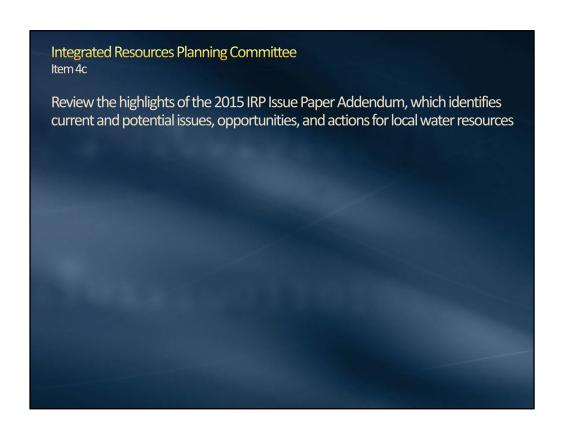
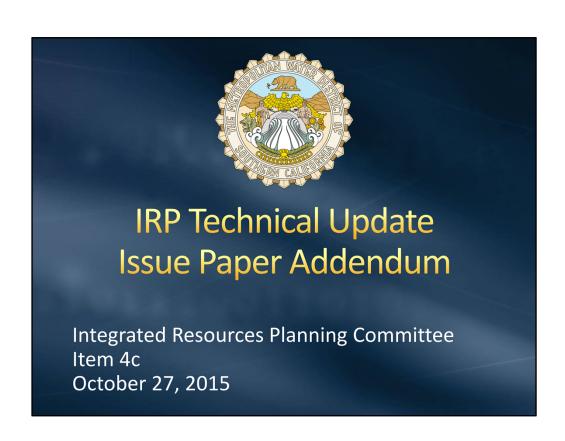
Integrated Resources Planning Committee
Item 4c

Subject: 2015 IRP Update Local Water Resources Issue Paper Addendum

Purpose: the purpose of this presentation is to provide an overview of the Final Draft IRP Issue Paper Addendum

IRP Committee/October 27, 2015





# Purpose To help inform future water resource discussions by identifying current and potential issues, opportunities, and actions

Is aimed to help advance the regional discussion on water resources by identifying current and potential issues, opportunities, and actions.

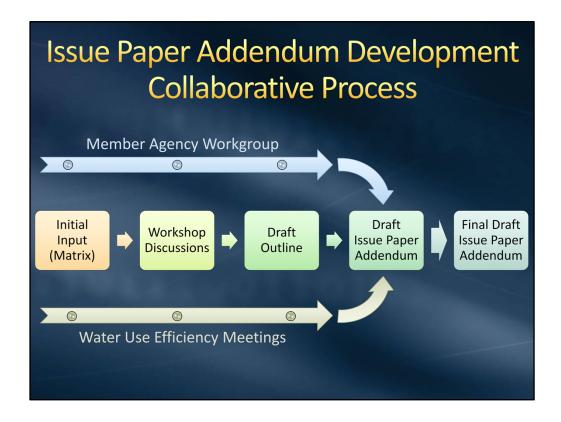
**Not** aimed to dictate policy, rather to provide information to **help** with the policy discussion. This is also **not** a textbook on each resource.

We are aiming for an effective (meaning concise and readable) comprehensive document.

# 2015 IRP Issue Paper Addendum Background

- Builds on the 2010 IRP Issue Papers
- To be transmitted to Board in November
- Includes the following areas:
  - Conservation
  - Groundwater (including stormwater and other recharge)
  - Recycled water
  - Seawater desalination
  - Graywater
  - Resource interrelations

The 2010 IRP included the development of 6 individual issue papers based on each resource area (involving in-depth workgroup discussions). This addendum builds on that base of information.



The process of collaborating regional on the development of this issue paper addendum started at the IRP kickoff meeting with your member agencies back in April of this year. We also received input from external experts.

Collaborative process with your member agencies of receiving input, discussing the compiled information, and then going through the steps of developing this final draft issue paper addendum

Thank you for all your participation and input. Hopefully we captured your input and represented the key points in this paper.

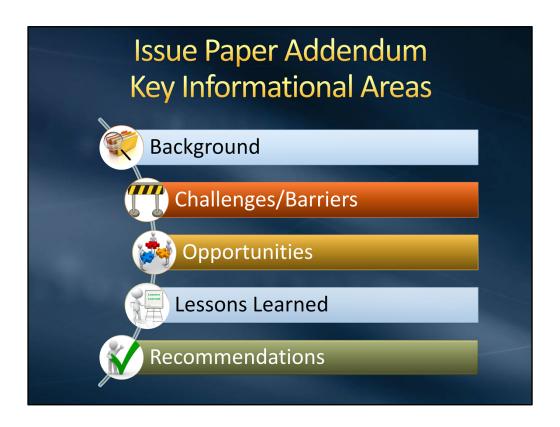
Input matrix: introduced at the kickoff meeting, comments due 5/15

Presentations on the compiled input and issue paper content from 6/11 (groundwater part 2 workshop) to 6/24 meeting on local resources (all other resources)

Draft outline: presented and sent out for review on 7/8 (comments due 7/15)

# Parallel process

Utilizing an already established venue: monthly WUE meetings, comprised of member agency and Metropolitan conservation staff (generally on the 3<sup>rd</sup> Thursday of every month)



The addendum is organized by resource. These are the key informational areas discussed in each resource section.

For this presentation, I'll provide a general overview of the types of challenges, opportunities, and recommendations identified in the Issue Paper Addendum



Not exactly how the paper is laid out, but it does give you a flavor of the types of challenges discussed in the paper

Challenges/barriers to developing these future resources can be summarized into these general categories

Public Awareness/Perception: Difficulties communicating water usage to the end user...even ways to impact behavior can be challenging for example with prop 218. Strong opposition in some areas. As well as misinformation.

# **Regulatory Hurdles:**

O&M: balancing flood control and stormwater capture and recharge, sediment removal, brine disposal, energy use, improper maintenance, need for operator training

Sustainability: difficult to sustain commitment to conservation during non-drought years, threats to groundwater sustainability

# Water quality:

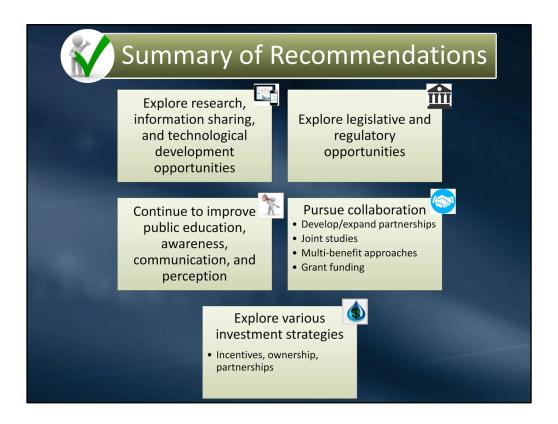
Source: RW - influent water quality from the WWTP, groundwater contamination, wastewater reduction impacts influent water quality Impacts: graywater may have potential health and soil impacts, potential groundwater basin salt loading, And conflicts with other sources

Costs: low-hanging fruit may be gone (including demand hardening). In some areas, it's

difficult to assess benefits due to lack of water savings data (especially for measures that depend on behavior...shower heads) and data on project yield (stormwater)...essential to investment decisions and planning

Summary of Opportunities	
Drought has created momentum	<ul><li>Heightened awareness of water</li><li>New regulatory pathways</li><li>Improved public perception</li></ul>
Technological Advances	<ul><li>New technology</li><li>Research and case studies</li></ul>
New Funding Opportunities	Variety of sources and applications
Collaboration	<ul> <li>Integrate resources and manage risks</li> <li>Collaboration on multi-benefit projects and grant funding</li> </ul>

Heightened awareness and new regulatory pathways (e.g., AWT can be used as blend water)



You will see that the recommendations are more broad categories of recommendations versus detailed steps, as we are very careful to allow flexibility and not to presume to dictate policy, which is in phase 2

Collaboration: e.g., continue to assist with model ordinances

Explore integrated approaches (optimizing resource interactions)
Integrating programs: existing and new funding, research, etc. programs

# 2015 IRP Issue Paper Addendum Conclusions

- Represents input received in the process
- Serves to inform policy discussions in Phase 2
- Serves as a reference for technical issues
- Will be included as an appendix to the 2015 IRP Technical Update Report

(i.e. disclaimer, these are not our recommendations)





# Conservation

# Challenges

- Difficult to sustain commitment to conservation during non-drought years
- Conflicting institutional objectives
- Communicating water use to end users
- Demand hardening
- Compliance with Prop. 218 requirements
- Availability of water savings data

# **Opportunities**

- Drought has created momentum
- Technological advances
- Behavior modifications and market transformation

# Recommendations

- Evaluate existing programs & explore new programs
- Continue to assist with model ordinances
- Provide targeted outreach and education
- Explore research opportunities
- Develop opportunities for information sharing & communication
- Explore incentive strategies

# Groundwater (including stormwater and other recharge)

# **Challenges**

- Loss in groundwater production capability due to ongoing drought
- Continued loss in recharge due to urbanization, conservation, and other
- Future climate change
- Groundwater contamination and salt loading

# **Opportunities**

- Adjudication amendments have improved management flexibility
- Regulatory changes help maximize recycled water recharge
- New technologies for treatment/disposal

## Recommendations

- Explore opportunities to address ongoing sustainability issues
- Explore innovative projects/partnershi ps
- Continue to provide an avenue for open regional discussion on stormwater

### **Recycled Water** Challenges **Opportunities** Recommendations • Lengthy and Progress toward • Explore variable permitting opportunities to new regulatory process process improve the permitting process Varied public • Improving public acceptance and perception • Improve public education and perception New funding awareness opportunities Costs • Explore various Water quality New technologies investment issues & research strategies (i.e., • Operational & incentives, institutional ownerships, and barriers partnerships) • Consider joint technical studies

### **Seawater Desalination** Challenges **Opportunities** Recommendations • Improve permitting • Explore legislative, Costs regulatory, and process Permitting and new communications regulations • New technologies opportunities & research • Demand risk • Continue • Improving public • NGO opposition investment in communications research and • Partnerships to innovation share risks • Investigate partnership opportunities

# Stormwater Direct Use Challenges **Opportunities** Recommendations • Rainfall patterns • New regulations • Evaluate business that allow capture case analysis for • Operation and and reuse providing additional maintenance incentives Increased public understanding of • Continue to provide water issues an avenue for open regional discussions • Encourage information sharing

# Graywater Challenges Opportunities Recommendations • Permitting Recent regulatory • Continue to changes and encourage research • Cost streamlined of potential and Potential health impacts permitting and soil impacts • Improved public • Continue to • Conflicts with other acceptance improve public resources awareness

### **Resource Interrelations** Common elements and resource interconnections **Shared Challenges Opportunities** Recommendations Water quality • Collaboration on Explore partnership multi-benefit opportunities & Regulatory funding strategies projects and grant challenges for multi-benefit funding Costs and limited approaches Technology, funding research, and info • Explore research & Lack of public tech development sharing support opportunities Heightened public awareness and Investigate regulatory reform integrating during drought regulatory & outreach/education Optimizing efforts resource interactions Explore integrating resource, program, & planning opportunities

Opportunities to optimize our resources by collaborating on multi-benefit projects and grant funding