



# Streamgaging the eastern Sierras, northern California and Nevada

The U.S. Geological Survey collaborative  
streamgaging program in the Truckee, Carson  
and Walker River Basins

January 21, 2010

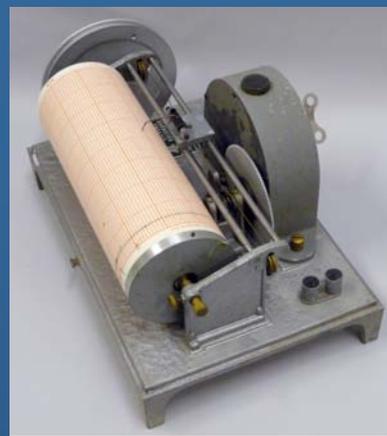
U.S. Department of Interior  
U.S. Geological Survey

# Opening Remarks/Program Overview

- A brief history of time
- Review of today's agenda
- A national network, one gage at a time
- The “Three Rivers” network – Data
- The “Three Rivers” network – Funding
- Goals for today's workshop



# A Brief History of Time



- The USGS began streamgaging in 1889.
- I began streamgaging in 1972, using for all practical purposes, 1889 technology.
- The last 38 years has seen a revolution of technological advances in all aspects of streamgaging.
- The 1889 goal remains, collecting and disseminating unbiased (both technically and politically), accurate stream-discharge data.



# Today's Agenda

- Technical advancements in:
  - Field data collection
  - Records processing
  - Records manipulation and retrieval
- National programs – USGS and NWS

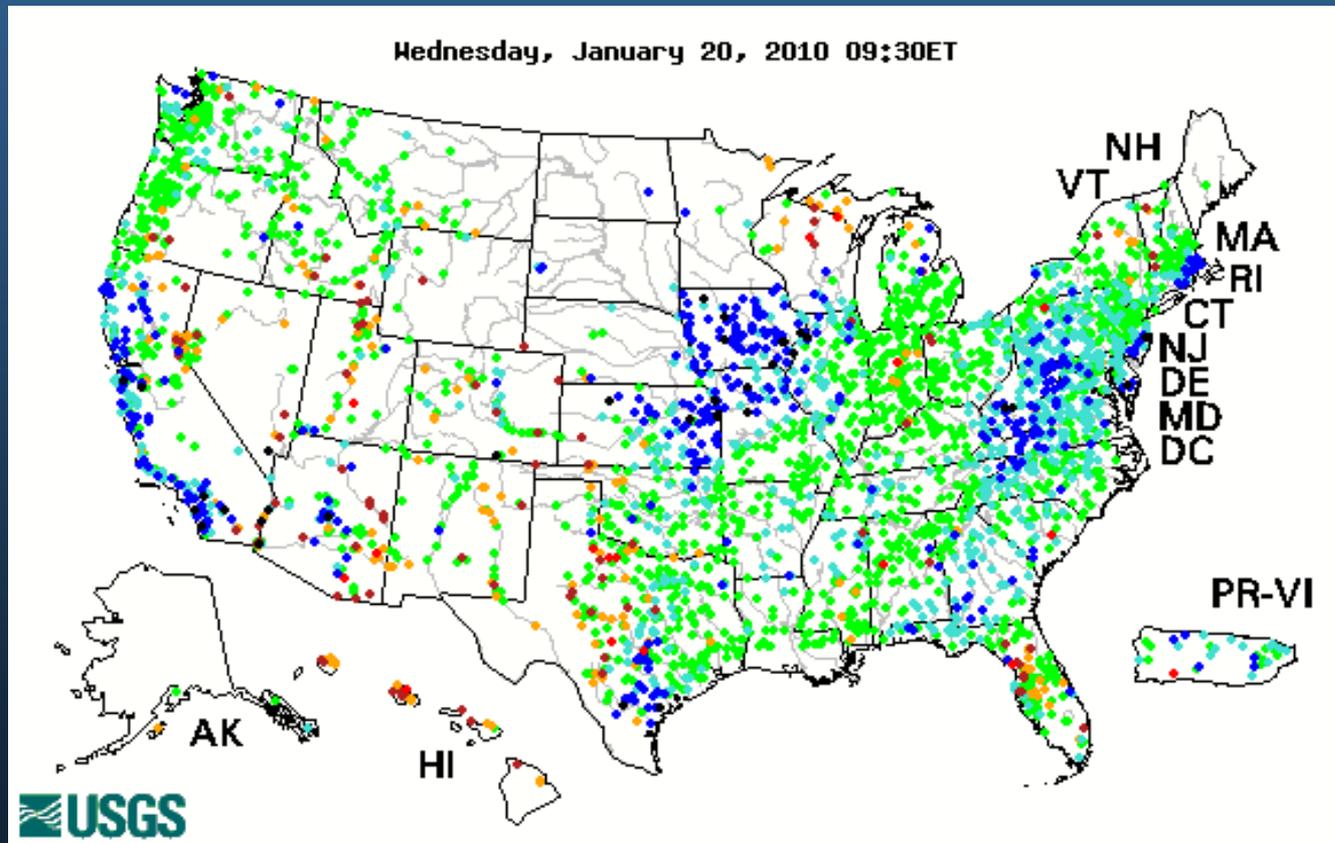
## Lunch

- Funding the “Three Rivers” network and stakeholder interaction: the workshop part of the workshop!



# A national network, one gage at a time

- Operation of a nation-wide [now] real-time streamflow network is a core mission of the USGS.

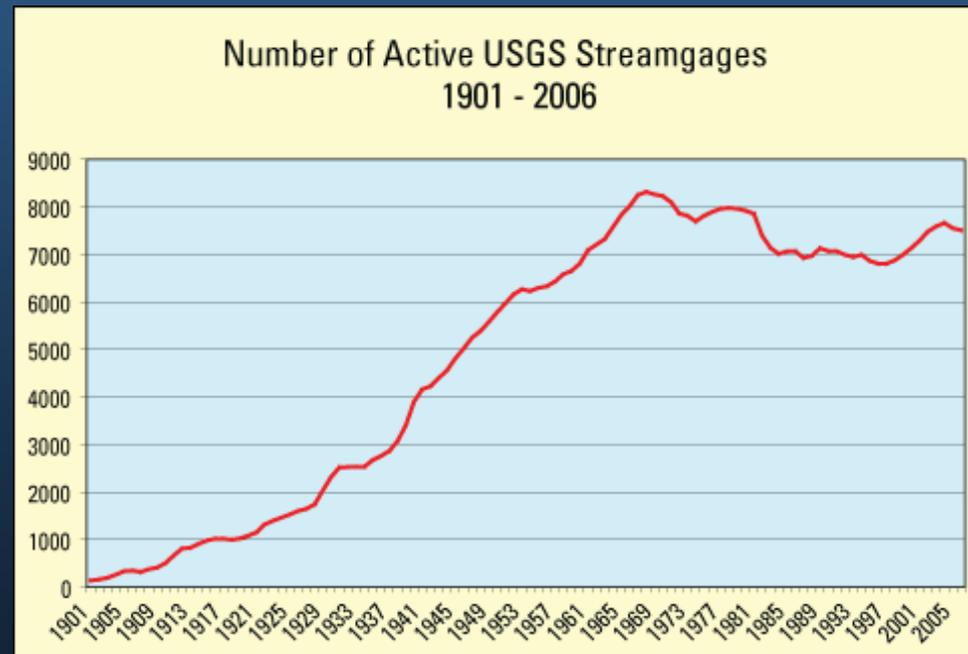


# A National network, one gage at a time

- [Goggle Map](#)

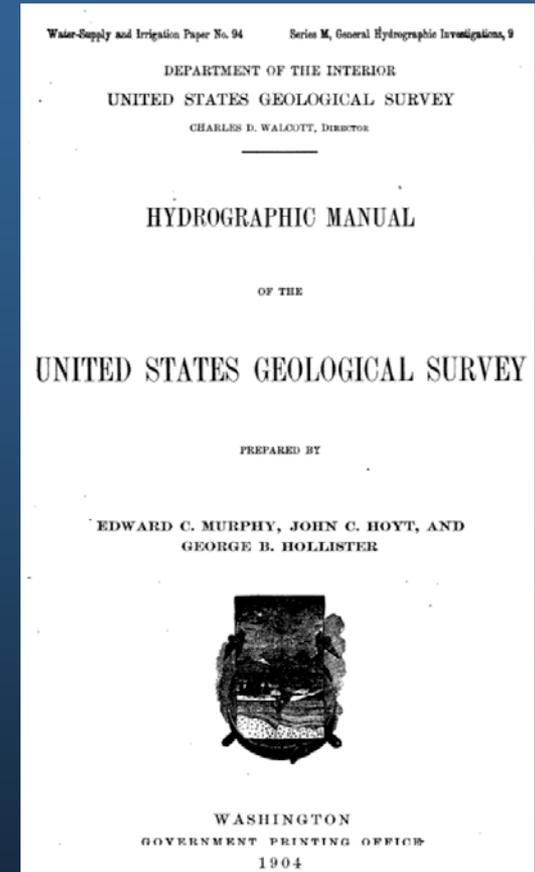
# A national network, one gage at a time

- Operation of a nation-wide [now] real-time streamflow network is a core mission of the USGS.
- The USGS presently operates about 7,000 continuous-record streamflow stations, most of which are real-time.
- The network is supported by more than 500 federal, state, and local agencies.
- Large areas of the nation would be unengaged save for state and local support.



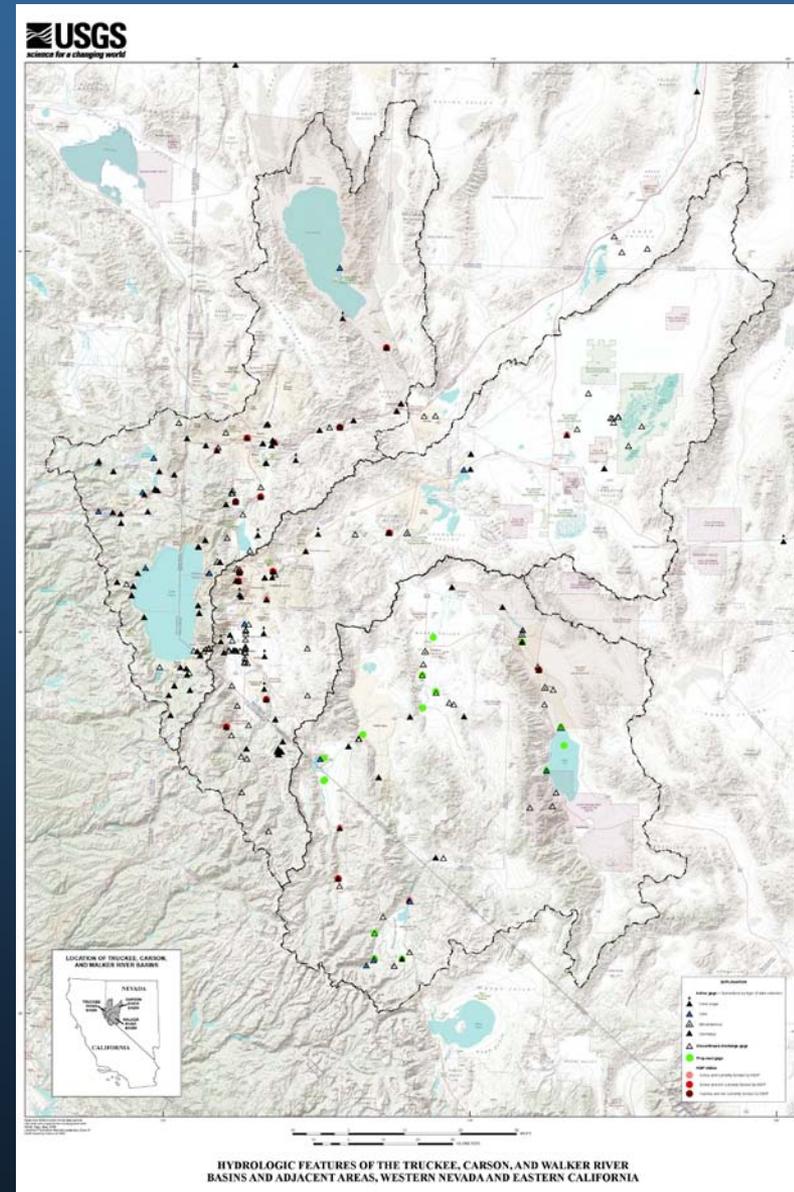
# A national network, one gage at a time

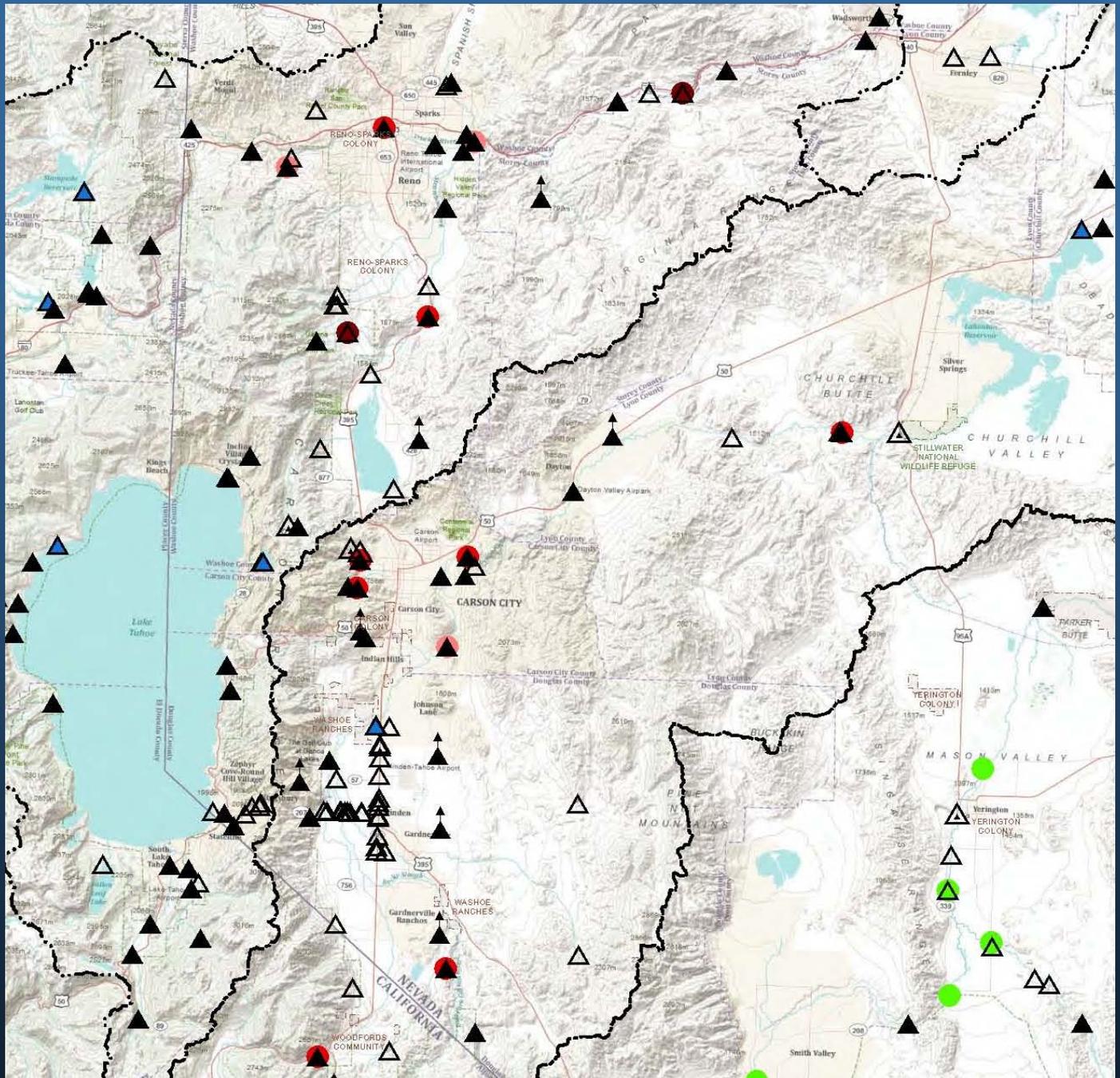
- Regional and national reviews are conducted to assure adherence to OSW policies.
- Instrumentation, field data collection, records processing, data storage are uniform across the national network.
- USGS streamflow data well accepted in the legal environment.



# The “Three Rivers” Network

- Truckee Basin
    - 45 continuous-record streamflow
    - 2 diversion (full-year)
    - 7 lake elevation
  - Carson Basin
    - 19 continuous-record streamflow
    - 2 diversion (full-year)
    - 2 lake elevation
  - Walker basin
    - 9 continuous-record streamflow \*
    - 2 diversion (partial-year)
    - 6 lake elevation
- \* Not including Walker Lake Phase 2





# Funding the “Three Rivers” Network

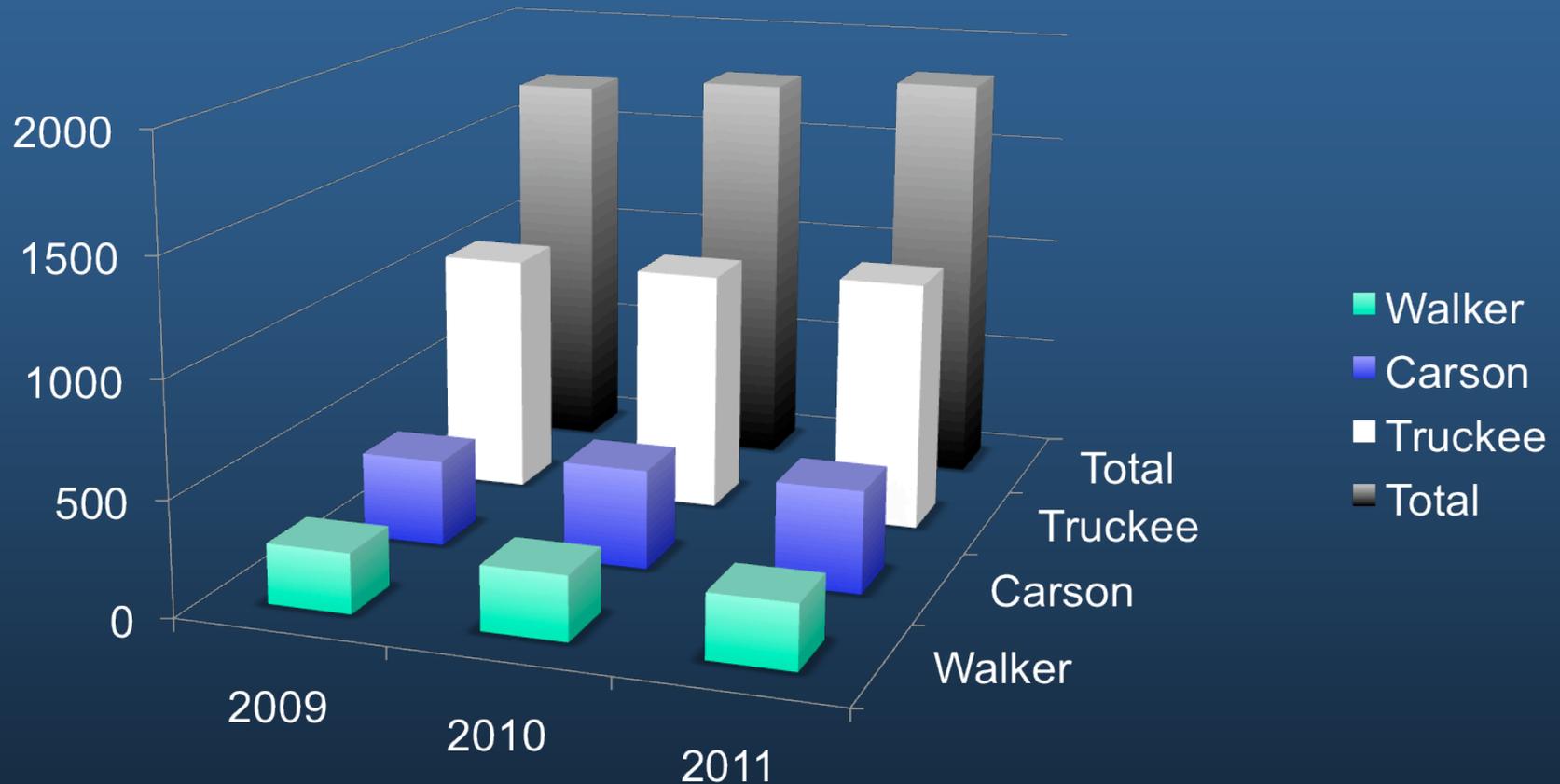
## 18 Partner Agencies

- California Department of Water Resources
- Carson Truckee Water Conservancy District
- Carson Water Subconservancy District
- City of Carson City
- Federal Water Master
- Pyramid Lake Paiute Tribe
- Nevada Department of Environmental Protection
- Nevada Division of Water Resources
- Tahoe Regional Planning Agency
- Truckee Meadows Water Authority
- Truckee Meadows Water Reclamation Facility
- U.S. Bureau of Reclamation
- U.S. Bureau of Water Commissioners
- U.S. Corps of Engineers
- U.S. Geological Survey
- U.S. Forest Service
- Walker River Irrigation District
- Walker River Paiute Tribe



# Funding the "Three Rivers" Network

Dollars in thousands



# Funding the “Three Rivers” network

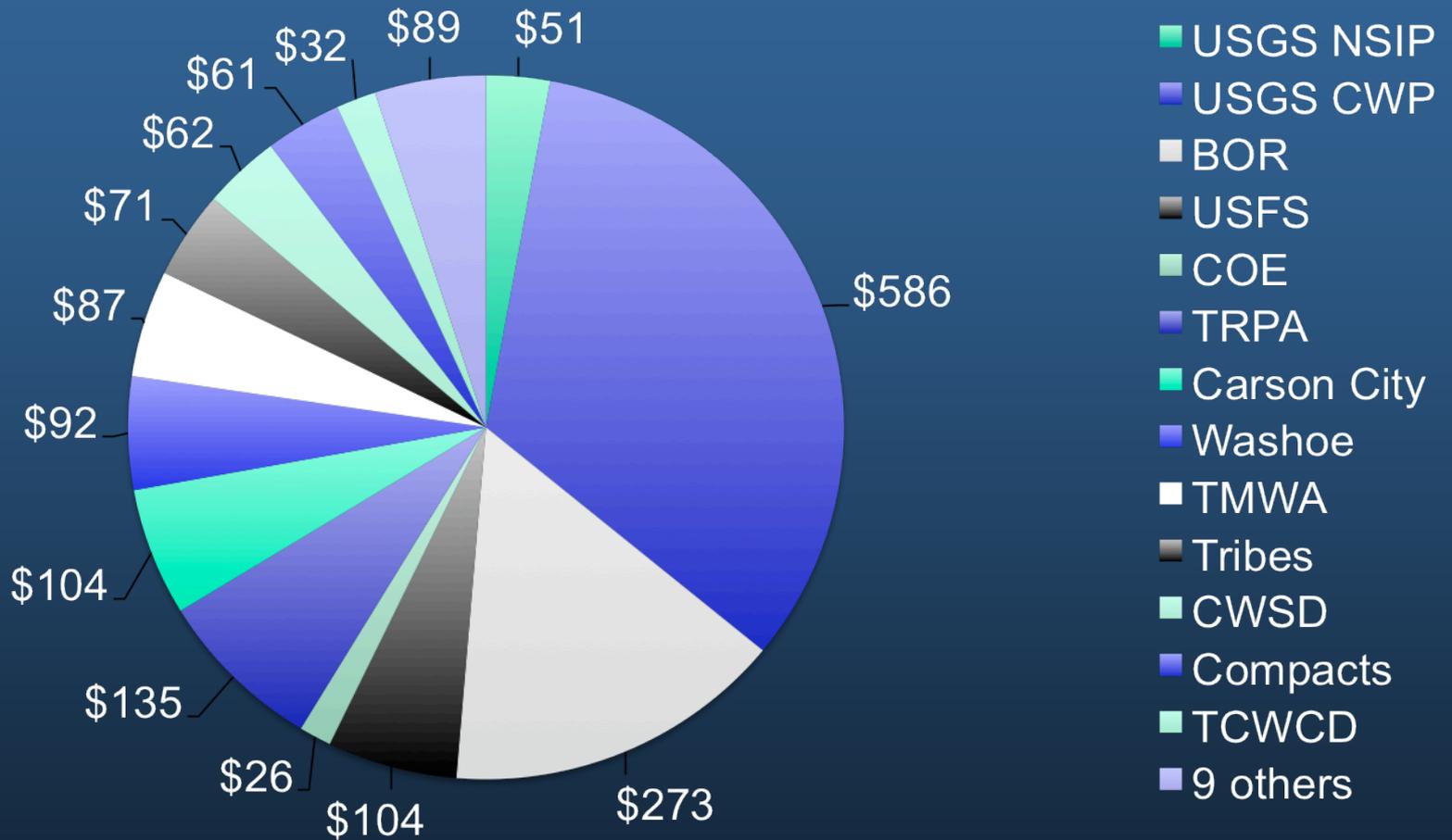
Water Year	Truckee	Carson	Walker	Total
2009	\$1,062,367	\$397,299	\$261,650	\$1,721,316
2010	1,067,100	436,150	279,525*	1,782,775*
2011(est)	1,105,100	448,050	280,050*	1,833,200 *

\*Not including Walker Lake Phase 2



# FY 2010 "Three Rivers" Funding

Dollars in Thousands



# Goals for today's workshop

- Demonstrate the increased value of the streamflow “product”.
- Show the contribution of local program to national goals.
- Initiate discussions between stakeholders with varied objectives and resource availability.
- Ultimately: Develop partnerships that will help meet the needs of all stakeholders.



