

Water Management Tools for Drought

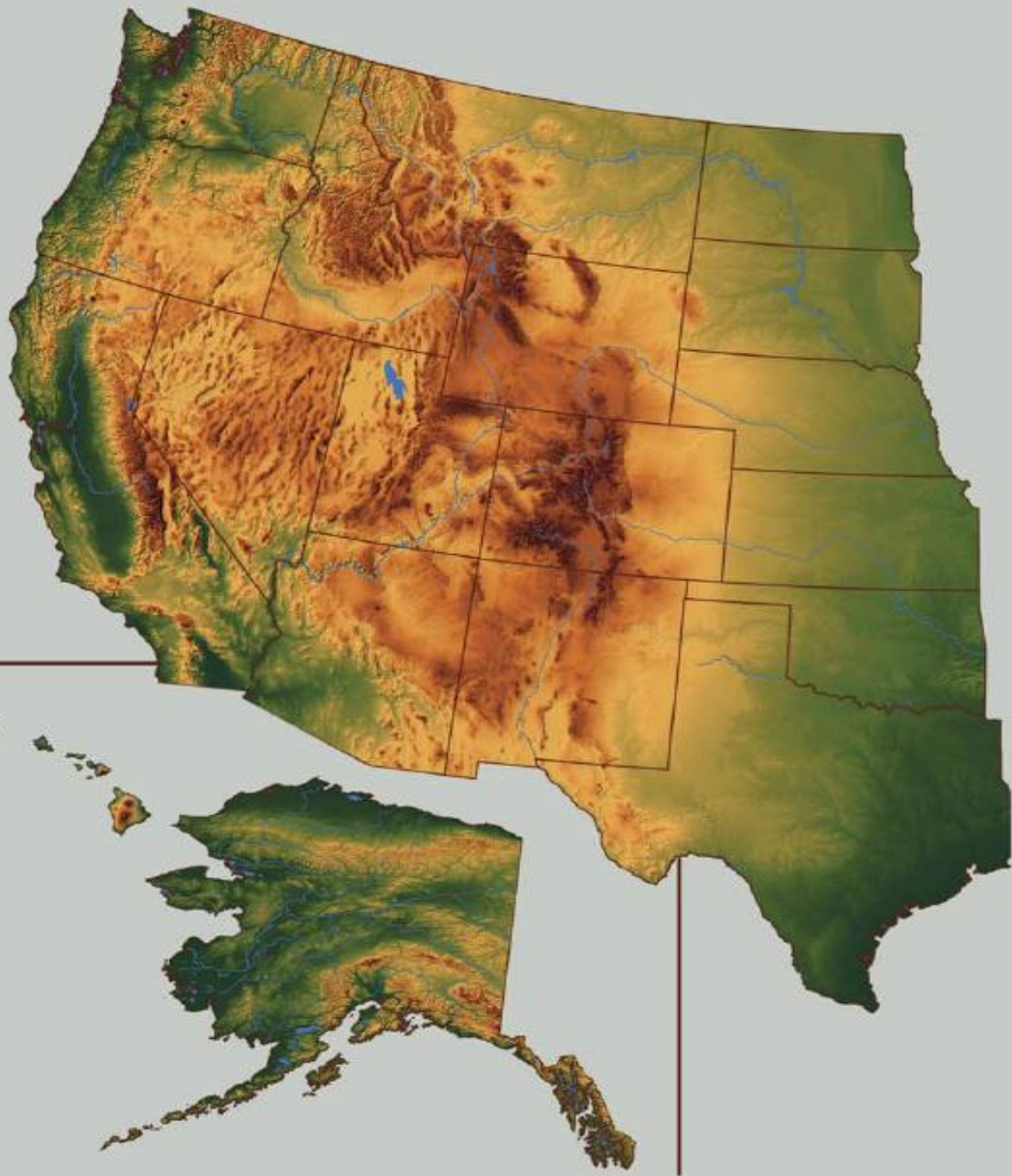
The WSWC Water Data Exchange



Water Rights Settlement Symposium

August 8-9, 2023

WESTERN STATES
WATER COUNCIL



Western States Water Council

- State government entity
- Advisory body to 18 western Governors on water issues
- Provides states collective voice
- Fosters state/state and federal/state collaboration
- Works with the Western Governors' Association (WGA)
- Western Federal Agency Support Team (WestFAST)

Our mission is to ensure that the West has an adequate, secure and sustainable supply of water of suitable quality to meet its diverse economic and environmental needs now and in the future





Water Needs and Strategies for a Sustainable Future



1. Growth and Water Policy
2. Meeting Future Water Demands
3. Water Infrastructure Needs and Strategies
4. Resolution of Indian Water Rights Claims
5. Climate Change Impacts
6. ESA & Protecting Aquatic Species

Water Needs and Strategies for a Sustainable Future



Western Governors' Association ♦ June 2006

Water Needs and Strategies for a Sustainable Future: *Next Steps*



Western Governors' Association ♦ June 2008

Water Planning Challenges

- Growth & related economic & environmental needs
- Limited data regarding water supplies and demands
- Competing or poorly defined water rights
- Aging and often inadequate infrastructure
- Unpredictable climate and extreme events
(little ability to predict seasonal/subseasonal supply)
- Constantly evolving regulatory landscape.

WSWC Vision Statement

Effectively addressing these challenges will require stronger collaboration and cooperation that transcends political and geographic boundaries between states, federal agencies, tribes, and local communities.





Western States Federal Agency Support Team

A Declaration of Cooperation

*Working Together for the Sustainable and
Efficient Use of Western Water Resources*

We, as representatives of our respective Federal agencies, do hereby declare our intent to cooperate as members of a Western States Federal Agency Support Team (WESTFAST) partnership. We will work together whenever and wherever possible throughout the 17 Western States to promote and educate the public on the benefits of sustainable and efficient use of water resources.

We declare that WESTFAST supports a continued commitment on the part of Federal, and State organizations; working with local, Tribal, and other stakeholders; to improve the effectiveness of collaboration to seek watershed solutions to water issues in the Western States. This effort emphasizes proactive, voluntary, participatory and incentive-based approaches to water resource management and conservation assistance programs throughout the Western States.

We hereby declare that we as WESTFAST partners will collaborate with the Western States Water Council to guide the development of an appropriate action plan for this partnership.

We hereby declare to support, in concept, the establishment of a Federal liaison position to work with the WESTFAST members and the Western States Water Council in developing a collaborative work plan to carry forward joint water resource initiatives. Contributory cost-sharing such a position will be based on authorized and available funds.

Army Corps of Engineers
Bureau of Land Management
Bureau of Reclamation
Environmental Protection Agency
National Oceanic & Atmospheric
Administration
Natural Resources
Conservation Service
U.S. Fish & Wildlife Service
U.S. Forest Service
U.S. Geological Survey
U.S. Department of Energy
National Aeronautics and Space
Administration
U.S. Dept. of Defense
National Park Service

STATES & TRIBES ARE NOT STAKEHOLDERS



Water in the West is an increasingly scarce and precious resource.

Hoover Dam/Lake Mead



WSWC Principles

- We must cultivate a western water conservation ethic through greater understanding of, and appreciation for, water's value.
- Water must be recognized as a critical public policy priority given the importance of the resource to our public health, economy, food security, environment, and western way of life.

WSWC Principle

All levels of government must prioritize the collection, analysis and open sharing of reliable data regarding water availability, quality, and usage given its importance to research for sound science and data driven decision making.

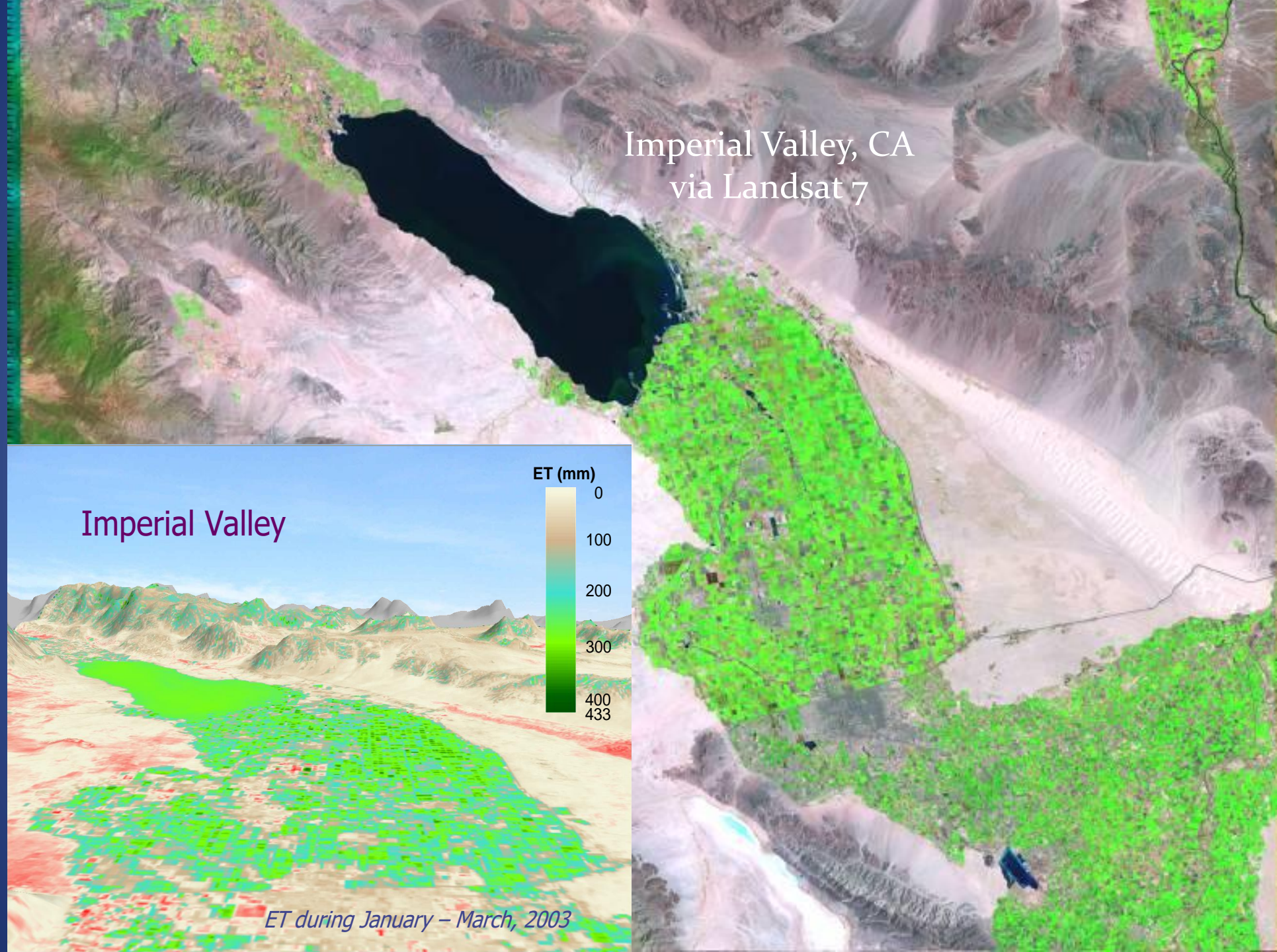


NASA Data Related Initiatives

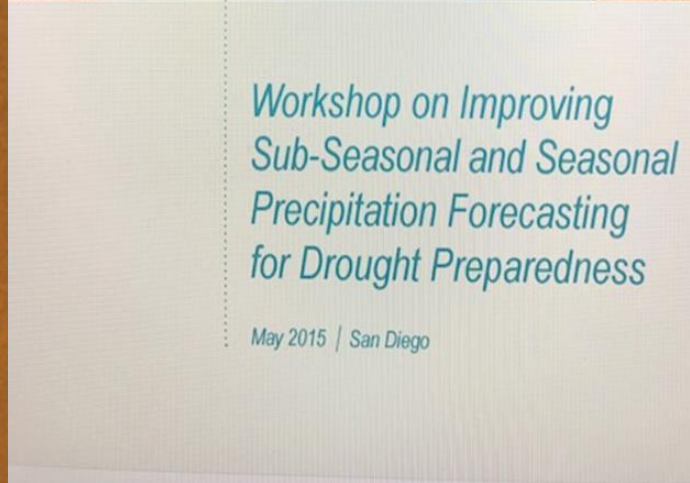
- Western Water Applications Office (JPL)
- Thermal Infrared Imagery (TIRS)
- LCDM/Landsat 8 & 9
- Landsat Next
- Evapotranspiration (ET)
- Consumptive Use
- Open ET Initiative
- Mapping ET



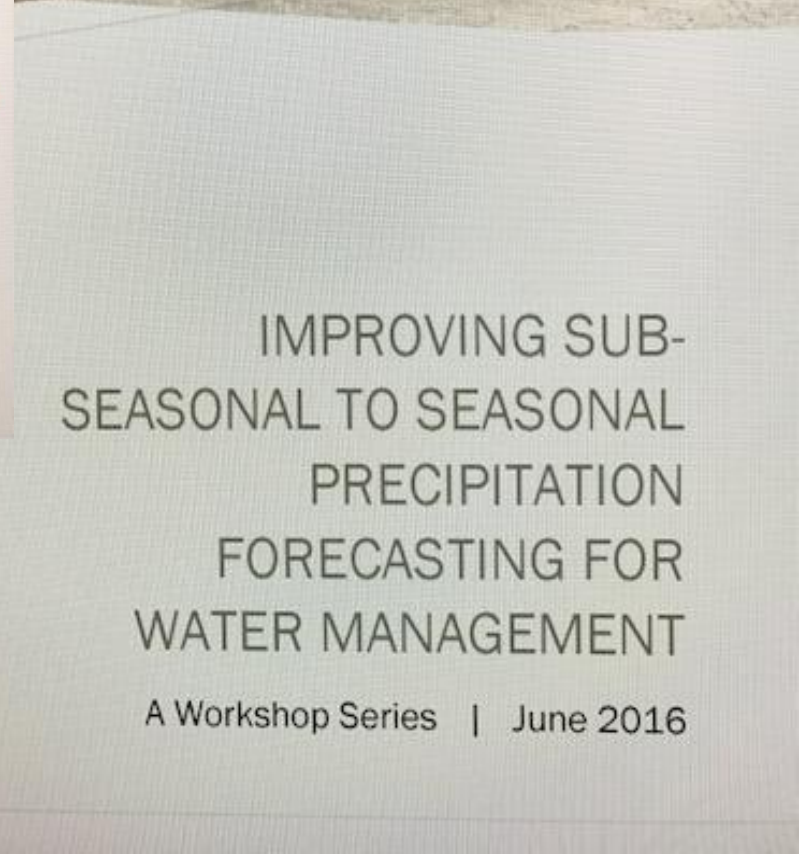
Imperial Valley, CA
via Landsat 7



Improving
Sub-Seasonal to Seasonal
Precipitation Forecasting for
Water Management



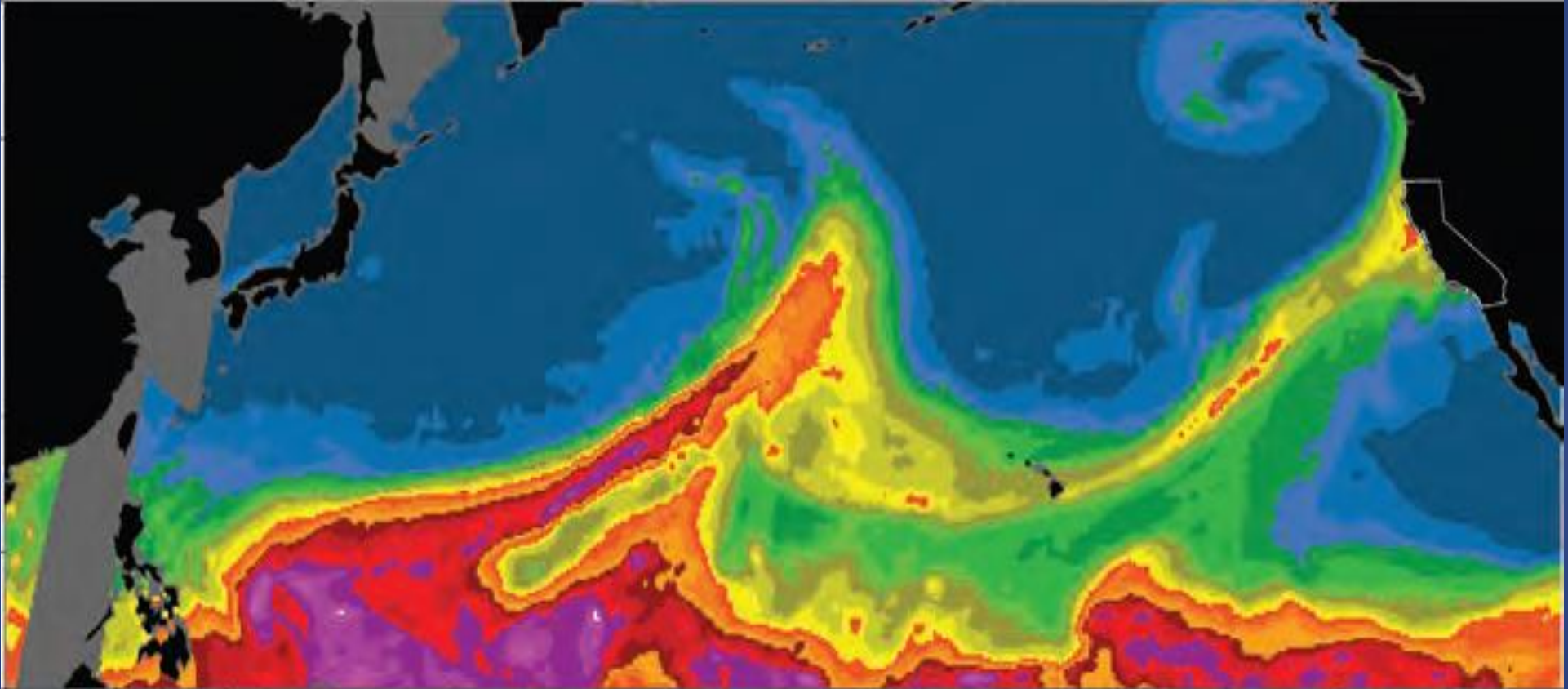
WESTERN
STATES
WATER
COUNCIL



IMPROVING SUB-
SEASONAL TO SEASONAL
PRECIPITATION
FORECASTING FOR
WATER MANAGEMENT

A Workshop Series | June 2016

Atmospheric Rivers





Water Data Exchange (WaDE) Program

**Transforming Western Water Planning, Management, and Policy by
Sharing States Water Data Since 2011**

- Western Governors encourage the use of state water data in planning for both the public and private sectors.
- The Western States Water Council has worked together with state and federal agencies to create the Water Data Exchange, with philanthropic support.
- An online portal, called our Western States Water Data and Analysis Tools (WestDAAT), will enable states to share their water data with each other, federal agencies, and the public via a common platform.



“Reliable water data is almost as critical to farmers and water managers as the water supply itself. With added pressure from population growth and the uncertainty that climate change impacts have on existing and future water supply, OpenET allows planning for agricultural water needs in a way that just wasn't possible before.”

—E. Joaquin Esquivel, Chair of the California State Water Resources Control Board

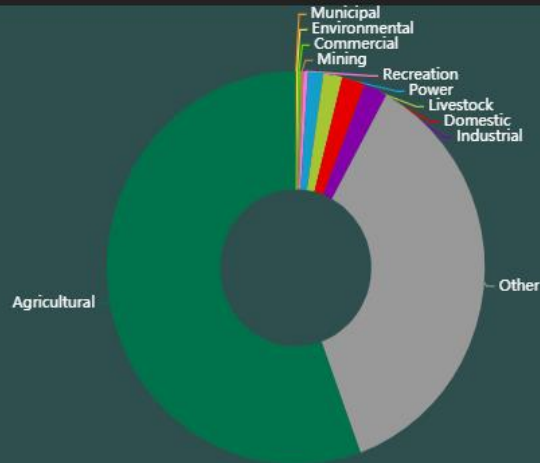


- Albuquerque
- Denver
- Las Vegas
- Los Angeles
- Phoenix
- Salt Lake City
- San Diego
- Tucson

Water Rights Data

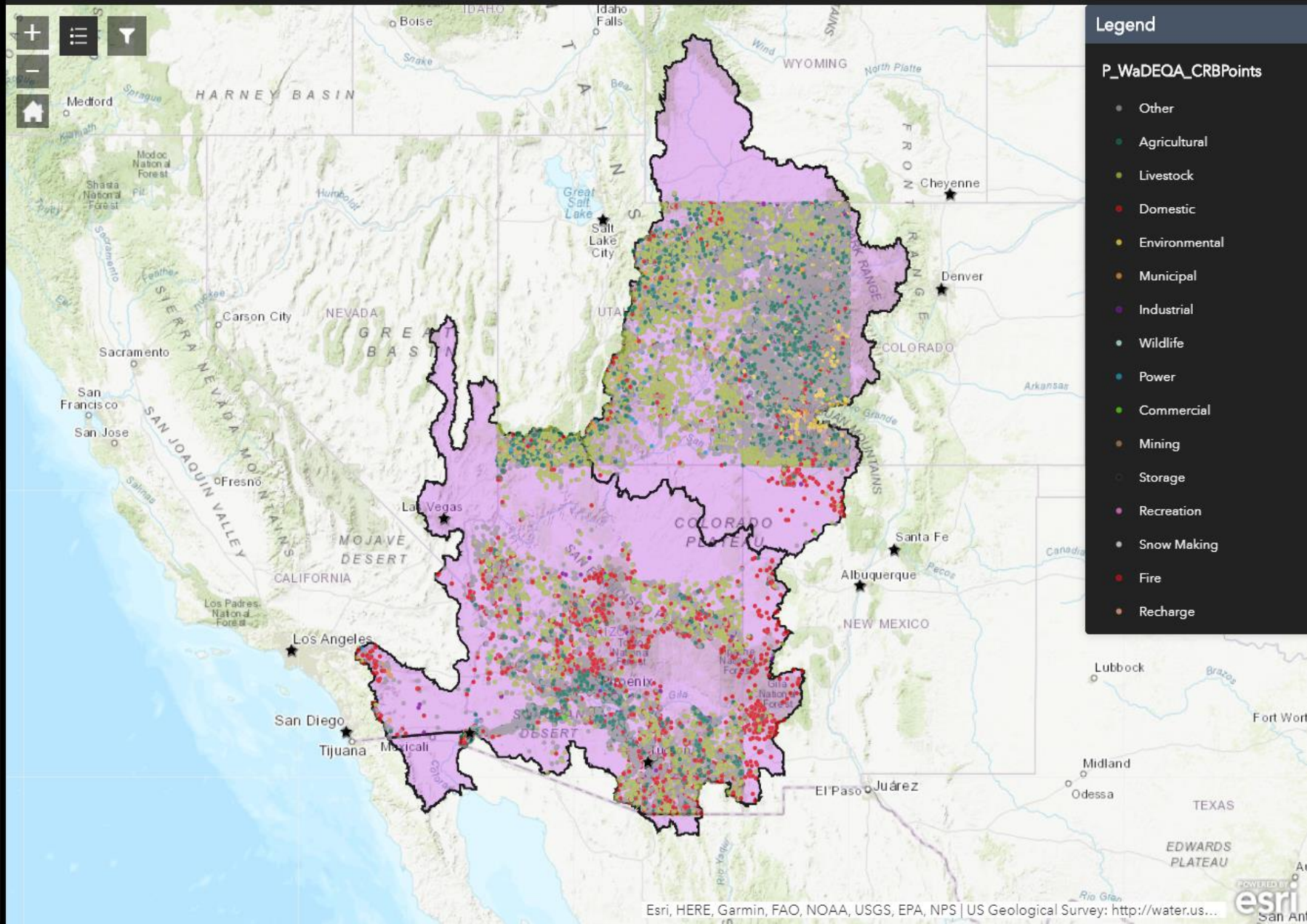
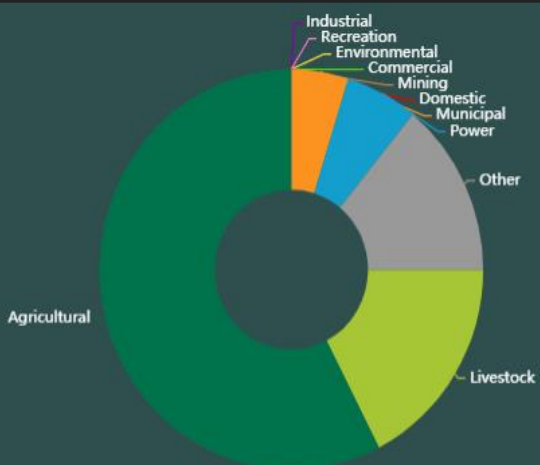
Infographic

Flow Amount (CFS)



Infographic_2

Maximum Volume Limit (AF)



Irrigation Water Rights Prior 1922

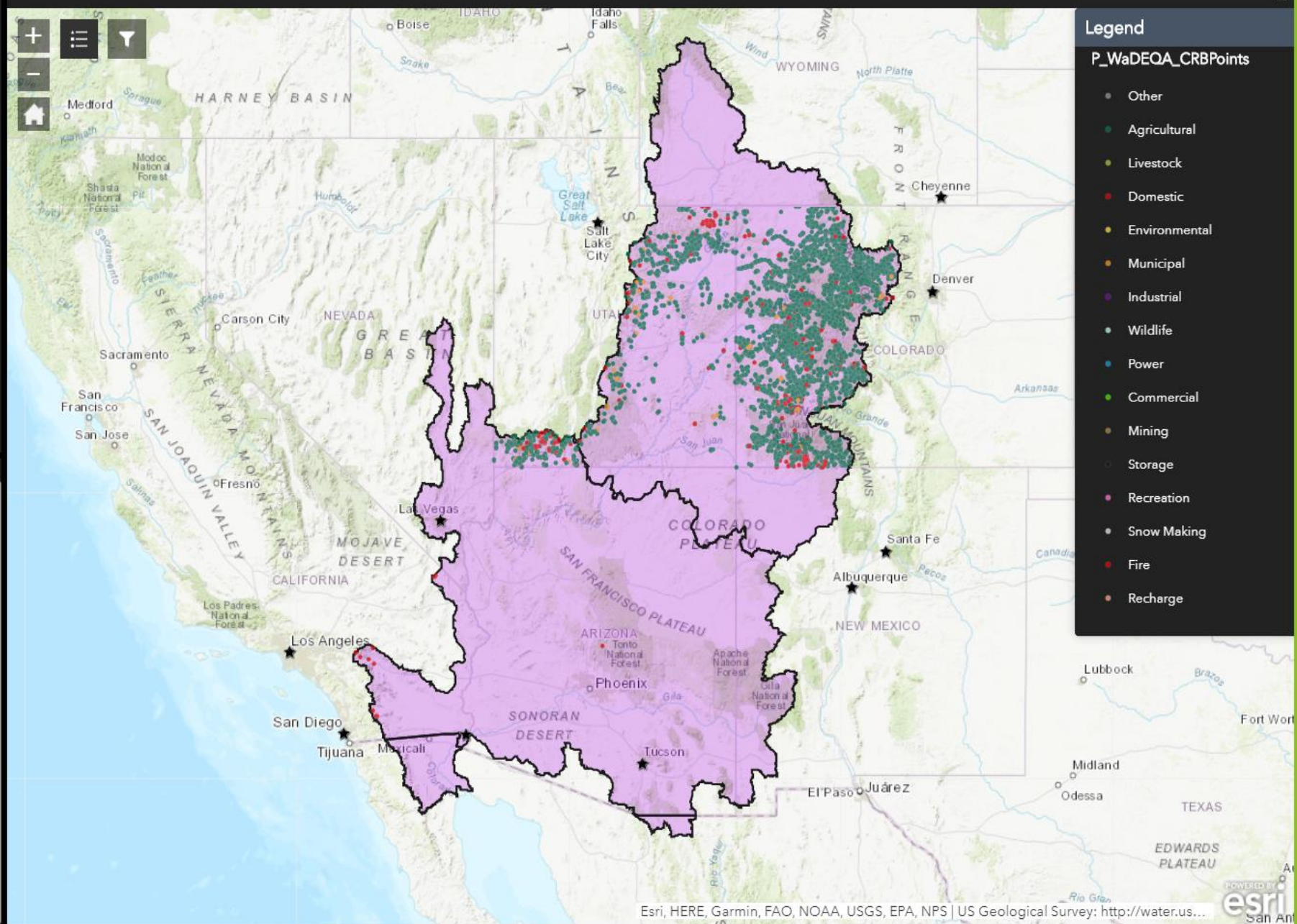
Infographic

Flow Amount (CFS)



Infographic_2

Maximum Volume Limit (AF)

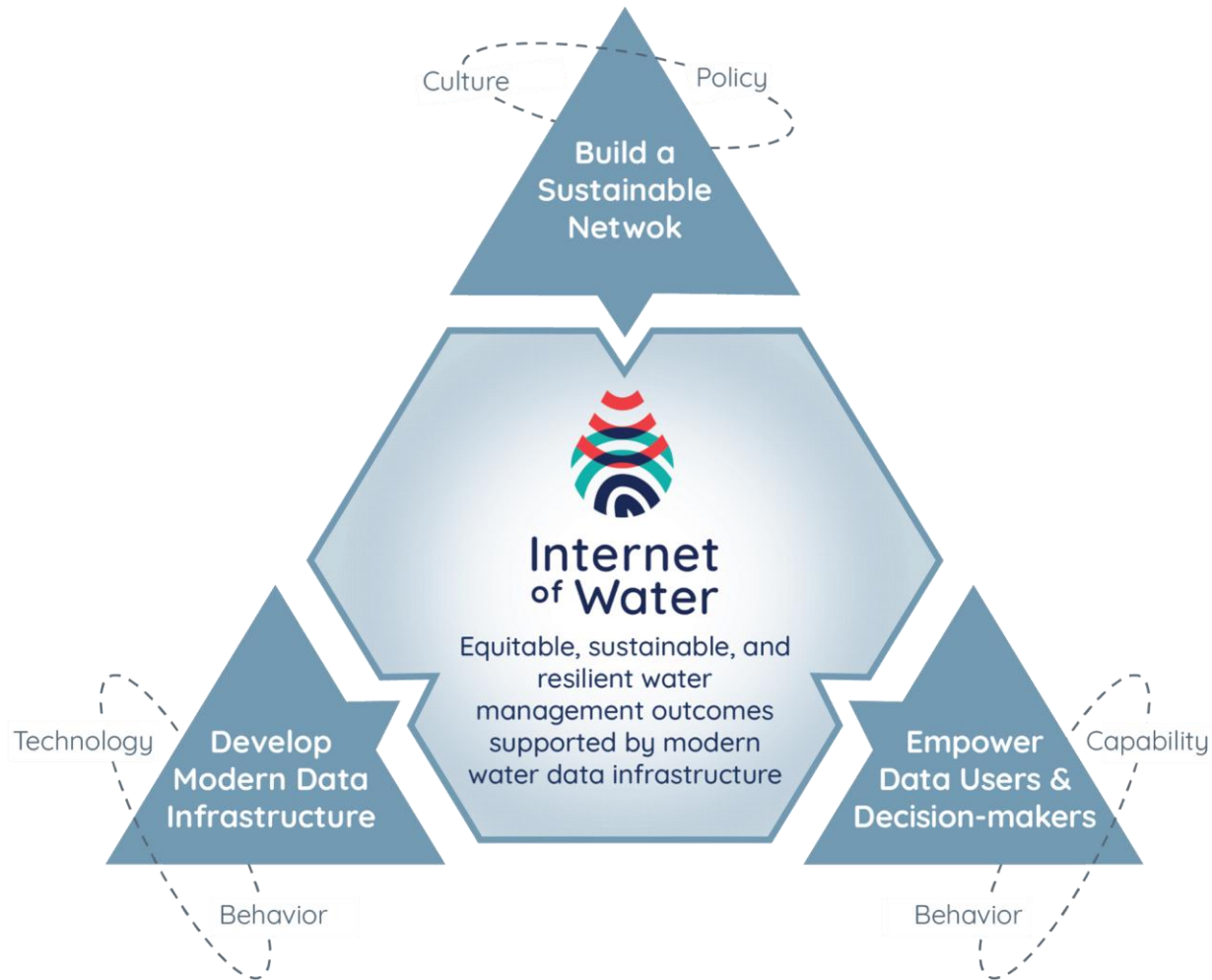


Legend

P_WaDEQA_CRBPoints

- Other
- Agricultural
- Livestock
- Domestic
- Environmental
- Municipal
- Industrial
- Wildlife
- Power
- Commercial
- Mining
- Storage
- Recreation
- Snow Making
- Fire
- Recharge

IoW Theory of Change



IF the IoW creates modern water data infrastructure across the U.S. and builds a diverse network of partners sharing standardized water data ;

THEN stakeholders will be empowered to collaborate and accelerate the development of novel water information tools that address equity and resilience in the face of serious threats to water availability and quality;

AND AS A RESULT, these stakeholders will improve decision-making about water management, ensuring equitable, sustainable, and resilient water management for the nation.



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