

Partnering to Success with Recycled Water



**Leveraging Opportunities and
Addressing Challenges Together**

February 21, 2014



Agenda

- Partnership & Collaboration
- Survey – Summary of Results
- Importance
- Challenges & Opportunities

Delta Diablo – Lead of Western Recycled Water Coalition

- 22 members, representing 3.8 million residents
- Developing 26 projects
- ~120,000 AFY
- Pursue Federal Funding



Western Recycled Water Coalition



Partnership and Collaboration

- Members of Congress want to help ...but requests must be for more than 1 project or 1 region or 1 state
 - Determine “real” recycled water projects that are in development across the U.S.
- Collaboration among five organizations for nationwide survey



NACWA



Sustainable Solutions for a Thirsty Planet®

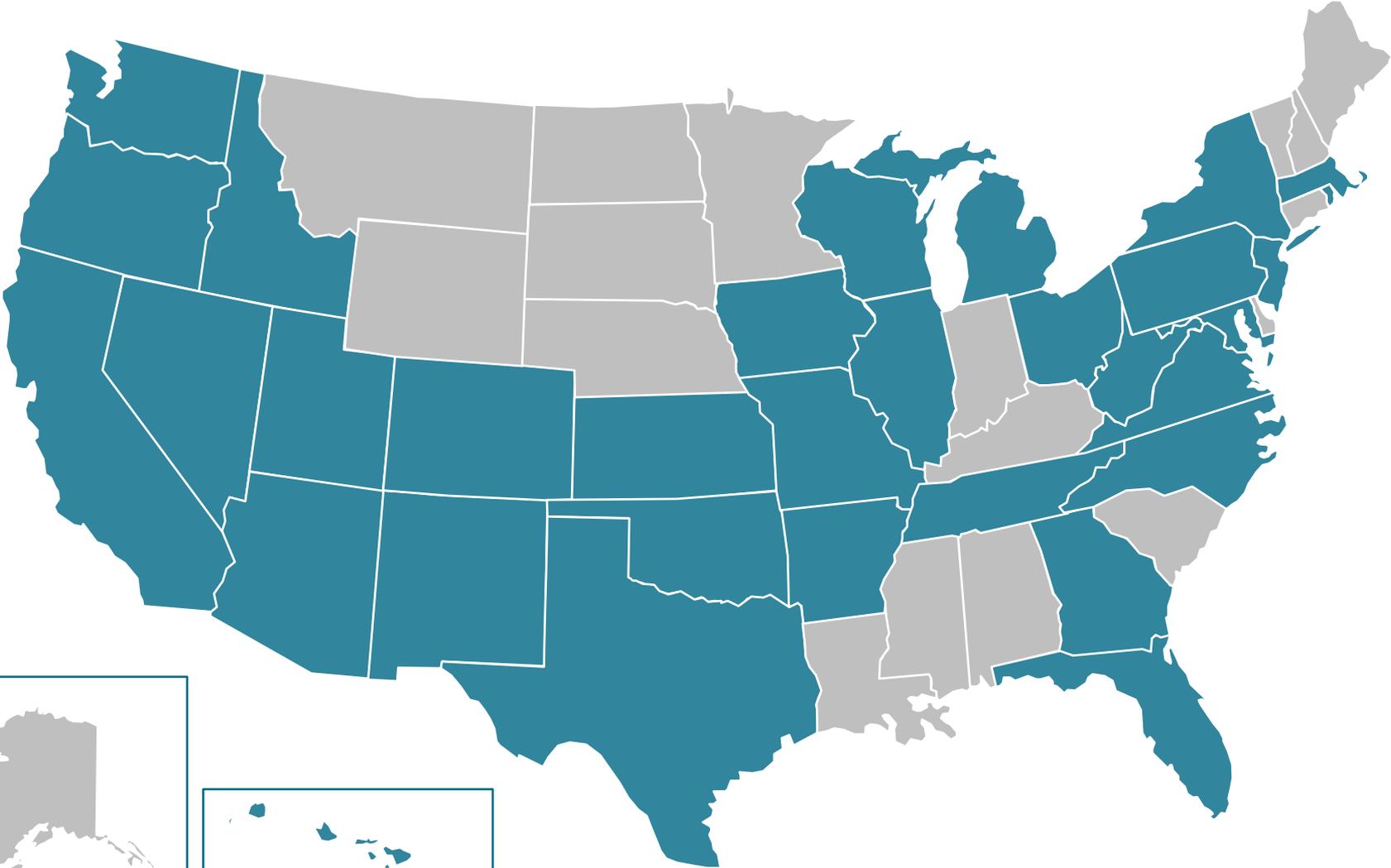
Western Recycled Water Coalition

- Survey sent out October 2013; results tallied November

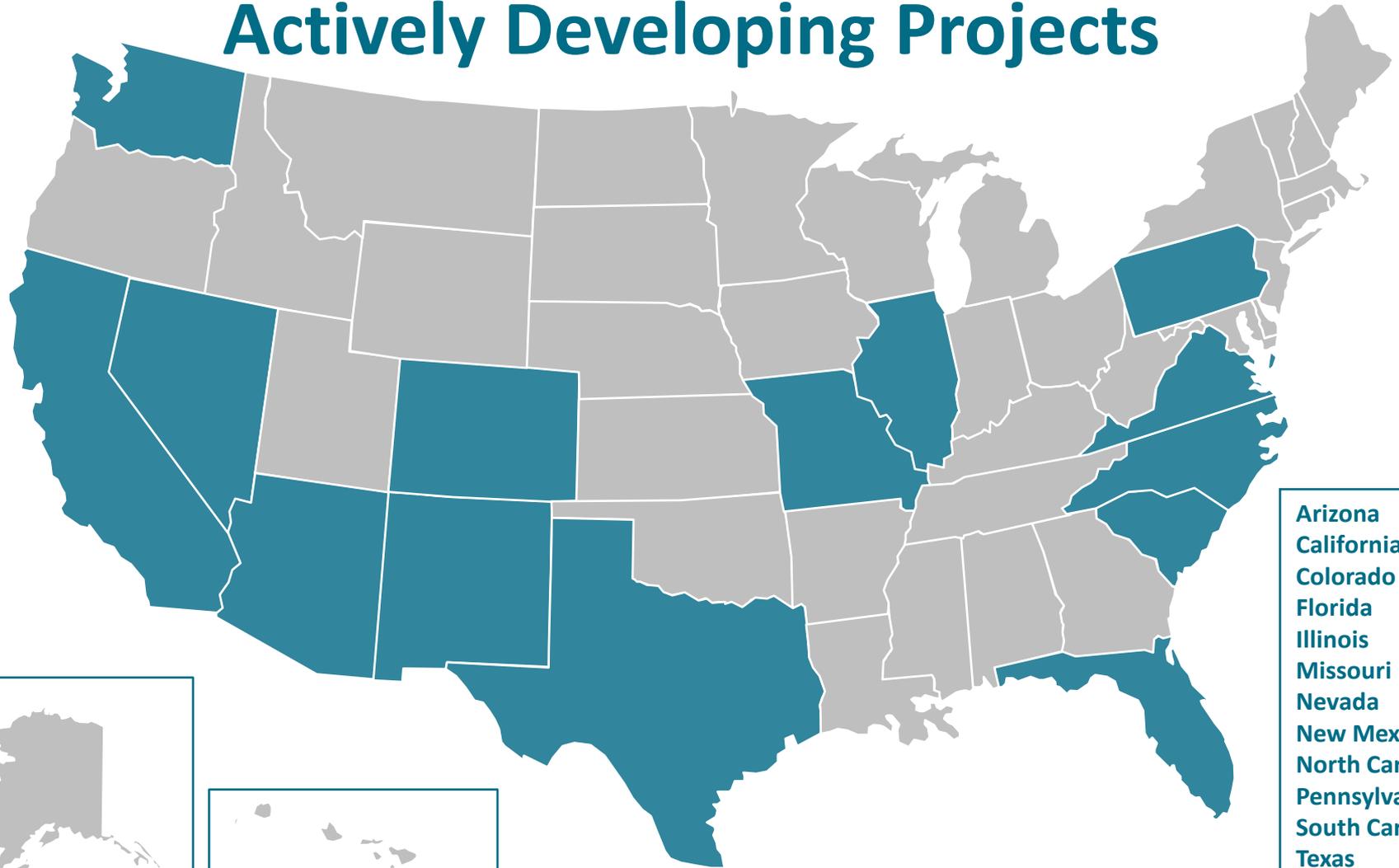
Survey Summary Disclaimer – What it is and is not

- It is a snapshot in time of results from responses received from October 8 – November 4, 2013.
- It is not the universe of recycled water projects in development across CA or the United States.
- It is not necessarily representative of projects, yield, or cost of projects across the U.S.
- It is responsive to the request to show where agencies/organizations across the U.S. are currently investing \$ in recycled water development.

219 Survey Respondents Located in 33 States

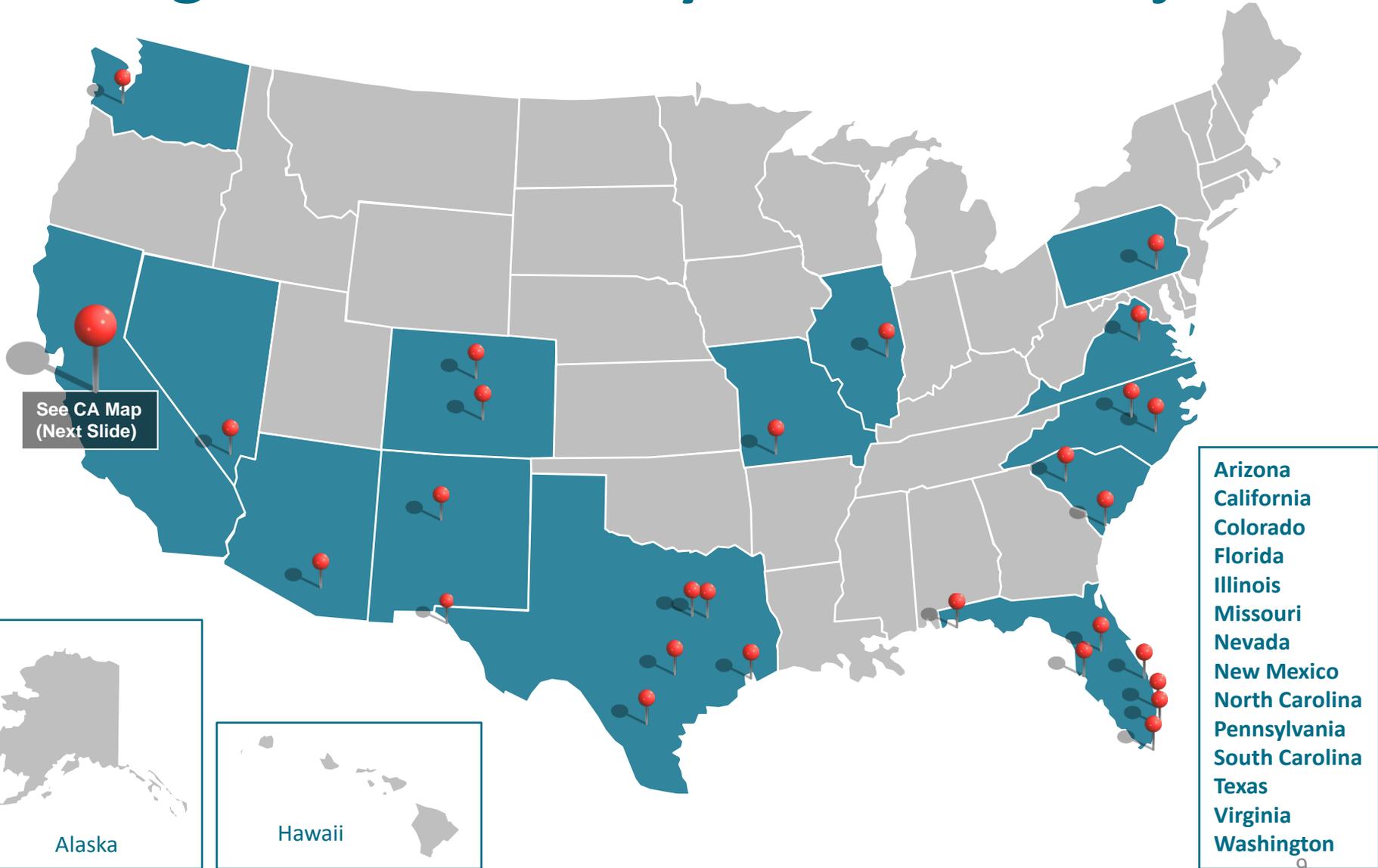


Survey Respondents in 14 States Reported Actively Developing Projects



- Arizona
- California
- Colorado
- Florida
- Illinois
- Missouri
- Nevada
- New Mexico
- North Carolina
- Pennsylvania
- South Carolina
- Texas
- Virginia
- Washington

92 Agencies with Recycled Water Projects

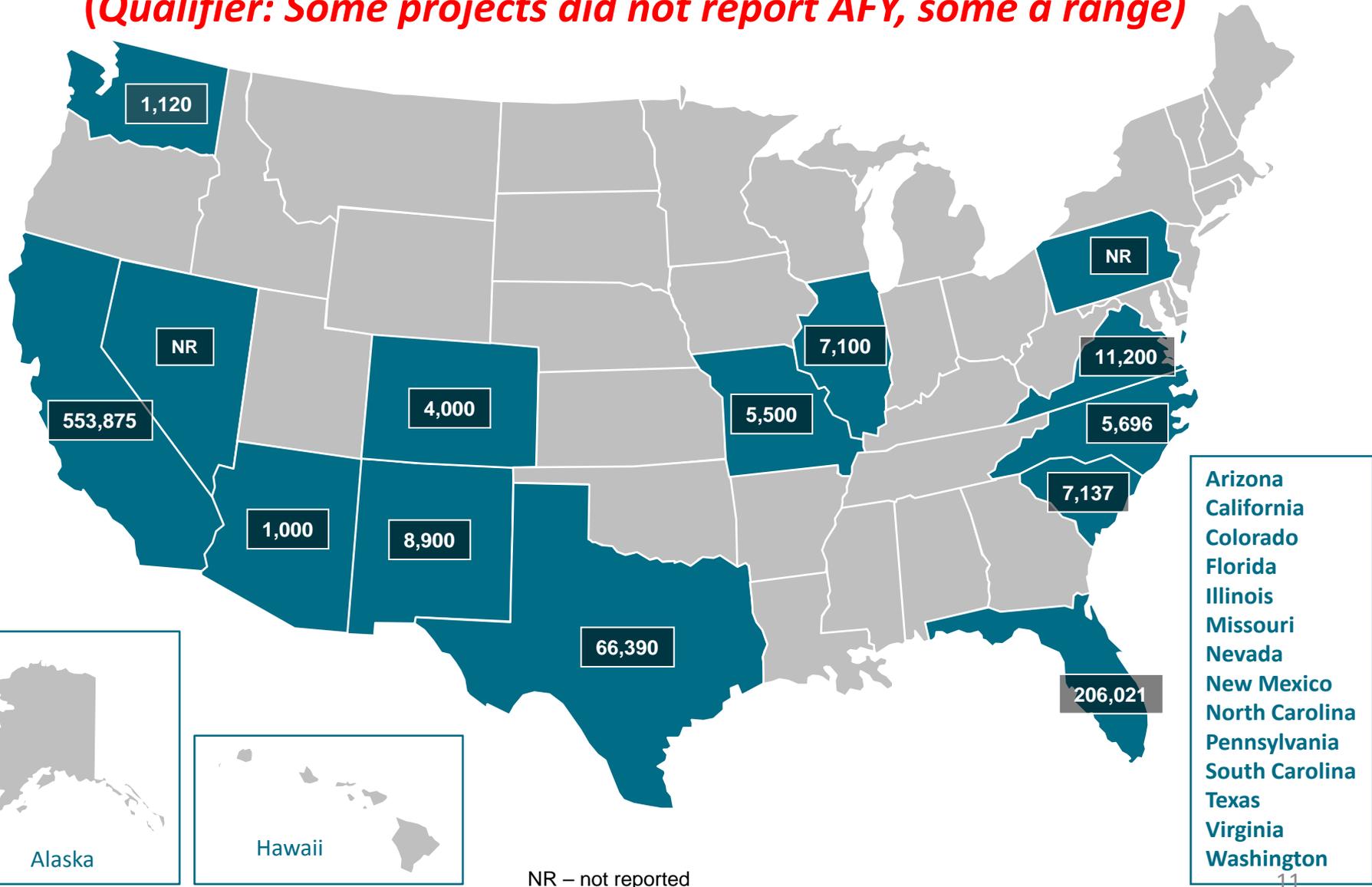


65 Agencies with Projects in California



~900,000 AFY being Developed by Survey Respondents

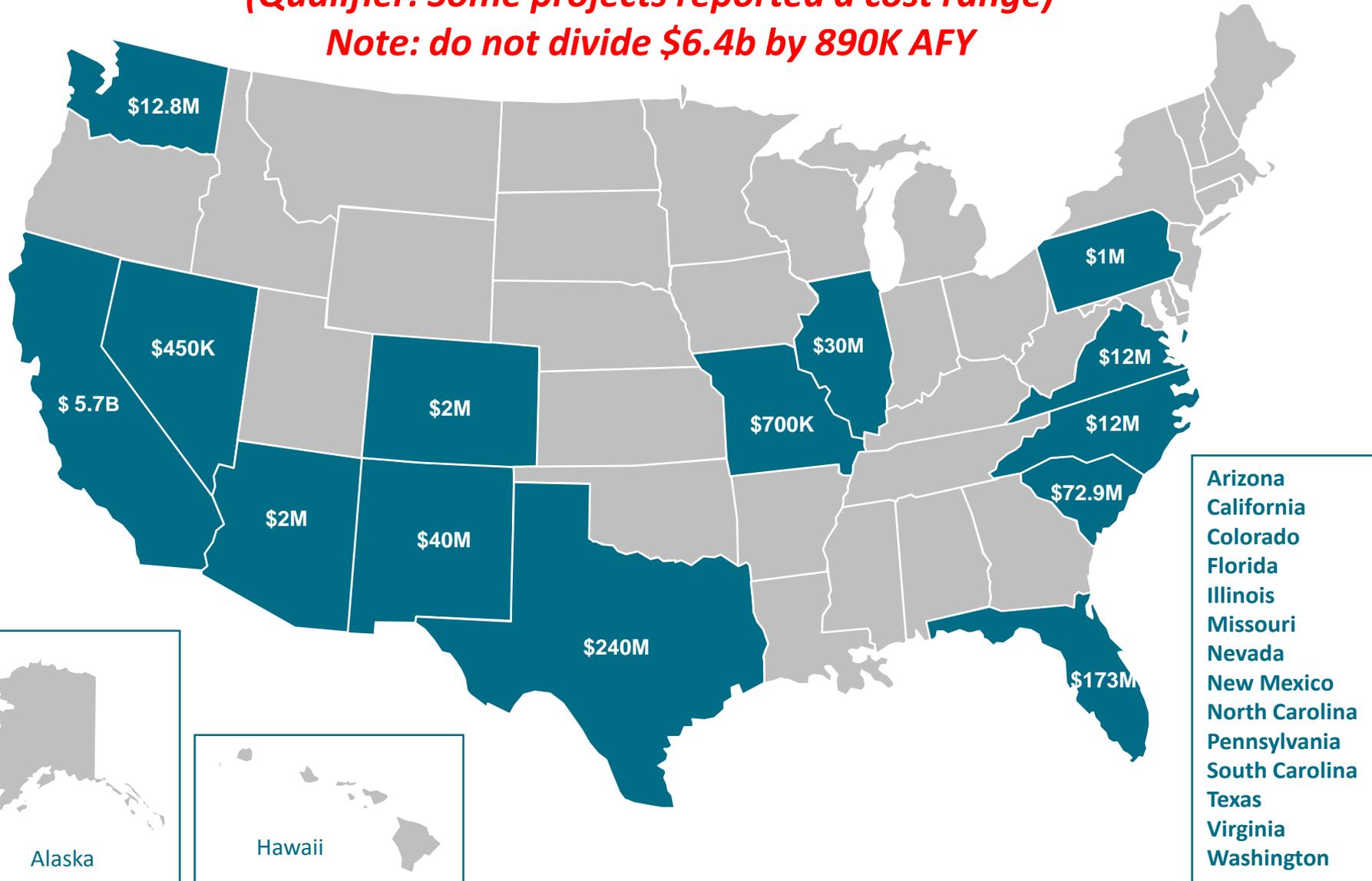
(Qualifier: Some projects did not report AFY, some a range)



\$6.4 Billion Total Project Costs for Survey Respondents

(Qualifier: Some projects reported a cost range)

Note: do not divide \$6.4b by 890K AFY



California Project Types

- 13 Advanced treatment facilities (UV/MF/RO); 9 tertiary treatment facilities; 5 scalping plants;
 - ~5 groundwater recharge and 4 indirect potable reuse projects
- Over 560 miles of pipeline, 36 storage facilities and 58 pump stations;
- ~23 misc. projects to expand treatment, distribution, or related facilities.

Project Funding Sources

- REAL PROJECTS: Over \$630 million spent to date on planned projects over the next 10 years
- \$450 million Federal & State funding secured to date
 - \$380 M SRF Loans
 - \$34 M Title XVI Grants
 - \$4 M Other WaterSMART Grants
 - \$3 M Other Federal Grants
 - \$28 M Other State Grants



Project Funding Needs

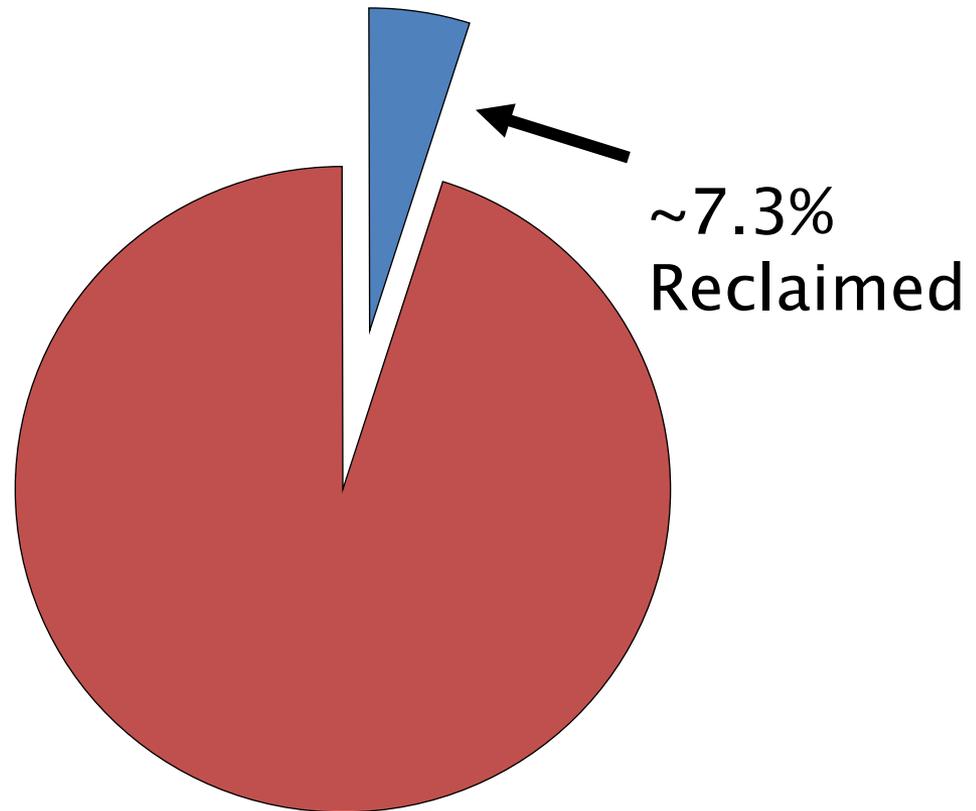
- \$2.8 Billion = Financial Support Needed
- 34% are “unlikely” or “definitely not” going to move forward without financial assistance
 - In California, 29 of 65 (**45%**) agencies are “unlikely” or “definitely not” going to move forward without \$ assistance
 - Represents over 225,000 AFY of recycled water that may not be developed w/out \$



Potential for Water Reuse

Source: Wade Miller, WaterReuse Association

- About 7% of municipal wastewater effluent in the U.S. is reclaimed and beneficially reused
- Israel reuses more than 70%
- Singapore reuses 30%, up from 15% in recent years
- Australia, now at 8%, has a national goal of 30% by 2015





How much is available in California?

- **3.5 Million Acre feet** of wastewater in California are discharged to the ocean each year.

“... represents the most immediately available and reliable source of new water in California.”

(source: WaterReuse Association)

Importance for California

We need water



December 2013 reservoir levels in Lake Oroville & Shasta Lake

Challenge: Project Funding Needs

- Agencies report needing ~50% State and/or Federal partnership in order to build recycled water projects.
 - With no outside funding, new RW systems can take ~40 years to break-even
 - A 50% partnership may reduce break-even period to ~20 years
 - It's very challenging for local governing bodies to invest in infrastructure with break-even periods >20 years

Why Does a 50% Cost Share Makes Sense?

Projects will provides local, state and federal benefits

- Creating drought-tolerant supplies that can be relied upon even with the predicted impacts of climate change;
- Reducing dependence on imported water supplies;
- Moving towards tertiary and advanced treatment of wastewater;
- Improving surface water quality and reusing precious water supplies;

Why Does a 50% Cost Share Makes Sense?

Projects will provides local, state and federal benefits

- Moving California toward Statewide recycling goals;
- Supporting jobs and economic development;
- Capitalizing on local agencies willingness to invest local dollars on at least a 1:1 basis for an investment that has state and federal benefits well beyond 20 years.



Pursue New Federal Funding

- Previous funding sources – not available
 - Title XVI – no new project authorizations and no earmarks
- Monitor New Federal Legislation:
 - Water Infrastructure Financing Innovation Authority (WIFIA - proposed loan program)
 - “California Emergency Drought Relief Act of 2014”
 - Others? Modifications to existing acts



Pursue New State Funding

- Previous: Propositions 13 and 50
- Existing: Proposition 84 – Round 3 remains
- New:
 - Drought legislation
 - Water Bond
- Modify:
 - CWSRF Loans – 0% for 30 years



California Follow-up Survey (Feb. 2014)

- 57 California Agencies Participated
 - 45 agencies with projects to construct in 1-3 years:
 - Finance \$1.1 B
 - Produce/distribute 200 TAF
- State Water Resources Control Board – Reviewing Results
 - Considering potential to offer 0-?% interest loans for RW
 - Criteria? Timing? TBD
 - Requires Board approval

Value of 0% financing Example: \$10 Million Project

SRF Terms	Annual Debt Service	Present Worth of Debt Service*	Savings v. \$10 M project*	Equiv. Grant Funding*
30-year, 2.1%	\$452,662	\$7,373,361	\$2,626,639	26%
30-year, 1%	\$387,481	\$6,311,635	\$3,688,365	37%
30-year, 0.5%	\$359,789	\$5,860,563	\$4,139,437	41%
30-year, 0%	\$333,333	\$5,429,624	\$4,570,376	46%

*Using a 4.5% Discount Rate representative of traditional tax-exempt bond financing rate

Next Steps

- **Inform:** 65 projects in CA developing over 550,000 AFY, \$2.8 funding needs
 - Being shared with elected officials, funding agencies
- **Solidify the “ask”:** Agencies report needing ~50% State and/or Federal partnership in order to build recycled water projects
- **Work with SWRCB:** 0-1% 30-year loans for ready recycled water projects – limited time opportunity

Next Steps (cont.)

- **Secure new funds:**
 - Identify state elected officials to support water bond language or separate legislation to increase RW funding
 - Seek callout \$ for RW
 - Monitor Federal legislative proposals
 - Seek additional funding for recycled water projects



Collaboration & Partnership

- **Join together - Speak as one voice**

Continue to work together and invite others to join
(WateReuse, CASA, WRWC, ACWA)

Thank you

Contact

Jayne Strommer

JayneS@ddsd.org

(925) 756-1910

www.westernrwc.org

