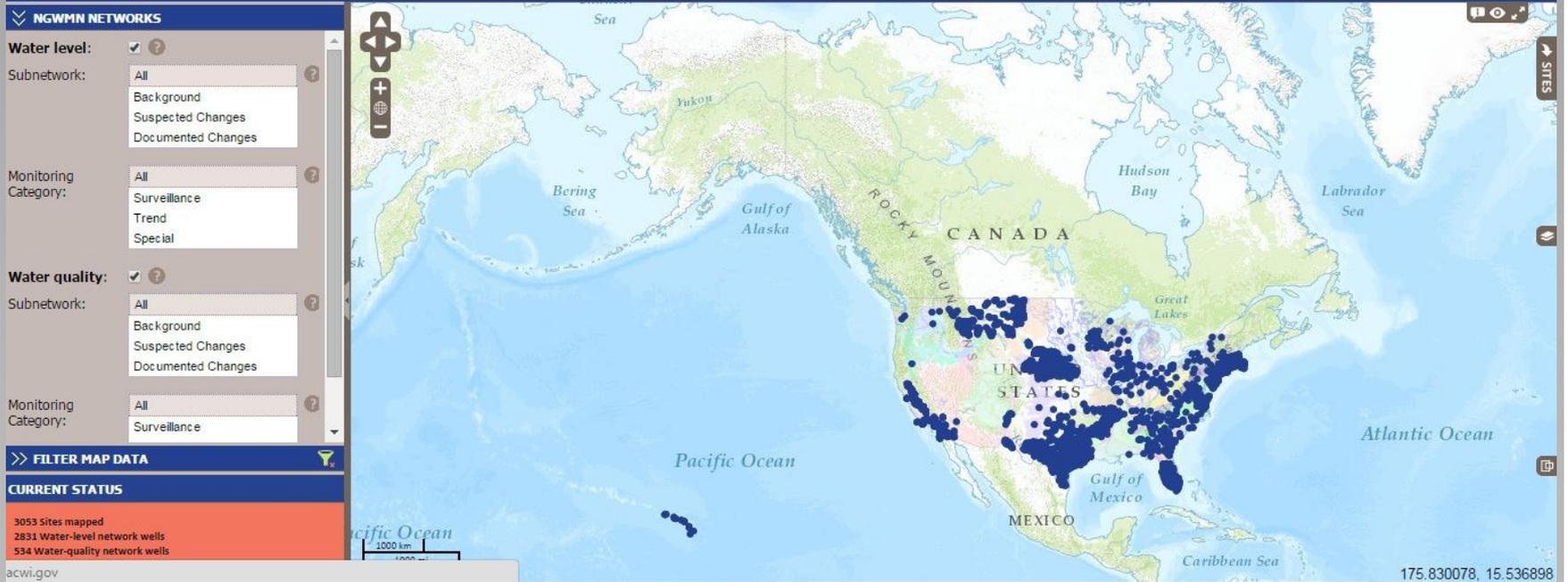
## **National Ground-Water Monitoring Network Program: Mechanism**

- A voluntary, cooperative, integrated system of data collection, management, and reporting
- An aggregation of wells selected from existing Federal, multistate, State, Tribal, and local ground-water monitoring networks monitoring selected aquifers across the Nation
- It takes advantage of and seeks to enhance existing networks
- Data are comparable and can be included in a regionally and nationally consistent network

## **National Ground-Water Monitoring Network Program: So... What is it?**



# National Ground-Water Monitoring Network Program: So... What is it?



# National Ground-Water Monitoring Network Program: So... What is it?

- Enhance the NGWMN portal
- Encourage other partners to participate in the network
- **Funds received in FY15 for SECURE Water Act activities focused on the NGWMN initially will include cooperative agreements to states**
- USGS is working through the required federal paperwork necessary to establish this new authority.

## Next Steps

The Water Quality Portal (WQP) is a cooperative service sponsored by the EPA, USGS, and the National Water Quality Monitoring Council (NWQMC) that integrates publicly available water quality data from the USGS National Water Information System (NWIS) the EPA STorage and RETrieval (STORET) Data Warehouse, and the USDA ARS Sustaining The Earth's Watersheds - Agricultural Research Database System (STEWARDS)

# Water Quality Portal

- The Portal launched in April 2012 to make millions of chemical and microbiological data records available through one seamless operation. Today, the Portal now exceeds 250 million records, from over 2.2 million sites

There are over 400 Water Quality Exchange (WQX) data partners including federal, state and tribal agencies, academia, and watershed organizations.

- Greater than 2000 visits in March - users generated 615 different web maps on the Portal page while downloading over 500 data points and 2 records. Over 228 million results from over 2.2 million monitoring locations are currently accessible through the portal.

EPA is working to add several new federal, state, tribal and watershed organizations as WQX partners in 2015.

The Portal is scheduled to serve biological data records in 2015, including fish, macroinvertebrates, and algae.



# Water Quality Portal