Water Quality Program Initial Assessment

Presentation to CALFED
Bay-Delta Public Advisory Committee

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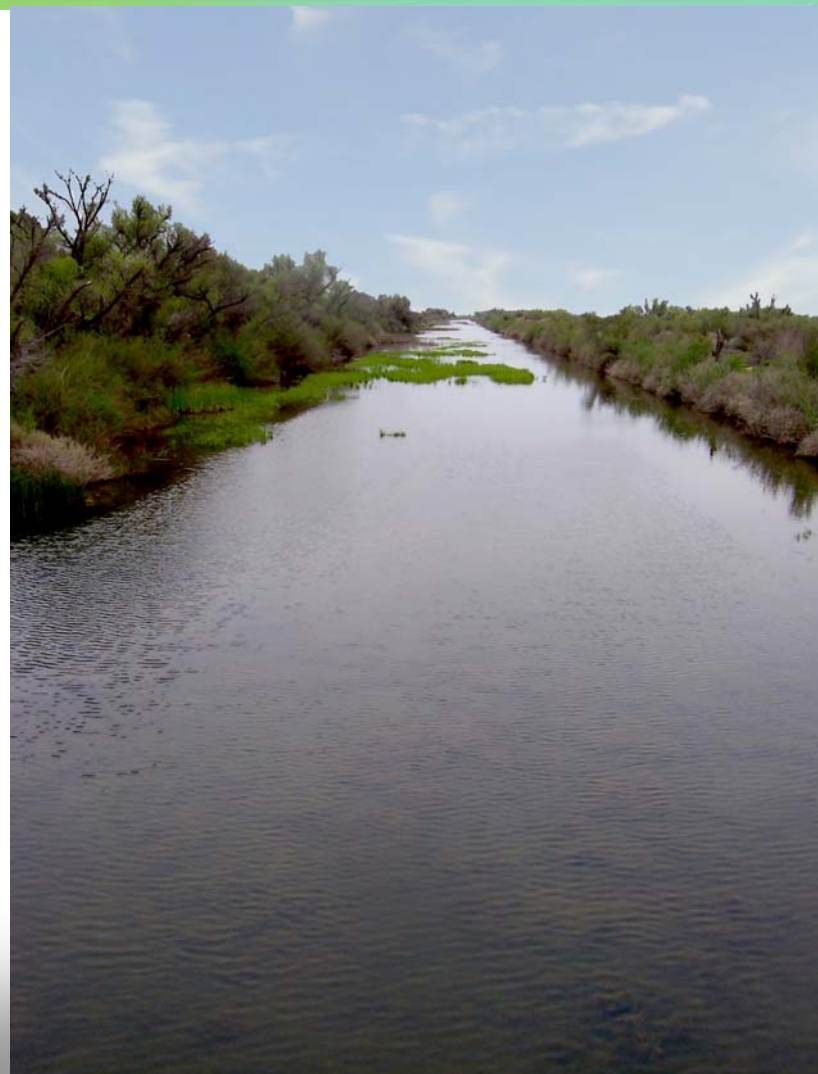
Brown and Caldwell
June 8, 2005

BROWN AND CALDWELL

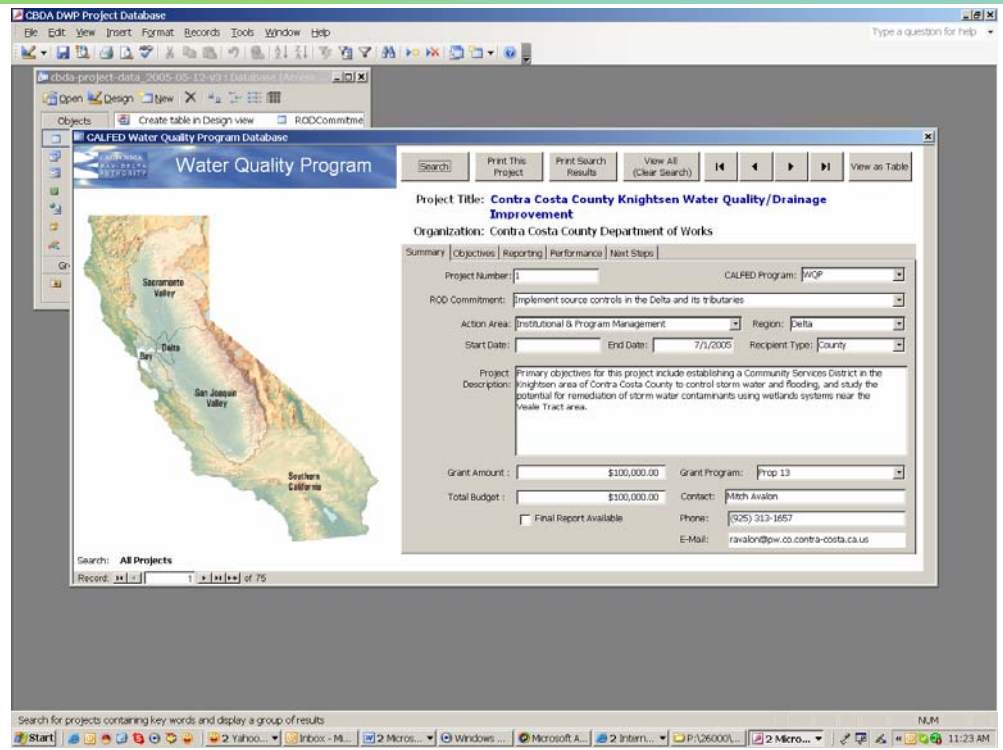
Overview of Today's Presentation

- Assessment process
- Key results
- Conclusions and recommendations



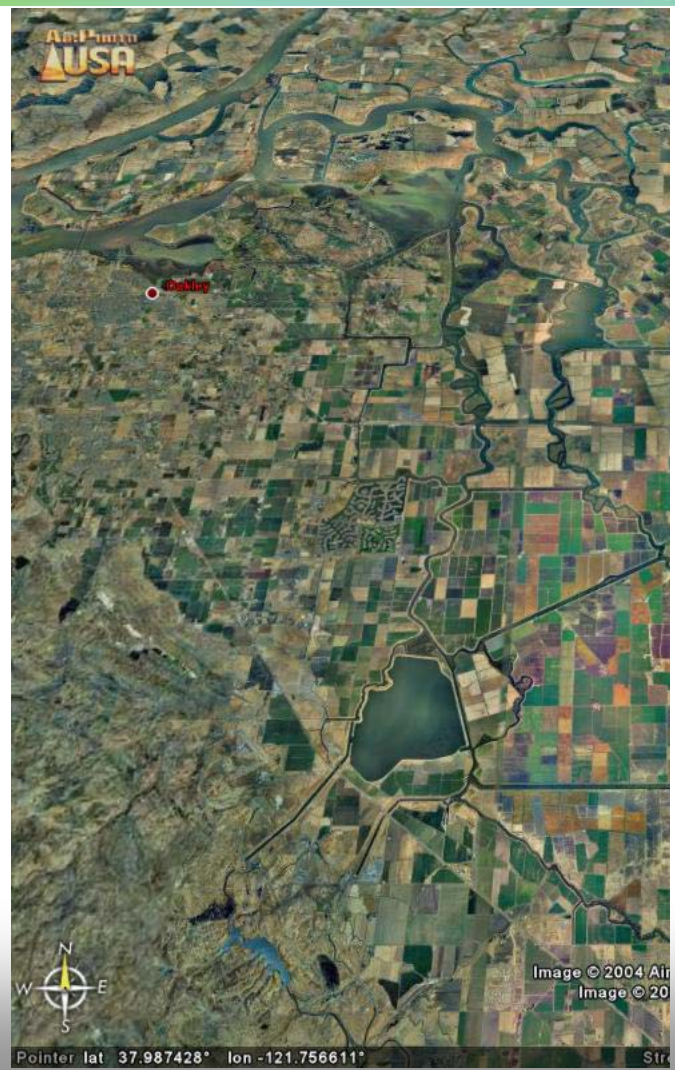
Assessment Process

- Project documentation
  - Surveys
  - Interviews
  - Database
- Preliminary results
  - Existing water quality
  - Performance measures
- Review and refinement
  - Feedback and input
  - DWS, CUWA, and participating agencies



Existing Delta Water Quality

- Challenges in characterization
  - Complex system
  - Data and tools not fully developed
- Extensive feedback and input
  - More comprehensive characterization
  - Overview of new tools
  - No conclusions yet
- Basis for future assessment



Measures of Progress

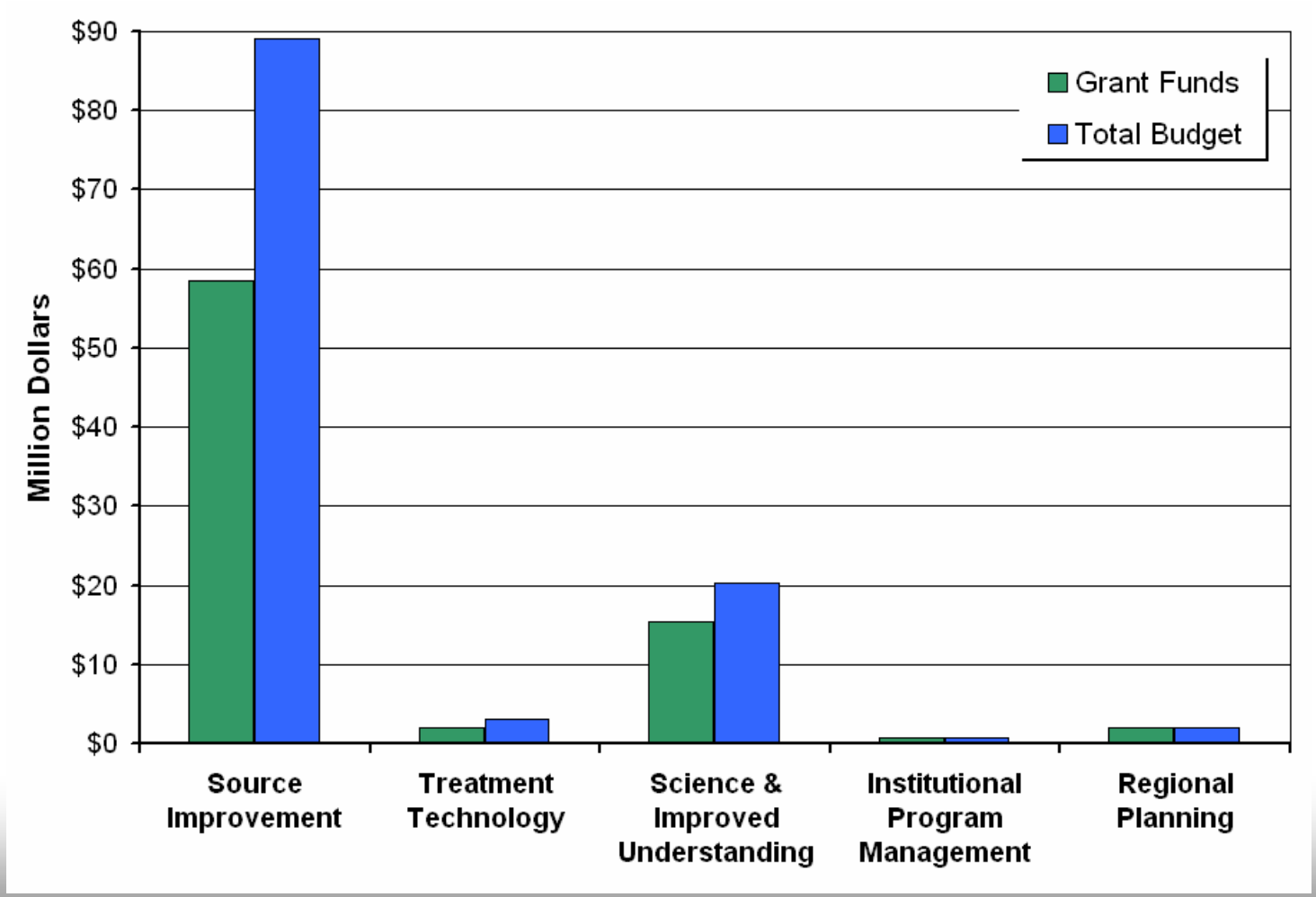
"Progress toward meeting CALFED water quality targets and alternative treatment technologies"

- Administrative measures *ROD, 2000*
- ROD commitments
- Water quality targets

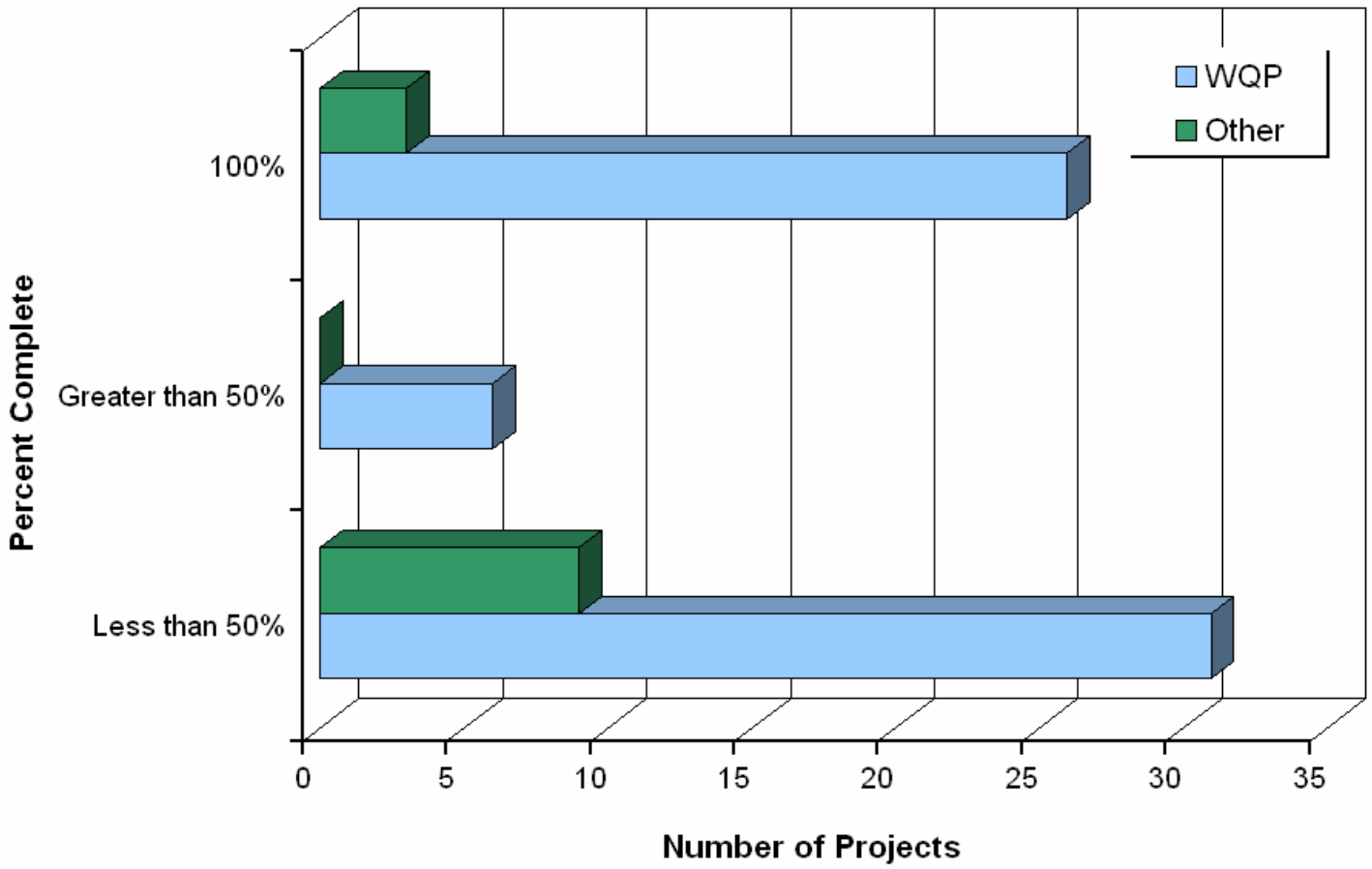
  "…50µg/L bromide and 3.0 mg/L total organic carbon…or an equivalent level of public health protection" (ELPH)
- Treatment technologies

ROD, 2000

Administrative Measures – $78M in WQP Funding



Majority of WQP-Funded Projects are Still in Process



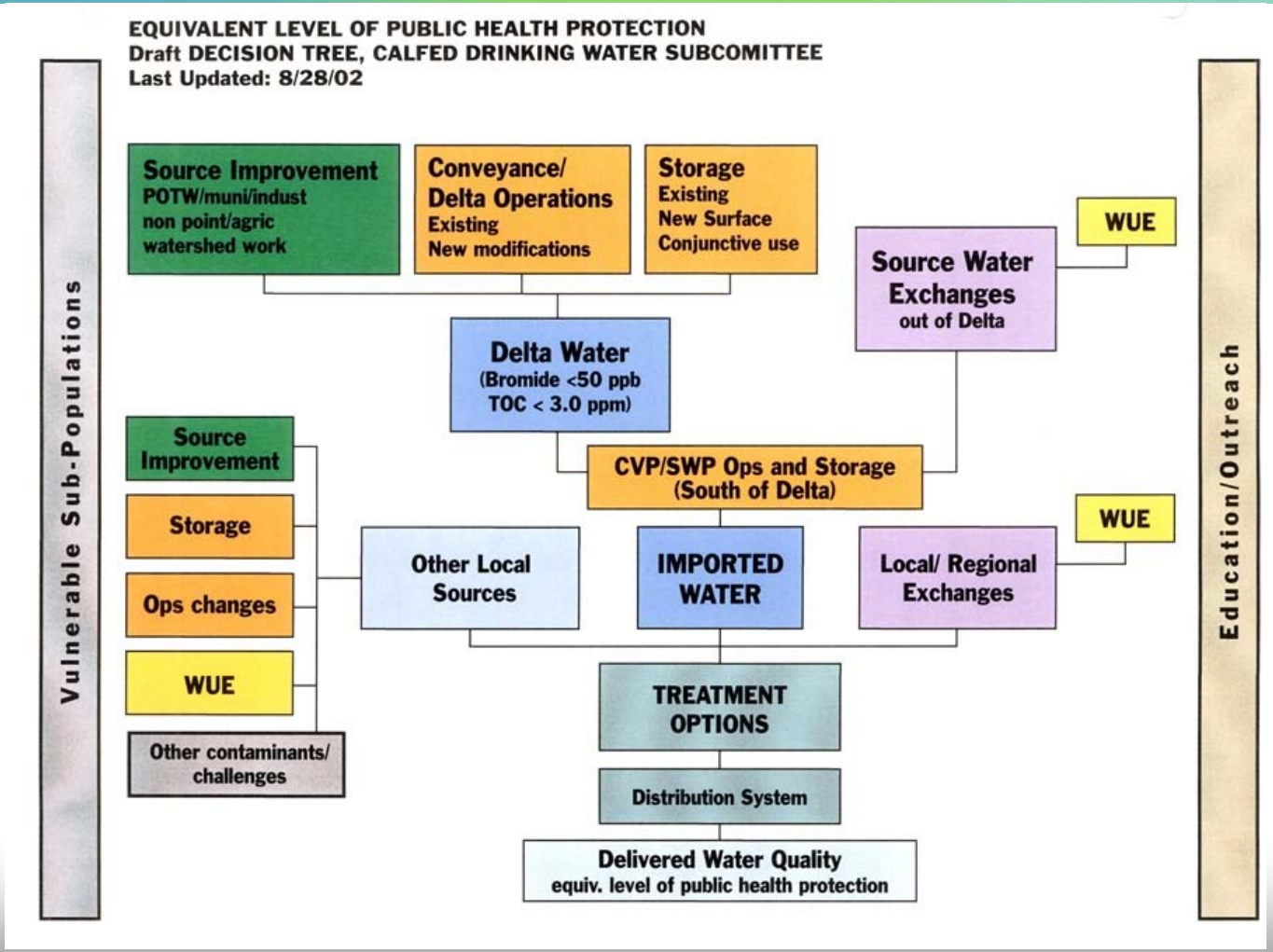
Progress Toward ROD Commitments – Many Complete, Others Still in Process

- San Joaquin Valley Drainage
  - 10 projects, $5.3M, early stages
- Source Controls
  - 33 projects, $30M, early stages
- Drinking Water Subcommittee
  - Ongoing effort, adequately addressed
- Treatment Technology
  - 4 projects, $1.9M, commitment fulfilled*
- Conveyance Runoff
  - 8 projects, $17M, commitment fulfilled*
- North Bay
  - 2 projects, $600K, commitment fulfilled*
- Recirculation
  - Pilot study completed

Progress Toward Water Quality Targets

- Existing water quality exceeds ROD targets for bromide and organic carbon
- Majority of WQP-funded projects support progress toward water quality targets
- Too early to see actual improvements in water quality and ELPH
- Ongoing efforts needed in source protection and ELPH

Shift Toward ELPH Will Provide Framework for Prioritization



Progress on Treatment Technologies

- Promising demonstration projects
  - UV disinfection
  - Ozonation
  - Ion exchange resins
  - Desalination of agricultural drainage

Water Tech Partners and UCD

Conclusion – Progress on Understanding of Drinking Water Quality

- Recommendations:
  - Continue to support monitoring and assessment tools.
  - Shift focus from ROD commitments to regional ELPH plans.
  - Make performance measures a high priority.
  - Better understand the role of environmental justice and tribal interests.

DWR

Conclusion – Need for Realistic Schedules and Expectations

- Recommendations:
  - Develop realistic expectations on schedules for grant funding.
  - Shift focus to on-the-ground improvement projects where timely.
  - Prioritize efforts based on a reduced level of funding and focus on direct improvements.
  - Develop performance measures specifically to track contributions of individual projects.

Conclusion – Need Better Coordination between Projects & Program

- Recommendations:
  - Include implementing agency staff resources in funding process to facilitate coordination.
  - Facilitate knowledge sharing and integrate project results into broader WQP framework and strategy.
  - Provide additional communication forums, including website, brown bag series, and topic-specific workshops.

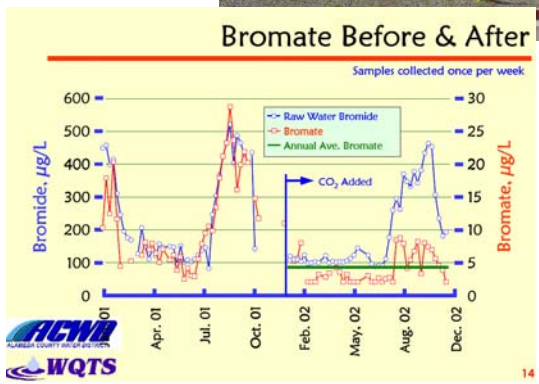
Conclusion – Central Valley Drinking Water Policy Project Critical

- Recommendations:
  - Continue WQP support through basin planning phases.
  - Use tools to further educate on linkage between source water and treated water quality.

Conclusion – Treatment Technology ROD Met, but Future Role Unclear

- Recommendations:
  - WQP re-evaluate role in treatment technology.
  - Consider scale, transferability, treatment processes, and community size.

Alameda County Water District



Conclusion – Shift Toward Regional ELPH Planning is Appropriate

- Recommendations:
  - Fund and facilitate development of regional ELPH plans and synthesis of plans to inform goals and priorities.
  - Use plans to inform performance measures.

Questions/Discussion