California Water Plan Update 2013 Finance Planning Framework
June 21, 2012

Resource Management Funding History

General Description

This section is intended to provide a description of federal, State, and local Integrated Water Management (IWM) investments from roughly 1850 to the present. Basic information in this section will describe historical cost-sharing arrangements, how they differed among different types of projects (e.g., water, flood, and ecosystem), and how they will be used as a reference point in recommending future investment and cost-sharing.

Key Finding for Today’s Discussion

In order for State government to successfully plan and implement IWM, there must be a method for characterizing, planning and tracking State IWM investment

One key finding and two related contextual messages are presented below followed by two questions for the Water Plan Advisory Committees. The objective of the key finding and contextual messages is to provide a comprehensive context and understanding of what recent and current conditions are and how they came to be. This is a critical first step in strategic planning that speaks to “Where we are now”.

This section will include a characterization of State government IWM spending from fiscal years 2000/2001 through 2011/2012 using the investment categories developed in storyboard component 2. It will quantify and synthesize IWM-related spending data in a way that supports decisions regarding future IWM funding methods, opportunities and decisions. See Tables 1 and 2 and Figures 1 through 3 below for a rough indication of the types of information to be included as well as the expected messages that can be derived from the information. The two contextual messages are described on pages 5 and 6. Questions for the Advisory Committees are shown at the bottom of page 6.

NOTE: In order to effectively achieve any desired future outcome, a full understanding of the type and value of benefits resulting from the spending must be attained; including the leveraging of multi-benefit opportunities. Update 2013 is not expected to fully characterize such benefits however; Update 2018 can continue to develop a framework that will serve this purpose.
TABLE 1 – State Government IWM Spending
One table per fiscal year from fiscal years 2000/2001 – 2011/2012

<table>
<thead>
<tr>
<th>Source Category</th>
<th>Agency</th>
<th>Total FY ##/## Budget (1,000)</th>
<th>Total IWM Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Fund</td>
<td></td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>G.O. Bonds</td>
<td></td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Special Funds</td>
<td></td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Federal</td>
<td></td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Fees</td>
<td></td>
<td>#</td>
<td>#</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Total FY ##/## Budget (1,000)</th>
<th>Total IWM Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTALS</td>
<td>#</td>
<td>#</td>
</tr>
</tbody>
</table>

NOTE: IWM is defined as activities that generate the following types of benefits: Drought preparedness; Energy benefits; Water quality; Water supply and supply reliability; Flood damage reduction; Recreation; Environmental; Fuel load reduction; Climate change risk reduction; Affordability; Groundwater overdraft reduction; Food security; Operational flexibility

Messages derived from Table 1:
(1) Summary of total IWM spending across State agencies for single or multiple years (trends).
(2) Categorization of spending by sources and agencies.
(3) Proportions of funding sources and how they change over time.
(4) Variability of spending/funding source over time by source category.
TABLE 2 – State Government IWM Spending by Update 2013 Investment Category
One table per fiscal year from fiscal years 2000/2001 – 2011/2012

<table>
<thead>
<tr>
<th>Source Category</th>
<th>Innovation</th>
<th>Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Planning, Outreach, Information Tech. and R&amp;D</td>
<td>Program Delivery (Administration, Governance, Loss Control)</td>
</tr>
<tr>
<td>General Fund</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>G.O. Bonds</td>
<td>#</td>
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</tr>
<tr>
<td>Fees</td>
<td>#</td>
<td>#</td>
</tr>
</tbody>
</table>

Planning, Outreach, Information Tech. and R&D & Program Delivery (Administration, Governance, Loss Control) & IWM Infrastructure

NOTES:
(1) If feasible, the finance framework will include an “Incentives” investment category that serves two purposes: a.) it helps differentiate between local assistance (sometimes referred to as pass-through) and State operations; and b.) it will include State enforcement activities.
(2) Infrastructure includes; Human and natural (i.e. activities that involve modifications to the physical environment in order to generate IWM benefits). This distinction is made in order to identify portions of investment in infrastructure that support human activities and portions of investment that support ecosystem services and assets.

Messages derived from Table 2:
(1) The "Program Delivery" column indicates, in part, how much funding is in play for potential improvements to State Government operations.
(2) Spending sources relative to IWM investment category (innovation, incentives, infrastructure).
(3) Proportions of spending by IWM investment category.
FIGURE 1 – State Government IWM Spending by Source Category

FIGURE 2 – State Government IWM Spending by Source Category
Contextual Message #1 – Historically - Two Basic Funding Sources and Two Basic Strategies

To help maintain clarity amidst the complexity surrounding IWM funding and finance planning and analysis (including roles of various levels of government and funding methods), it is important for this finance planning framework to reflect the context that there were two basic sources of funding: tax-based and fee-based. Similarly, for any given year, there were essentially two funding strategies: (1) cash on hand (sometimes referred to as “pay as you go”); and (2) borrowing. There is the potential third strategy of “reserves”, but for this purpose, reserves are considered cash on hand/pay as you go. Relevant messages include:

• There are two basic sources of funding
• “State” funding must essentially come from the [local] ratepayers, taxpayers or both
• There is an established and very complex framework for the flow of funding from origin to expenditure that often locks down funding for specific purposes and it is often too complicated to understand, much less improve.
• Several complex permutations (e.g. difficult to understand or optimize for targeted outcomes) are in place for various types of IWM activities such as water supply, wastewater treatment, flood management, ecosystem restoration, etc. This can impede a full understanding as well as the flexibility necessary to make changes designed to improve results. (See the Portion of Total IWM Funding that is NOT Specially Allocated information in Figure 3)

Contextual Message #2 – General Obligation Bonds Have Played a Significant Role

When making future financial decisions, it is important to fully understand the role, status and cost of borrowing. General obligation bonds have played a significant role in IWM finance for many decades. This section will describe their historical and recent role. It will also provide information that helps make decisions surrounding their future role. Potential types of useful information include:

![FIGURE 3 – State Government IWM Spending by IWM Investment Category](image-url)
- The time series relationship between IWM bond sales and cumulative debt service since 1970 (Figure 4).
- Unissued and outstanding IWM general obligation bonds.
- IWM and other bond debt per capita, as a percentage of personal income, debt repayment as a percentage of the (2011/2012?) general fund.
- The changing context of project authorization; time and money required to authorize a project; consequences of stop/start-up oscillations.
- The deleterious effect of bond freezes.

**FIGURE 4 – IWM-Related General Obligation Bond Sales and Cumulative Debt Service (1970 – Present)**

**Question #1** – What would you change about the graphics or other presentation materials to make them more clear or useful?

**Question #2** – What addition contextual messages would you add in support of the key finding that will help produce a useful finance planning framework and/or recommendations? *(Use Worksheet)*