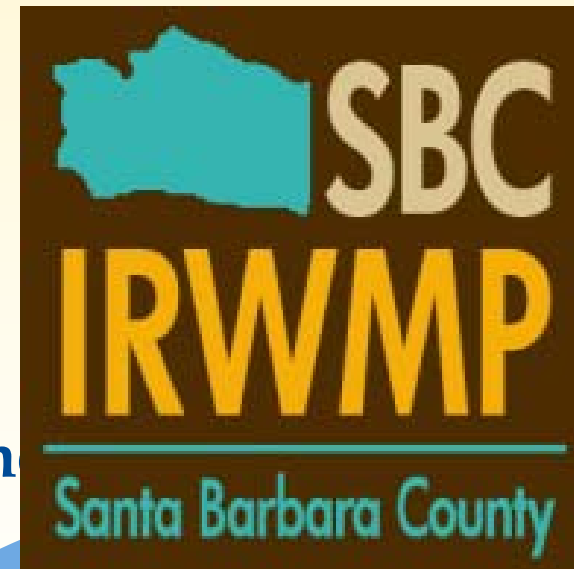




Santa Barbara County
IRWM Plan 2013
South Coast Recycled Water Development
Plan
Planning Workgroup
Meeting



Presenters
Scott Lynch
Kathy Caldwell

March 13, 2013

*Innovative Solutions for
Water and the Environment*

Agenda

- A. Approval of December 5th Conference Call Meeting Notes
- B. Approval of Plan Cover (handout)
- C. SB County IRWM Plan 2013 - Recycled Water Target
- D. Overview of Final Report
- E. Comments on Draft
- F. IRWM Plan 2013 Approval Process
- G. Next steps

Santa Barbara County IRWM Plan 2013

Recycled Water Target

- 7,035 AFY by 2035 (county-wide goal)
- 2,293 AFY expected to be recycled water from the south coast sub-region
- Goleta plans to expand from 785 to 870 AFY
- Santa Barbara plans to expand from 1,150 to 1,423 AFY

Overview of Report

- Executive Summary
 - Background
 - Plan Components
 - Available Recycled Water Supplies
 - Identification of Potential Recycled Water Demands
 - Recycled Water Treatment Needs
 - Recycled Water Distribution System Needs
 - Analysis Approach
 - Benefits to the Region
 - Potential Constraints
 - Recommendations

Overview of Report (con't)

- Chapter 1 Introduction
 - Background
 - Plan Components
 - Stakeholder Process
- Chapter 2 Literature Review
 - Summary of agency/organization provided documents
- Chapter 3 Regulations
 - Summary of Federal, State, and local regulations

Overview of Report (con't)

- Chapter 4 Existing Wastewater Treatment Plants and Recycled Water Systems
 - Summary of existing WWTPs and RW systems
 - Identify potential available RW
- Chapter 5 Potential Customers
 - Summary of existing RW demands
 - Identify potential RW demands (all)
 - Summary of potential demand – those used to develop projects)

Overview of Report (con't)

- Chapter 6 Wastewater Treatment Plant
 - Define improvement needs and costs
- Chapter 7 Distribution Needs
 - Criteria
 - Identify potential distribution systems

Overview of Report (con't)

- Chapter 8 Potential Projects
 - Approach and cost criteria
 - Projects summary
 - By area
 - Optional projects
 - Estimated costs
 - Benefits to the region
- Chapter 9 Constraints and Recommendations
 - Constraints (by user, project agency, region)
- Chapter 10 References

Appendices

- Appendix A - Document/Data Summary
- Appendix B - EPA Guidelines for Water Reuse (2012)
- Appendix C - CDPH 2011 Draft Regulation for Groundwater Recharge Reuse and Public Workshop Presentations
- Appendix D - Demands Assumptions
- Appendix E - Potential Recycled Water Customers

Summary of Recommendations

- Assess value of recycled water to the region
- Identify avoided costs
- Benefits/linkages to SNMPs for using RW needing advanced RO treatment
- Addressing customer recycled water quality needs
- Regional approach to pursuing project funding
- Addressing institutional level agreements early
- Long lead time for IPR projects
- Consider programmatic environmental documentation

Comments on Draft

- Section 5
 - Potential AG demand not included for GWD because of
 - High cost to reduce TDS levels
 - Current water use is groundwater/surface water, so cost would have to be greatly subsidized
 - Therefore, no additional work done on these potential users
 - Only users that were deemed feasible based on the agency's individual situation and/or had existing data were included. Additional efforts that would not result in near-term projects (AG, golf courses on GW, etc) not included

Comments on Draft

- Chapter 5 and Chapter 8 “Demands”
 - Chapter 5 = “Potential of all users identified”
 - Chapter 8 = “Demand of potential projects”
 - Demand Table(s) – add El Estero process water as a demand

Comments on Draft

- Section 6.2 (page 6-2)
 - Costs:
 - Revise language regarding tertiary and RO treatment unit costs being “somewhat comparable.”
 - Add note as to why costs are more for RO (membranes) and also that O&M for RO is much higher (energy, membrane replacement, chemicals)
- Section 7.2.1 (page 7-2)
 - Existing System Improvements: In recent years, the GWD recycled water distribution system has demonstrated the pace at which recycled water systems can depreciate. Do we want to note this?

Comments for Discussion

- 8.3.3 Unit Costs and Assumptions
 - Add note regarding “conceptual level costs estimates” (p. 8-22)
 - Table 8-9: add note that contingency is 30% (per p. 8-22)
 - Page 8-23: No land acquisition costs for injection wells
 - None included for any facility: Should we add clarification in cost criteria about this and that it is part of the contingency?

Comments for Discussion

- Section 8.5 - Benefits of Projects
 - Some language should be added to this section indicating that these benefits are identified to illustrate some of the considerations that could be weighed against economic costs for decision-making purposes. Previous sections have discussed project-related costs, but full cost-benefit analysis would go deeper by identifying a full range of economic benefits and costs.

Comments on Draft

- Executive Summary
 - One framework consideration for the introduction and set-up of the Recycled Water Plan (Plan) is the fact that two local agencies (Goleta Water District and the City of Santa Barbara) have significant experience managing and operating relatively mature recycled water systems. This provides a unique opportunity for local data, information sharing, and analysis that could be leveraged by other agencies considering adding recycled water to their supply portfolios in the future.

Comments on Draft

- Executive Summary (Page ES-4: Table ES-5)
 - Describe what the table is trying to communicate
 - Ex: Illustrate that relatively significant capital expenditures are required to maintain existing users and to add new users to relatively young recycled water systems in the Goleta and Santa Barbara service areas. This could be instructive for those considering building recycled water systems in the future.
 - May be helpful to expand the definition of \$/AF, and explain that this could be used as a relative gauge regarding planned expenditures to support existing and future capital improvements.
 - Other messages?

Comments on Draft

- Section 9 (and Executive Summary)
 - Change “Constraints and Recommendations” for this section and with “Findings: Constraints and Next Steps”?
 - Will this meet State requirements?

Comments on Draft

- Section 9.1 – Potential Constraints
 - Section 9.1.1 (User Constraints – Water Quality) and Section 9.1.2. (Project Challenges – Regulatory)
 - Mention concerns over CECs?
- Section 9.1.2 – Project Challenges
 - Add challenge noting relatively high lifecycle costs of recycled?
 - Assets depreciated faster than potable water system assets
 - RW systems use significant amounts of energy, particularly R/O systems,
 - Brine disposal for R/O is additional costs
 - This relates to overall “cost of service,” as well as other sustainability considerations.
 - Other?

Comments on Draft

- Section 9.1.2 – Project Challenges
 - Add challenge acknowledging that RW systems do not pay for themselves using traditional “cost of service” rate methodologies. Rates for recycled water customers are typically low to incentivize conversion, thus system maintenance and repair is typically subsidized by potable users’ rates.
- Section 9.1.3 - Agency Challenges
 - Feasibility of Projects - rewrite to be more generic? (Comment was in reference to Exec. Summary)
 - Should we consider for Section 9 discussion as well?
 - Suggested text: “Substantial economic cost/benefit analyses should be performed when determining the feasibility of potential recycled water projects.”

Comments for Discussion

- Section 9.1.3 - Agency Challenges
 - Customer Acceptance:
 - Should we spell out concerns over public health? Keep more generic?
 - Explain impacts of water quality on use?
 - Include statement regarding the acceptance of costs subsidies by potable customers?
 - Health Concerns over Recycled Water Quality:
 - Delete sentence: "...the public has not expressed significant concerns over public health and safety of the recycled water."

Comments on Draft

- Section 9.1.4 - Regional Challenges:
 - Large Agricultural Demands: Add note that recycled water may impact the taste of agricultural products?

Comments on Draft

- Section 9.2
 - Combined bullets **Assessment of Regional Water Value with Evaluation of Avoided Costs and Other Economic Benefits?**
 - Assessment of Regional Water Value
 - Include recommendations for studying value of offsetting groundwater use from regional golf courses with recycled water?
 - Groundwater Quality Improvements
 - Question: Are these improvements in the in the context of IPR? Should be clarified.
 - Answer: Per text “For recycled water projects employing reverse osmosis treatment...” IPR is direct benefit. Irrigation has some benefit

Comments on Draft

- Section 9.2
 - Meeting Customer Recycled Water Quality Needs
 - Golf Courses - Should we recommend examining how much groundwater use is attributable to regional golf courses, and how many AFY of recycled water could go to these users?

IRWM Plan 2013 Approval

- Posted on IRWMP website
- Steering Committee Meeting – May 2013
- Public meetings – July and October 2013
- Approval by Cooperating Partners – December, 2013

Next Steps

- A. Address work group comments
- B. Finalize and post Draft Report with track changes on share point site
- C. Work group approval of changes
- D. Incorporate changes and post Draft Final