Update 2013 Integrated Water Management Finance Planning Framework
Session 5 – Future State Government Role in IWM

Prepared for: California Water Plan Plenary

September 13, 2012
Water Plan Plenary - September 12 & 13:

1. Framework Background and Scope of IWM
2. History of Resource Management Funding
3. Principles for Investment Priorities and Apportioning Costs
4. Cost of Forgone Future Investment
5. Future IWM Role of State Government & Criteria for Crafting Recommendations
What is Integrated Water Management (IWM)?

Operational Explanation for Plenary

Multiple Dimensions:

**Topics:** Flood management, water supply and quality, environmental assets and systems, ……

**Institutional:** Alignment of all State policies that pertain to the suite of IWM topics

**Planning:** Transparent and inclusive

**Principles:** Sustainability and multi-objective solutions
This is a **strategic** long term planning framework and is **NOT** intended to change or supplant:

(1) Ongoing State grant and loan activities
(2) Specific State programs or projects that are currently being planned or implemented
(3) Local or regional governance and finance
Update 2013 IWM Finance Planning Framework
Purpose and Applications

- Inform future general obligation bonds
- Guide future legislation pertaining to finance planning and finance strategies
- Clarify and align State IWM funding and finance
- Prioritize future State IWM investment
Update 2013 Finance Planning Framework
Content and Flow of Information - Storyboard

1. Scope and Outcomes
2. Integrated Water Management Activities
3. Existing Funding
4. Funding Sustainability
5. Future State Roles and Partnerships
6. Future Costs
7. Funding Who and How
8. Trade-offs
Scope and Outcomes of IWM Finance Framework- IWM Benefit Categories

- Affordability
- Drought Preparedness
- Energy
- Environmental
- Flood Damage Reduction
- Food Security
- Fuel Load Management
- Groundwater Overdraft Reduction
- Operational Flexibility and Efficiency
- Reduce Climate Change Impacts
- Water Dependent Recreational Opportunity
- Water Quality
- Water Supply and Supply Reliability
IWM Activity Categories

Investing in Innovation and Infrastructure

- **Innovation and administrative activities**
  - Governance (for State Government investment decisions)
  - Planning and public process improvements
  - Information technology/data and tools
  - Water technology

**Infrastructure (natural and human - implemented at various geographical and jurisdictional scales)**

- Local
- Groundwater basin
- Watershed
- Regional
- Interregional
- State
- Interstate
- International
- Tribal
Audience Input

- Generally agreed on Finance Framework approach (storyboard) as path forward
- Refinements to IWM benefit descriptions
- Importance of optimizing existing funding programs
Session 2 – History of Resource Management

Funding

1. Scope and Outcomes
2. Integrated Water Management Activities
3. Existing Funding
4. Funding Sustainability
5. Future State Roles and Partnerships
6. Future Costs
7. Funding Who and How
8. Trade-offs
Estimated Annual Federal, State Agency, and Local IWM Spending in California

Spending (2010 dollars in billions)
History of Resource Management Funding

Questions for participants:

(1) What other useful messages can be derived from this information?

(2) What additional data or information would provide useful historical context?
Audience Input

- Compiling historical IWM spending data provides useful insights for finance planning
- Data methodologies, limitations, and caveats should be more explicit
- Be sensitive to how data is displayed and messaged
- May need to revisit what activities are defined as IWM
- Audience recommended additional data and key messages
1. Scope and Outcomes
2. Integrated Water Management Activities
3. Existing Funding
4. Funding Sustainability
5. Future State Roles and Partnerships
6. Future Costs
7. Funding Who and How
8. Trade-offs
Strategic Planning and Prioritization Paradigm

Collaboration w/ Decision-makers and Implementers

Observations

Necessary Process Attributes:
- Empathy
- Respect
- Integrity

Action/Benefits

Prioritization

Value Judgments

Analysis & Synthesis

Beliefs/Mental Models

Public and Stakeholder Resource-Dependent Values
Panel Discussion

1. What types of resource-dependent values do you advocate and how can they be expressed in terms of principles for prioritizing investment?

2. What principles should be used to apportion State Government investment throughout California and how can these principles guide investment with enough flexibility to address the high regional variability?

3. What principles should guide apportioning of costs between reducing legacy impacts and producing future public and private benefits? This question can also be phrased as “What is the appropriate role of public funding?”
Resource-Dependent Values

- Values are highly related and integrated
- Values are decided by public and our challenge is to get on their radar
- Co-equal goals have a specific context
Principles for Prioritizing State Government Investment

- Public needs to pay for public benefits
  - Be more inclusive in defining beneficiaries and more narrowly define public benefits
- Public health and safety (beyond ability of locals)
- Remove impediments to State established resource goals
Legacy Impacts and Path Forward

Legacy Impacts

- State should be responsible for legacy impacts (but current practice differs)
- How do you define legacy impacts? (accruing benefits vs. legacy costs)

Path Forward

- Need a more disciplined approach to funding
Session 4 – Consequences of Forgone Future Investment

1. Scope and Outcomes
2. Integrated Water Management Activities
3. Existing Funding
4. Funding Sustainability
5. Future State Roles and Partnerships
6. Future Costs
7. Funding Who and How
8. Trade-offs
Description – Generalized description of risks, impacts and other trade-offs of forgone investment for

- Flood management
- Water supply and quality infrastructure
- Ecosystem assets and processes
- Climate change adaptation

Effects – Develop detailed description of costs of Forgone investment (monetary, risk, quality of life)

Causes – Develop plausible narrative for each of the three categories above describing key drivers of Forgone investment
COMPONENT 2 — IWM ACTIVITIES

What IWM activities must occur to generate targeted benefits? In order to create actionable finance recommendations, the activities required to create the benefits identified in Component 1 must be identified. This component will be applied at both the regional and State levels. Information on activities, and their costs and expected benefits (including supporting information regarding any accompanying estimates, methods or assumptions), will be compiled from the 48 IRWM planning efforts. The State Agency Steering Committee will perform a similar task for State-administered IWM activities.

The framework will include categories for the activities for organization purposes but, more importantly, to apply an optimum scale for guiding State IWM investment (i.e., generally roll-ups of various types of regional projects or programs) in a way that is relevant to regional activities (i.e., generally project-level).

The following categories were developed by the Finance Caucus:

- **Innovation and administrative activities** (governance, planning and public process improvements, information technology/data and tools, and water technology research and development).
- **Infrastructure (natural and human)** (implemented at various geographical and jurisdictional scales such as local, groundwater basin, watershed, regional, interregional, State, interstate, international and tribal).
COMPONENT 5 – STATE ROLE AND PARTNERSHIPS

Which activities is State government best able to implement? This includes State-administered activities as well as the State’s role in partnerships with federal, Tribal, regional or local entities. Update 2009 of the water plan recommends the State effectively lead, assist and oversee California’s water resources and flood planning and management activities that: (1) regions cannot accomplish on their own, (2) the State can do more efficiently, (3) involve interregional or interstate issues, or (4) have broad public benefits. More specific criteria must be developed in order to define the State’s role in funding IWM activities and help identify investment priorities. This section will include findings and recommendations regarding the State’s future role in creating the benefits identified in Component 1. Multiple packages of recommended activities will be developed for the different planning horizons and sets of assumptions about the future.
Update 2013 Finance Planning Framework
Overview

Update 2013 Finance Planning Framework (Shown integrated into Volume 1)
August 24, 2012

This document represents the general approach for building the Update 2013 financing planning framework into Volume 1 of Update 2013. Water Plan Plenary finance sessions are indicated in red. The text below each heading is instructional text, to describe the purpose and general idea of each section. It will not necessarily appear in the chapter. The text below each heading is instructional text, to describe the purpose and general idea of each section. It will not necessarily appear in the chapter.

The last row provides an indication of probability that each respective section of the finance planning framework will be completed for Update 2013. Sections that are not completed for Update 2013 will be recommended for advancement or completion for Update 2018. The definition of “completed” involves three primary considerations: (1) a method or process is in place for producing desired deliverables (including frameworks for stakeholder involvement, data collection capability, etc); (2) analytical tools required to produce desired trade-offs analysis are in place; (3) some level of stakeholder agreement occurs. An operational definition of “completed” is that all three dimensions converge to support findings and recommendations with reasonable levels of uncertainty. Green = Higher Probability of Completion for Update 2013; Yellow = Moderate Probability; Red = Lower Probability.

<table>
<thead>
<tr>
<th>Chapter 1 - Introduction</th>
<th>Chapter 2 - CA Water Today</th>
<th>Chapter 3 - Imperative to Invest (in Innovation and Infrastructure)</th>
<th>Chapter 4 - State and Federal Companion Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plenary Finance Session 1</td>
<td>Follow the Money</td>
<td>Cost of Limited or Forgone Investment</td>
<td>Existing Finance Strategies</td>
</tr>
<tr>
<td>Framework Background and Scope of IWM</td>
<td></td>
<td>Plenary Finance Session 4</td>
<td></td>
</tr>
<tr>
<td>Definition and Scope of Integrated Water Management; Finance Planning Framework</td>
<td>Resource Management Funding History</td>
<td>Consequences of little to no future investment</td>
<td></td>
</tr>
<tr>
<td>This section will describe: (1) the definition and scope of integrated water management (IWM). (2) how many policymakers and stakeholders have expressed a need for an IWM finance planning effort, (3) how California is expected to face significant challenges surrounding IWM financing due to the near full allocation of existing bond funds, protracted recession, deferred investments, etc. (4) the intended expanded uses of the finance planning framework.</td>
<td>This section will provide a description of historical federal, state, and local IWM investments as context for planning future state IWM investment. It will also include a variety of data and information to provide a full understanding of how current conditions have evolved to be (e.g. debt levels, funding sources, administrative constraints, etc).</td>
<td>This section will convey a sense of urgency to implement Update 2013 recommendations. It includes a description of the implications of very limited investment in IWM (e.g. that may not even begin to implement activities that are considered critical or high-priority). Implications or resulting conditions can be expressed in terms of environmental, economic, and social effects of deferred implementation; forgone opportunities or benefits; and other unfavorable consequences.</td>
<td></td>
</tr>
<tr>
<td>IMPORTANT MESSAGE - Emphasis on the value of the storyboard to this and other future IWM finance efforts (as a useful framework for working through the layers of issues and complexities required to get to IWM funding and financial recommendations)</td>
<td>State, Local and Federal Government IWM Spending Summary</td>
<td>Description and Clarification of the Role of State Government in IWM</td>
<td>Plenary Finance Session 5</td>
</tr>
<tr>
<td>• A detailed description of the Finance Plan storyboard. • An explanation of the storyboard’s development • An illustration of how the finance planning framework reflects the storyboard.</td>
<td>This subsection contains a generalized characterization of state IWM spending from fiscal years 2000/2001 through 2011/2012 using the categories developed in storyboard component 2 (e.g. innovation and infrastructure). To the extent possible, it will also include similar data for local and federal spending. Contextual messages will be articulated as necessary to help provide a full understanding of the opportunities and options.</td>
<td>Qualitative Only</td>
<td>Session 5 Topic</td>
</tr>
</tbody>
</table>
## California Water Plan Plenary – Finance Panel Questions

**Panel Topic:** Future Role of State Government in Integrated Water Management (IWM)

**Objective:** Begin scoping the State Government's future role in IWM

<table>
<thead>
<tr>
<th>Panelists</th>
<th>Patterned Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grace Chan, Manager, Resource Planning &amp; Development, Metropolitan Water District</td>
<td><strong>Question 1</strong> – Update 2009 recommended that the State government be involved in supporting integrated water management (IWM) activities that: (1) regions cannot accomplish on their own, (2) the State can do more efficiently, (3) involve interregional or interstate issues, or (4) have broad public benefits. More specific criteria must be developed in order to create more actionable decision-support and to help identify investment priorities. Looking ahead to Update 2013, what should we add, subtract or change to clarify and develop the recommendations so they are more implementable and provide better decision support?</td>
</tr>
<tr>
<td>Grant Davis, General Manager, Sonoma County Water Agency</td>
<td>To help construct your responses, below are several categories of IWM activities that the Update 2013 Finance Caucus identified as useful for formulating State policy recommendations while providing enough specificity to categorize more specific actions; such as regional or State government IWM projects.</td>
</tr>
<tr>
<td>John Kingsbury, Executive Director, Mountain Counties Water Resources Association</td>
<td>Innovation and administrative activities: Governance of State investments; Planning and public process improvements; Information technology/data and tools; Water technology research and development</td>
</tr>
<tr>
<td>Liz Haven, State Water Resources Control Board</td>
<td>Infrastructure (natural and human) - Implemented at various geographical and jurisdictional scales: Groundwater basin; Watershed; Regional; Interregional; Statewide, Interstate; International; Tribal</td>
</tr>
<tr>
<td>John Lowrie, Deputy Director, CA Department of Conservation</td>
<td><strong>Question 2</strong> – Many local and regional entities may have the capacity to apply for and receive grants but do not have the capacity to follow through to implementation, operation and maintenance. This circumstance is an impediment to effective State incentives and to leveraging of State and local funding. What should the State government’s role be with respect to the local and regional technical, managerial and finance (TMF) capacity-building required to implement, operate and maintain an activity through its functional life?</td>
</tr>
<tr>
<td>Kim Wilhelm, CA Department of Public Health</td>
<td></td>
</tr>
<tr>
<td>Jim Branham, Executive Director, Sierra Nevada Conservancy</td>
<td></td>
</tr>
</tbody>
</table>
Panel Discussion – Question 1

What should we add, subtract or change to clarify and develop the recommendations so they are more implementable?

Proposed Categories:

**Innovation** *(Planning; R&D; Tech.; Governance)*

**Infrastructure** *(GW Basin; Watershed; Regional; Interregional; Statewide, Interstate; International; Tribal)*
Panel Discussion – Question 2

What should the State Government’s role be with respect to the local and regional technical, managerial and finance (TMF) capacity-building required to implement, operate and maintain an activity through its functional life?
Approach to Crafting Finance Update 2013 Recommendations

WATER PLAN UPDATE 2013
FINANCE PLANNING FRAMEWORK
Findings and Recommendations
DISCUSSION ITEMS

Water Plan Update 2013 will have Finance Findings and Recommendations regarding (Storyboard Component # shown in parentheses):

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Scope of Integrated Water Management (1 &amp; 2)</td>
</tr>
<tr>
<td>2.</td>
<td>Future role of State government (5)</td>
</tr>
<tr>
<td>3.</td>
<td>Estimated future IWM costs (6)</td>
</tr>
<tr>
<td>4.</td>
<td>Investment prioritization (5)</td>
</tr>
<tr>
<td>5.</td>
<td>Apportioning costs (7)</td>
</tr>
<tr>
<td>6.</td>
<td>Oversight and administration of State IWM finance (7)</td>
</tr>
<tr>
<td>7.</td>
<td>Financing Strategies (7)</td>
</tr>
<tr>
<td>8.</td>
<td>Other?</td>
</tr>
</tbody>
</table>

The plan will be used for deliberations about State investments in water as well as used to consider the ways in which this should be funded. The plan will consider the role of all levels of government and the private sector but recommendations will primarily focus on the State’s role in water management. It is expected the plan will be used in consideration of potential legislation and bond measures, used for driving grant criteria, and provide guidance for budget priorities.

Given the comments provided earlier (in this session and others) about principles for investment and the State role, what types of findings and recommendations do you believe need to be considered for the Plan to be credible?

For the section on Context and Premise: These are the statements of the basic assumptions related to the topic. For example, a premise might be “given normal inflation, things will be more expensive in the future.” Premises should be related to topics that require a common understanding of a particular perspective in order to fully understanding an associated recommendation or the reasoning needed to properly consider a topic. Sample entries are provided based on conversations with stakeholders and the key messages taken from the History of Resource Management Funding materials.

For the section on Recommendation Categories: We are not looking for specific recommendations you would like to make. For example we are not asking for recommendations on what particular piece of infrastructure the state should or should not invest in. However, we are looking for categories of recommendations the plan must address such as the topic of aging infrastructure (or storage, or sustainability, etc.). We are looking for your priorities in this area so we can plan for future, focused discussions with sufficient background materials for a well informed discussion. We expect this will be controversial and don’t expect to resolve any of this today. We just want to know what people think needs to be on the table for discussion.
THANK YOU