Update 2013 Integrated Water Management Finance Planning Framework
Session 3 – Principles for Prioritizing Investment and Apportioning Costs

Prepared for: California Water Plan Plenary

September 13, 2012
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
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
Update 2013 Finance Planning Framework

Water Plan Plenary - September 12 & 13:

- Framework Background and Scope of IWM
- History of Resource Management Funding
- Principles for Investment Priorities and Apportioning Costs
- Cost of Forgone Future Investment
- Future IWM Role of State Government & Criteria for Crafting Recommendations
### Update 2013 Finance Planning Framework

#### Overview

**Chapter 6 - Integrated Data and Analysis**

**Finance Decision Support System (Planning Needs and Analytical Strategy)**

The Update 2013 finance planning framework and recommendations will be based on the best available data, tools, models and subject matter expert opinion. Many technical capabilities will require continued development and refinement in order to increase uniformity, accuracy, quantitative analysis and comparability of information and approaches; advance scientific understanding; and generally reduce uncertainty. A partial list of uncertainties to be addressed in future Water Plan Updates is shown below:

- Co-dependence of activities
- Systemic analysis and optimization
- Standardization of methods, information and estimates
- Identification of leveraging opportunities, return on value of investments and diminishing returns
- Assigning economic value to environmental assets and services
- Avoidance of double counting of costs

**Finance-Themed Response Packages**

To develop practical decision support for future State IWM activities, many assumptions must be made about future conditions. These assumptions will be used to compose packages of water management strategies for analysis. The framework will include a method for articulating priorities at two scales (regional and statewide) and under different sets of assumptions about the future.

Assumptions about future finance conditions could be based on differing levels of future debt. The response packages could range from a Higher Debt Scenario (heavy borrowing for future activities) to a Lower Debt future scenario.

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### Plenary Finance Session 3

**Principles for Investment Priorities and Apportioning Costs**

**Approach for Prioritizing State IWM Investment**

The primary goal of this section is to remove implementation barriers that occur from a lack of clarity, certainty, and/or consistency in State IWM finance policy and practices. This includes federal and local implementers, where State cost-sharing is occurring. This section will include a description of interpretations of existing frameworks as well as new concepts for apportioning State investment in multi-objective solutions.

**Estimated Cost of Future IWM Activities**

This section speaks to the fundamental question: How much funding is anticipated to be necessary to meet State and regional IWM objectives through the year 2030?

**Available Financing Strategies**

This section will provide a menu of strategies from which recommendations can be drawn, including public/private partnerships. It will list and describe existing and potentially new State funding methods/strategies in the context of use for future State IWM finance. The description will include the most appropriate uses, and tradeoffs, of differing finance options with respect to different types of actions (i.e., infrastructure, innovation, etc.).

### Plenary Finance Session 5

**Criteria for Crafting Recommendations**

**Finance Recommendations**

This section includes recommendations, based on preceding data and findings, on the following topics:

- Governance for distributing and tracking investments
- Administration of State funding
- Assurances that investments produce desired outcomes
- Approach for prioritizing future State investment
- Adaptive management (levels and methods for funding adaptive management)
- Opportunities for leveraging or otherwise improving the way the State government plans and implements IWM
- Future analytical models and frameworks that will help quantify tradeoffs
- Improved alignment of planning, State policy-making and State regulation
- Other mechanisms associated with funding and implementing the IWM activities/services that are determined to be best administered by the State (under Storyboard Component 5).

**Qualification of Recommendations**

This subsection includes a qualitative description of tradeoffs associated with each recommendation. It will clarify the rationale and potential risks or undesirable effects associated with the findings and recommendations.

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### Plan to develop decision support system for use in future Updates

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<tr>
<th>Plan to develop decision support system for use in future Updates</th>
<th>Constrained by stakeholder agreement and by data and tool limitations</th>
<th>Will be published, but constrained by stakeholder agreement/Data and tool limitations</th>
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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.

COMPONENT 7 — FUNDING, WHO AND HOW

How will costs be distributed (and through what mechanisms) for the activities identified in Component 5? This component will describe alternatives and recommendations regarding governance, revenue sources, accountability (reporting on “return on/values of investment”), State government efficiencies and other mechanisms associated with funding and implementing the critical activities/services best administered by the State.
Update 2013 Finance Planning Framework
Strategic Planning and Prioritization Paradigm

Prioritization
Strategic Planning and Prioritization Paradigm

Collaboration w/ Decision-makers and Implementers

Observations

Necessary Process Attributes:
- Empathy
- Respect
- Integrity

Public and Stakeholder Resource-Dependent Values

Beliefs/Mental Models

Analysis & Synthesis

Value Judgments

Prioritization

Action/Benefits
Examples of Resource-Dependent Values

- Biodiversity
- Economic stability and prosperity
- Public health and safety
- Infrastructure levels of service
- Self-sustaining ecosystems
- Cost of living
- Relaxation and refreshment of mind and body
Many Values ................. One Boat

I’m sure glad the hole isn’t in our end . . .
## Panel Discussion

### California Water Plan Plenary – Finance Panel Questions

**Update 2013 Finance Panel Topic:** Principles for Prioritizing State Investment and Apportioning Costs  
**Objective:** Begin developing the principles and approach for prioritizing the State’s future IWM investments and apportioning of costs

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<th>Panelists</th>
<th>Patterned Questions</th>
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| **Dennis O'Connor**, Principal Consultant, Senate Committee on Natural Resources and Water | **Question 1** – The Update 2013 finance planning framework describes several constraints regarding future IWM investment such as: (a) Sustained economic downturn; (b) Near full allocation of existing bond funds; (c) Reduced willingness of the public to pay for government activities; (d) Decades of deferred investment.  
Under such constraints, prioritization becomes necessary, sometimes requiring tough decisions that benefit one interest and forgo another. The essence of any prioritization activity requires a full understanding of what stakeholders value most and then some tough relative value judgments. **What types of resource-dependent values do you advocate and how can they be expressed in terms of principles for prioritizing investment?**  
Examples of resource-dependent values include: Biodiversity, Public Health, Diverse portfolio of economic activity, Sustainability of GW supplies and aquifers, Relaxation and refreshment of mind and body (samples from Finance Caucus work product)** |
| **Cindy Paulson**, Executive Director, California Urban Water Agencies |                                                                                                                                                                                                                                                                                                                                                                     |
| **Sue Sims**, Executive Director, California Water Commission                                                                 |                                                                                                                                                                                                                                                                                                                                                                     |
| **Alf Brandt**, Principal Consultant, CA State Assembly                                                                 |                                                                                                                                                                                                                                                                                                                                                                     |
| **Glenda Humiston**, State Director of Rural Development, U.S. Department of Agriculture                                                                 |                                                                                                                                                                                                                                                                                                                                                                     |
| **Susan Tatayan**, Associate Director, CA Water Program, The Nature Conservancy                                                                 |                                                                                                                                                                                                                                                                                                                                                                     |
| **William Edgar**, President, Central Valley Flood Protection Board                                                                 |                                                                                                                                                                                                                                                                                                                                                                     |
| **David Bolland**, Senior Regulatory Advocate, Association of California Water Agencies                                                                 |                                                                                                                                                                                                                                                                                                                                                                     |
| **Jennifer Clary**, Water Policy Analyst, Clean Water Action                                                                 |                                                                                                                                                                                                                                                                                                                                                                     |

**Question 2** – There are several potential methods and rationales for apportioning State Government investment throughout the California such as resource management needs/priorities, population, disadvantaged communities and so on. At the same time, there is so much diversity of regional priorities and needs that one size fits all State policy simply cannot effectively meet State or regional resource management objectives. **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?**

**Question 3** – Historical water and flood management activities have resulted in unforeseen and unintended impacts that are becoming increasingly apparent today (i.e., legacy impacts). In addition, the state’s (note small “s”) resource-dependent values and priorities have changed to increase the emphasis on sustainable outcomes; thereby increasing the need for upfront investment (with the objective of long term environmental and economic sustainability). **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?”
Panel Discussion – Question 1

What types of resource-dependent values do you advocate and how can they be expressed in terms of principles for prioritizing investment?
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?
Panel Discussion – Question 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?”
Next Finance Session

Cost of Forgone Investment