

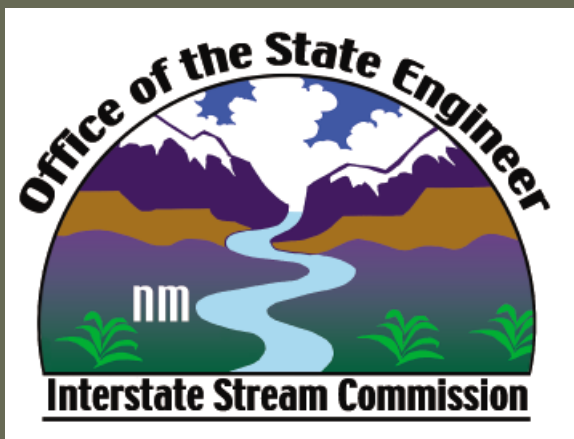
New Mexico Water Use and Data

2019 Western States Water Council Water Information
Management Systems Workshop/USGS National Water
Use Data Collaboration

September 16-19, 2019
Fort Collins, Colorado

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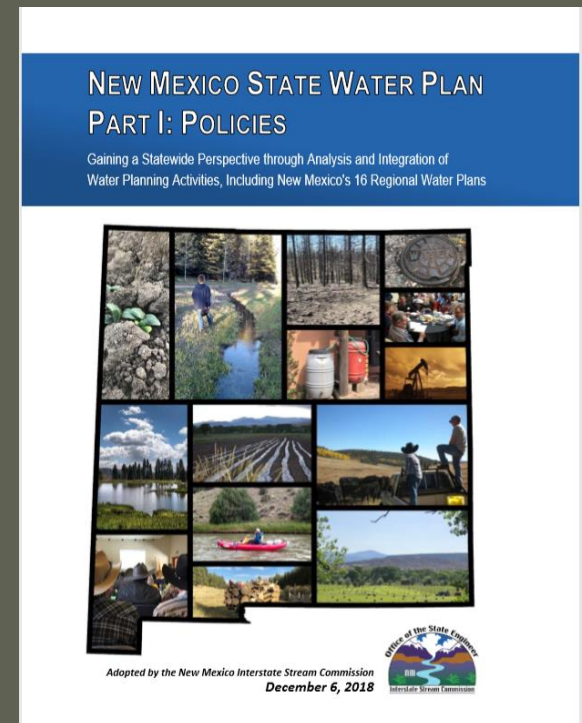
Water Data Act and Water Use in New Mexico

- ◉ Water Data Act – House Bill 651
- ◉ Water Use in New Mexico



Water Data Act

- ① 2018 New Mexico State Water Plan
- ① Water Data Act Background
- ① Implementation
- ① Accomplishments



Water Data Act Background

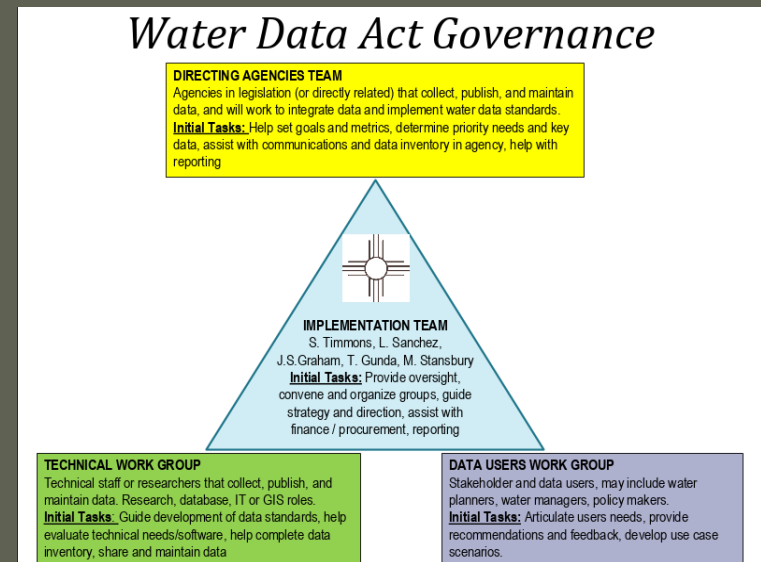
- ◉ Bill was introduced during the 2019 legislative session
- ◉ Signed by the governor April 2, 2019
- ◉ Agencies
 - Bureau of Geology and Mineral Resources
 - Interstate Stream Commission
 - Office of the State Engineer
 - Department of the Environment
 - Energy, Minerals and Natural Resources Department

Water Data Act Directives

- Bureau of Geology is the convening agency (as a non-regulatory agency)
 - Identify key water data, information and tools to support water management and planning
 - Develop common water data standards
 - Develop integrated water data and information platform
 - Identify available and unavailable water data
 - Develop and submit a plan to the governor and appropriate interim legislative committee

Implementation

- Kick-off Cabinet Secretary level meeting May 7, 2019
- May 8, 2019 meeting with upper and mid-level staff
- July 18, 2019 meeting
 - begin discovery and inventory of New Mexico's water data,
 - begin setting metrics and goals, and
 - identify priority data towards water management and planning.
- August 20, 2019 meeting
 - update on progress
 - identification of key data



Accomplishments to Date

- The data inventory process is underway.
- Legal review by the Utton Center at the University of New Mexico is underway and should be providing the implementation team with guidance on data sharing among state agencies.
- The Internet of Water staff are providing a prioritization of data platform recommendations.
- The Implementation Team continues to work toward a web accessible data platform by January 2020, which combines some key datasets to the data catalog, map and available tools.
- The Implementation Team is also working on some ideas regarding digitizing existing agency paper data to eventually allow for ease of accessibility by the public.

Water Use in New Mexico

- ◉ NM Water Use by Categories reports
- ◉ Current data collection processes
- ◉ USGS WUDR Grants

**New Mexico
Water Use By Categories
2015**



**New Mexico Office of the State Engineer
Technical Report 55**

History of New Mexico Water Use by Categories Reports

- ◉ NM has published statewide water use data since 1975
- ◉ Data included both withdrawals and depletions prior to the 2005 report
- ◉ Since 2005 only withdrawals have been published due to resource limitations

Current Data Collection Processes

- Generally data is collected from
 - New Mexico Office of the State Engineer databases (metering records)
 - paper and electronic surveys of some categories
 - phone call and email requests from some categories
 - estimation of water withdrawals

USGS Water Use Data and Research Grants

- ◉ WUDR non-competitive grant to write the *Water Use Data Collection and Processing Improvement Plan*
- ◉ WUDR competitive grants
 - Irrigated or possibly irrigated polygons (FY 16)
 - Public water suppliers service areas (FY 18)
 - Livestock distribution by county and river basin (FY 18)

Irrigated or Possibly Irrigated Polygons

- ◉ Previously compiled irrigated agriculture methods
- ◉ Test case in Eastern NM for the 2010 report
- ◉ Started with existing polygons, QA/QC with corrections where needed, new polygons drawn where needed

Use in NM Water Use by Categories 2015 Report

- Used polygon layers in combination with USDA Cropland Data Layer for 2015 to spatially compile crop type
- Challenges
 - Irrigated vs. dryland crops
 - Polygon size
 - Riparian vegetation CDL signatures

Current USGS Grant

- Public water suppliers service areas
- Livestock distribution in the state

Public Water Supplier Service Area Delineation

- Important to help with population estimates, gallons per capita per day estimates, location of use, location of supply
- Challenging due to many small systems with little or no data, often no system ability to use computers

Livestock Distribution in New Mexico

- Current method - livestock distribution from 1975
- Starting with NM Taxation and Revenue livestock counts
- Evaluating livestock location based on interviews with extension agents, livestock associations, etc.

Thank You

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