

**SAMPLE - Template for Describing State Government IWM Investment Packages and Supporting Assumptions for Update 2013 Finance Plan
January 24, 2012**

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This version of the draft template is populated with sample entries

This template is to compile Integrated Water Management Investment Packages -- activities and supporting assumptions of future conditions -- for the Update 2013 Finance Plan as described in Component 2 of the finance plan storyboard. This information will be used to facilitate discussion and develop recommendations regarding future State government funding for State-administered activities as well as State financial assistance for regional and/or local IWM activities as described in Component 5 of the finance plan storyboard. Each permutation of this template constitutes one "Investment Package". Multiple investment packages can be created using various sets of future assumptions and IWM activities. The section title blocks below are color coded to correspond with the flow diagrams shown in Figures 2 and 3 for State government and Regional IWM investment packages, respectively.

During the preparation of the Update 2013 Finance Plan, funding recommendations will be developed by:

- (1) Observing emerging patterns of common activities/geographical areas from the various regional and State government investment packages (which include local assistance) as guidance for where, and to what magnitude, future State IWM funding should be directed.
- (2) Ensuring consistency between the IWM benefits (type and magnitude) defined for the Update 2013 Finance Plan and anticipated benefits from IRWM activities.

Recommendations will be developed for State-administered activities, which generally provide broad public benefits, as well as activities at the scale of the Water Plan's 10 hydrologic regions and 2 overlay areas.

Investment Package Title: Water Plan Update 2009

Information Base

Planning Entity: Water Plan Update Team
Report Type: Statewide Strategic Water Plan
Date Published: March 2010
Website: <http://www.waterplan.water.ca.gov>

Scenario Assumptions

An initial step for developing a State government or Regional Investment Package is specifying a number of assumptions about future conditions. The framework for preparing the finance plan includes a process for specifying priorities at various scales (e.g. regional or statewide) and under different sets of assumptions about future conditions; such as society's future willingness and ability to pay for IWM activities, the planning horizon for each investment package, as well as demographic, land use, growth, and climate conditions.

Willingness and Ability to Pay – This section contains the method for specifying assumptions regarding society's future willingness and ability to fund IWM activities as well as the planning horizon. The purpose is to document the assumptions about future funding magnitude and revenue sources, and to examine internal consistency with planned IWM activities (which are listed in the *Response Package/IWM Activities* section of this template).

Specify a funding level for each jurisdictional scale in the table below

Jurisdictional Scale	Specify the Planning Horizon (2015, 2020, 2030 or 2050)
	2030
IRWM	3
State	3
Federal	3
Tribal	3
Private	3

Menu of Alternative Future Funding Levels

Level 4 — Flourishing economy and strong investment climate conducive to full implementation of all recommendations contained in *Information Base* identified above

Level 3 — 2010 (current condition with 2012 bond)

Level 2 — 2010 (current condition without bond) – similar to year 2000

Level 1 — Low resources, all-time low infrastructure investment profile

Scenario Storyline: *(Brief narrative describing the economic, climate, societal, demographic and other drivers resulting in the assumed future condition)*

Willingness and Ability to Pay: A general recovery of the economy will occur by 2018 to a level comparable to 2010 funding plus the equivalent of a 2012 bond;

Climate Change: Sea level will rise X feet by 2050; minimal increase in peak flood flows; moderate increase in inter-annual hydrologic variability; significantly reduced snowpack; significant increase vegetative consumptive use

Population: Multiple scenarios have been developed for future population

Other Important Assumptions:

Resources Management Objectives and IWM Benefits

Regardless of the variability of scale and level of detail (e.g. local, regional, statewide, quantitative, qualitative, project-level or strategic-level), the resource management objectives need to be specified as a basis for selecting a set of IWM activities; and to ensure that the activities would meet one or more of the IWM Benefits (i.e. are within the scope of the finance plan). This section of the template is for specifying in a uniform way the resource management objectives, bridging objectives with their associated IWM benefits, performance measures, and reporting metrics to track and measure “success” in meeting the stated objectives. This table will also be used to specify which benefits are targeted, and which are not, under a set of priorities for each scenario.

Objectives/Goals <i>(High level expression of components of future strategic vision – do not include activities)</i>	Sub-Objectives <i>(Where necessary to add specificity for determining Associated IWM Benefits)</i>	Associated IWM Benefits from Storyboard Component 1 <i>(See benefit definitions for more details)</i>	
Expand Integrated Regional Water Management	Build partnerships essential for sustainable watersheds and floodplain management, and increasing regional self-sufficiency	Supply Reliability, Operational Efficiency and Flexibility, Environmental (potentially all IWM benefits)	
Use and Reuse Water More Efficiently	Promote water conservation, recycling, and reuse	Supply Reliability	
Expand Conjunctive Management of Multiple Supplies	 For this Water Plan Update 2009 Investment Package, the subtext from each of the 13 Objectives (as described in the Update 2009 Highlights Document), would be placed here as a bridge between the high level objectives and the associated benefits (See examples shown in this column) 	Operational Efficiency and Flexibility, Supply Reliability	
Protect Surface Water and Groundwater Quality		Water Quality, Supply Reliability, Environmental	
Expand Environmental Stewardship		Environmental	
Practice Integrated Flood Management		Flood Impact Reduction	
Manage a Sustainable California Delta		Supply Reliability, Environmental	
Prepare Prevention, Response, and Recovery Plans		Flood Impact Reduction, Drought Preparedness	
Reduce Energy Consumption of Water Systems and Uses		Energy	
Improve Data and Analysis for Decision-making		Potentially All	
Invest in New Water Technology		Increase tech. attainability and more cost effectiveness	Potentially All
Improve Tribal Water and Natural Resources		Develop Tribal consultation, collaboration, and access to funding	Affordability, Water Quality,
Ensure Equitable Distribution of Benefits	Increase the participation of small and disadvantaged communities in state processes	Affordability	

Response Package/IWM Activities

This section describes the IWM activities that are selected in response to the future assumptions and resource management objectives described above. It also includes the total upfront capital investment, as well as present value (2010 dollars) of operation and maintenance costs, for estimating funding needed over the stated planning horizon.

The information summarized below also represents one permutation of a Response Package (defined in the Water Plan as a mix of actions and policies intended to meet multiple resource management objectives that are packaged/coordinated to achieve enhanced outcomes).

Priority Activities (Project or Program) Name	Total Funding (Capital and Present Value of O&M through Planning Horizon) \$ 2010 Dollar Basis	Activity Category	Scale of Benefits by Jurisdiction or Geographical Area	Nexus with Update 2013 IWM Benefits
INFRASTRUCTURE				
Water efficiency and reuse) - Actions 3, 4, 5, 6	\$\$	Human/Built	Regional	<ul style="list-style-type: none"> • Supply Reliability • Energy
Integrated flood management) - Actions 4 & 5	\$\$	Human/Built	Statewide	<ul style="list-style-type: none"> • Flood Impact Reduction • Environmental
Sustainable Delta management) - All Actions	\$\$	Human & Natural	Inter-regional	<ul style="list-style-type: none"> • Environmental
INNOVATION				
Recommendation #3 - Coequal goals for ecosystem health and water supply reliability	TBD	Governance	Statewide	Potentially All
Recommendation #4 - State government role and responsibilities -- leverage collaborative, multi-organization venues	\$	Governance	Statewide	Potentially All
Recommendation #6 - Improve coordination of land use, water, and resources planning	\$	Planning/ Participation	Statewide, Regional, Local	Potentially All

Investment Package

Total Costs by Activity Category and Scale of Benefits Over Planning Horizon

Scale of Benefits	Total Funding (Capital and Present Value of O&M through Planning Horizon) <i>\$ 2010 Dollar Basis</i>
INFRASTRUCTURE – HUMAN/BUILT	
GW Basin	\$
Local	\$\$\$
Watershed	\$\$
Regional	\$
Inter-regional	\$\$
Statewide	\$\$
Tribal	\$
International	\$
Infrastructure Subtotal	\$
INNOVATION	
Governance	\$
Planning and Public Process Improvements	\$\$\$
Information Technology/Data and Tools	\$\$
Water Technology Research and Development	\$
Innovation Subtotal	\$
Total	\$

**Process for Recommending State Investment
in Integrated Water Management (IWM) Activities**
Figure 1

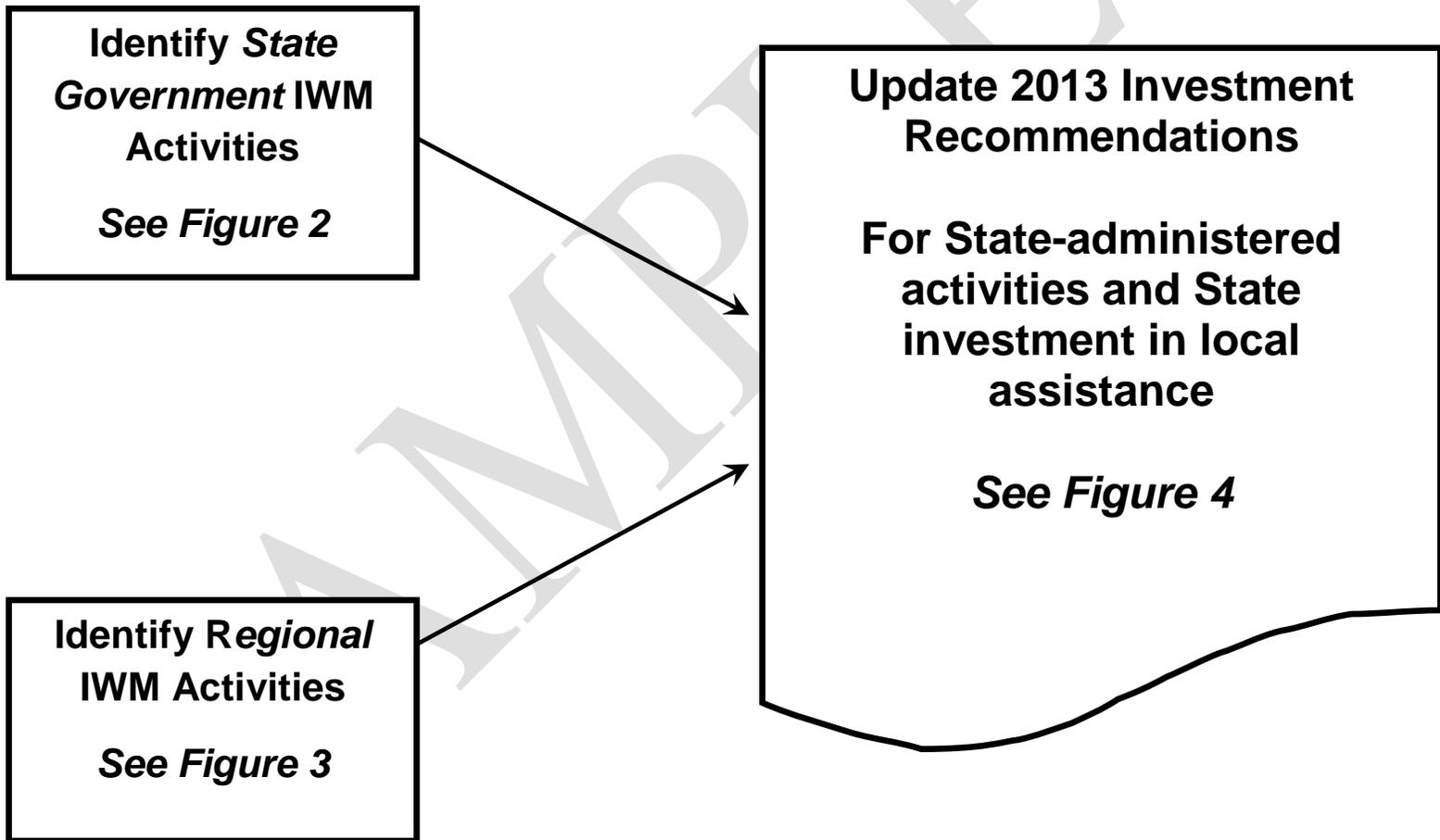
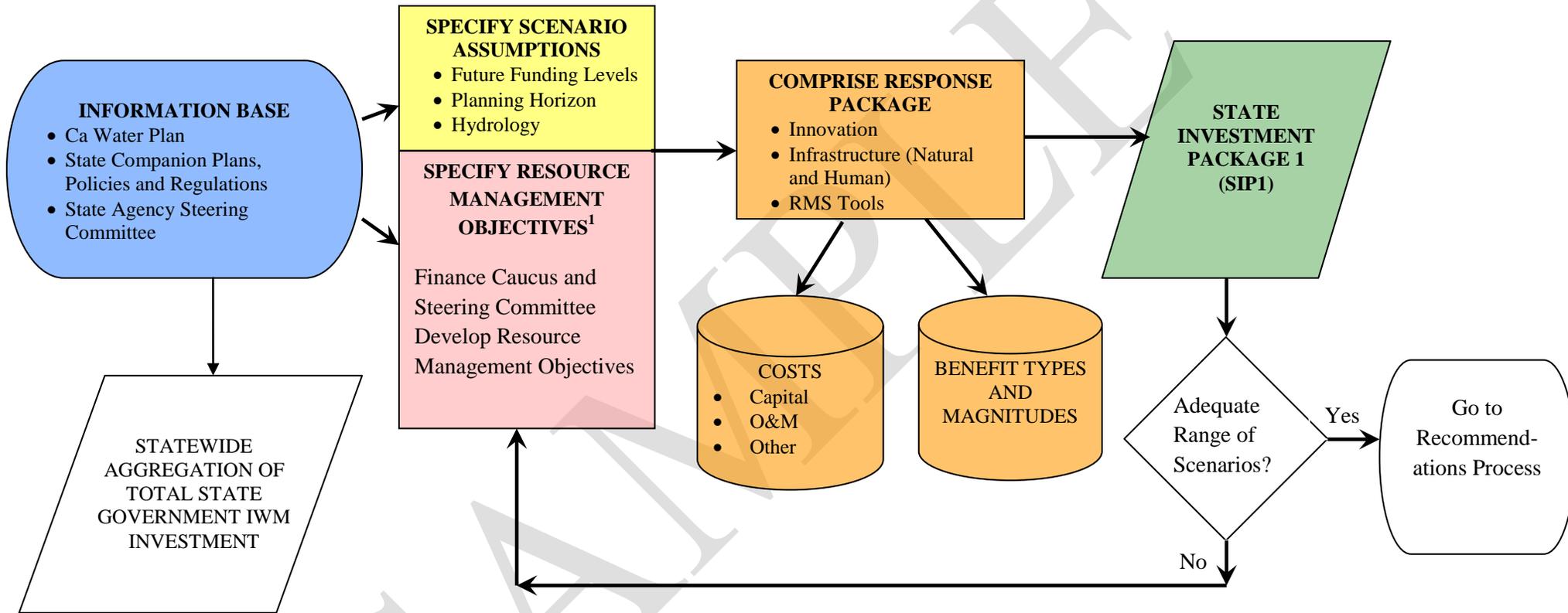


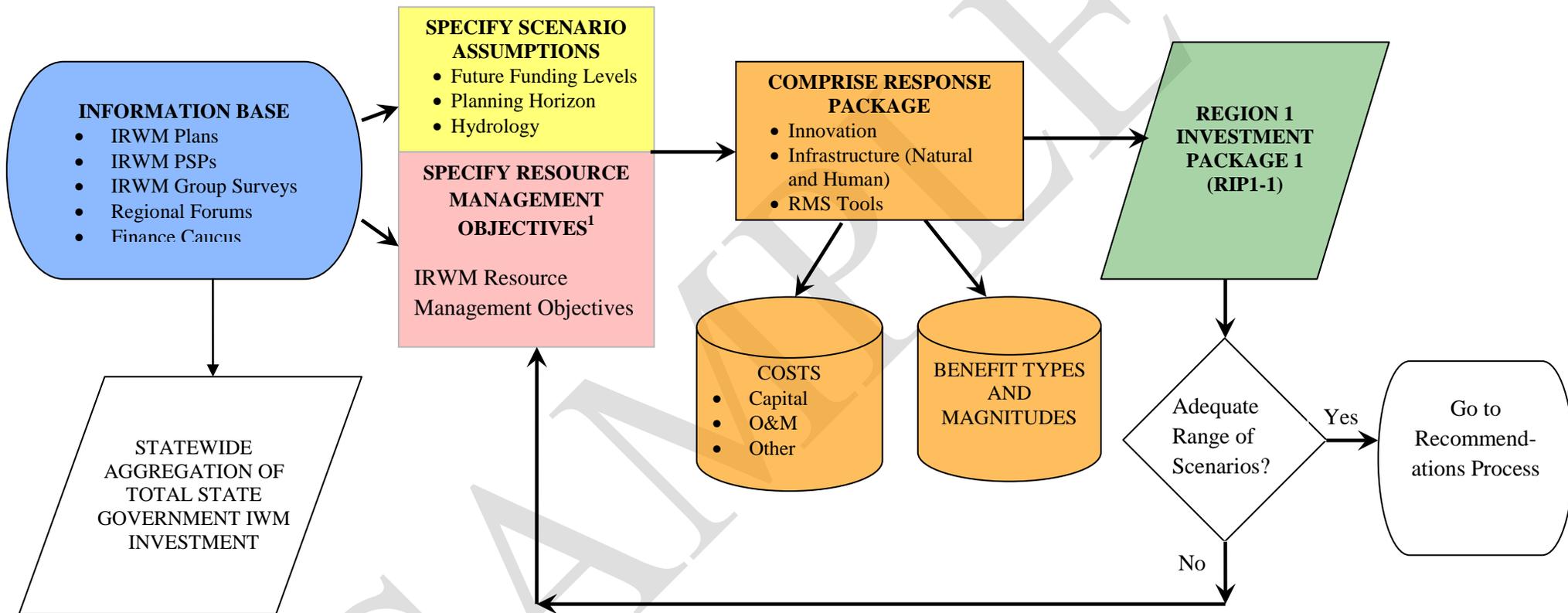
Figure 2 - State Government Activities
Flowchart for Component 2 of the Finance Plan Storyboard



- (1) Stakeholders can develop multiple, alternative sets of objectives that reflect the diversity of priorities and preferences across interests.
- (2) Scenario Objectives for State Government activities will be developed through the Finance Caucus and other collaborative venues and may include Update 2009 Strategic Vision/ Objectives, other State resource management objectives, public and/or non-public benefits from regional activities, etc

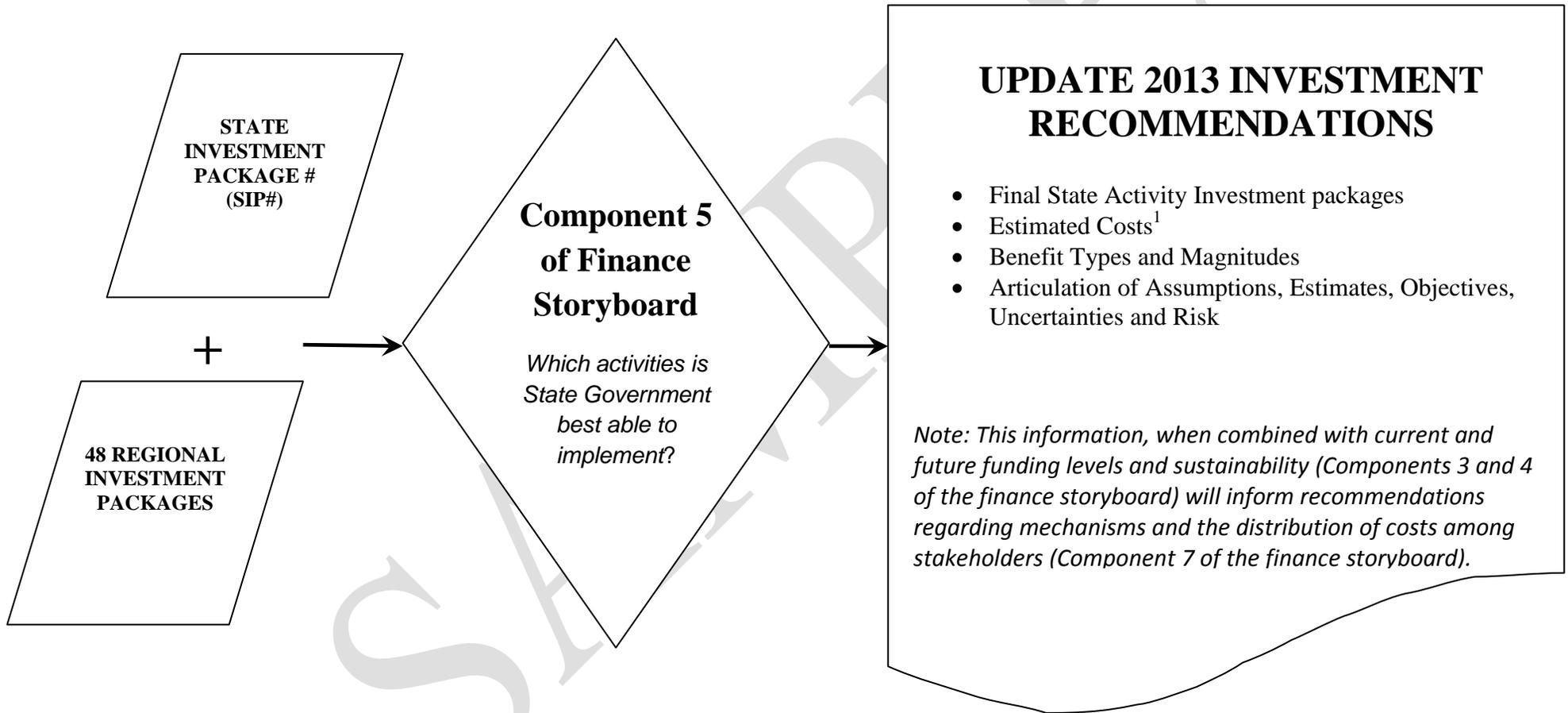
Figure 3 - Regions' Integrated Regional Water Management Activities

Flowchart for Component 2 of the Finance Plan Storyboard



- (1) Recommendations for the State Government's future funding of IRWM activities (Partially achieves Storyboard Component 5) will result, in part, from observed patterns of activities/places among multiple activity package permutations.
- (2) This achieves a portion of Storyboard Component 6 – *How much will the State Governments future role cost?*

Figure 4 - Update 2013 Investment Recommendations Process
(State-Administered Activities; including Local Assistance)
Flowchart for Component 2 of the Finance Storyboard



(1) This achieves a portion of Component 6 of the finance storyboard, which asks: How much will the State government's future role cost?