June 15th Meeting
California Water Commission
Issue Working Session

Objectives

1. Get tentative approval from Commission members to use the proposed definitions (Commission members may decide to revisit any definition at a later date. Definitions are subject to change until regulations package is submitted to OAL, hence, staff is requesting "tentative" approval.).
2. In the absence of a tentative approval, get direction for modifying the proposed definitions.
3. Discuss items in bold/highlighted text.

Issue Summary

California Water Code Section 79753 defines five categories of public benefits eligible for fu-rbnding: ecosystem improvements, water quality improvements, flood control benefits, emergency response, and recreation purposes. The Legislature's definitions of these public benefits are vague at times, creating both room and necessity for interpretation regarding exactly what benefits fit within the guidance provided by the statute for each category. Which benefits to count in a particular category is an important question, because the statute requires:

- The Commission to select projects through *a competitive public process that ranks potential projects based on the expected return for public investment as measured by the magnitude of the public benefits provided* (§79750 (c)),
- The state cost share for public benefits to not exceed 50 percent of the total costs of any project funded (with a potential exception for conjunctive use and reservoir reoperation projects) (§79756 (a)),
- The ecosystem improvements provided by a funded project to be at least 50 percent of total public benefits of the project funded (§79756 (b)).

Given these mandates, the definition of what can be counted within a particular benefit category may influence the ranking of projects, the share of public benefits ascribed to ecosystem purposes, and the share of cost allocated to public and other benefits.

The tables that follow summarize what the statute includes within a particular public benefit category, what clarification should be provided in the WSIP Guidelines, and how a particular public benefit could be defined for the purposes of allocating benefits to project costs.

The contents on the following pages were also informed by discussions with the Commission and Issue Papers developed in 2012 and 2013, as appropriate.

Table 1. Ecosystem Improvements

Public Benefit Category:	Ecosystem Improvements
Section in Statute:	§79753 (a) (1)
Language in Statute:	Ecosystem improvements, including changing the timing of water diversions, improvement in flow conditions, temperature, or other benefits that contribute to the restoration of aquatic ecosystems and native fish and wildlife, including those ecosystems and fish and wildlife in the Delta.
Initial Clarification of Language in Statute:	Ecosystem improvements, including: • Changing the timing of water diversions that contribute to the restoration of aquatic ecosystems and native fish and wildlife , including those ecosystems and fish and wildlife in the Delta • Improvement of flow conditions, temperature, or other benefits that contribute to the restoration of aquatic ecosystems and native fish and wildlife, including those ecosystems and fish and wildlife in the Delta
Additional Considerations:	1. Benefits to non-native fish and wildlife should not be counted as ecosystem benefits. 2. Both positive and negative ecosystem impacts should be considered when evaluating ecosystem benefits. 3. The economists on the technical team indicate that that any economic benefits that result from ecosystem improvements could be counted as ecosystem benefits. This is consistent with the 2012 "tools and methods" document. For example, water quality and/recreation benefits caused by ecosystem improvements could be categorized as ecosystem improvement. Although, this is an acceptable method, the project applicant will have flexibility in how they allocate their project benefits as long as benefits are not double counted. 4. Ecosystems include aquatic and terrestrial. Benefits to wildlife refuges would be counted under ecosystem improvements. Wildlife refuges include state wildlife areas, national wildlife refuges, and privately managed protected wetland habitat areas. 5. Section 79753 (b) prohibits bond funds being expended for the costs of environmental mitigation measures or compliance obligations, except for those associated with providing the public benefits funded by the WSIP. 6. Section 79750 indicates projects must provide a net improvement in ecosystem conditions. 7. Section 79752 requires funded projects to provide measurable improvements to the Delta ecosystem or to the tributaries to the Delta.

Table 1. Ecosystem Improvements (cont'd)

Proposed Clarification in Guidelines:	Ecosystem improvements, including: • Changing the timing of water diversions that contribute to the restoration of aquatic ecosystems and native fish and wildlife , including those ecosystems and fish and wildlife in the Delta • Improvement of flow conditions, temperature, or other benefits that contribute to the restoration of aquatic ecosystems and native fish and wildlife, including those ecosystems and fish and wildlife in the Delta Ecosystem improvements shall contribute to the restoration of aquatic ecosystems and native fish and wildlife, including those ecosystems and fish and wildlife in the Delta. Ecosystems include aquatic and terrestrial habitats and natural communities.
Benefit Examples:	Most ecosystem improvements are expected to be Delta water supply or other Delta habitat alterations that improve native species; riverine, floodplain, and riparian habitat downstream of water storage facilities; as well as use of delivered supplies to improve wetlands and wildlife refuge areas. Release of stored water might be used to affect riverine flow and temperature or to provide water to increase wetland or riparian areas. Many ecosystem improvements are intended to help California Endangered Species Act listed or other at-risk species and native biotic communities including rare natural communities.

Table 2. Water Quality Improvements

Public Benefit Category:	**Water Quality Improvements**
Section in Statute:	§79753 (a) (2)
Language in Statute:	Water quality improvements in the Delta, or in other river systems, that provide significant public trust resources, or that clean up and restore groundwater resources.
Initial Clarification of Language in Statute:	Water quality improvements are: • Water quality improvements that provide significant public trust resources in the Delta • Water quality improvements that provide significant public trust resources in other river systems • Water quality improvements that clean up and restore groundwater resources
Additional Considerations:	1. What is "significant"? The relative environmental value of the water quality improvements, as provided by the State Water Board, may be used by the Commission to determine if significant public trust resources are provided. The Commission will have ultimate discretion in determining if the public resources provided are significant. 2. What are public trust resources? A definition of public trust resources was not provided in the Water Quality, Supply, and Infrastructure Improvement Act of 2014. The concept of "public trust resources" derives from the public trust doctrine. It is not distilled in a single law or policy statement. Rather, it is a guiding principle for government based on various statutory directives, common law and the State Constitution. Agencies have historically defined it in ways that comport with evolving common law holdings and fit the needs of their mandates. For example, SB 1 (2009) required the State Water Resources Control Board (Water Board) to develop new flow criteria to protect public trust resources in the Delta ecosystem pursuant to the Water Board's public trust obligations. In developing these criteria, the Water Board articulated that the purpose of the public trust is to protect commerce, navigation, fisheries, recreation, ecological values, and fish and wildlife habitat.

Table 2. Water Quality Improvements (cont'd)

Additional Considerations (cont'd):	The concept of public trust uses is also fluid insofar as case law outlining its contours continues to evolve.[1] In the 1986 Racanelli case, the California Court of Appeal considered the public trust doctrine's application to water quality issues in the Delta. Specifically the court addressed whether water users bear responsibility for water quality issues caused by their upstream diversions. The court concluded that the public trust doctrine allows state water regulators to modify previously issued water rights in permits in the interest of protecting the water quality values of the Delta for fish and wildlife.[2] Based on discussions with the Water Board, staff recommends that fishery protection, fish and wildlife conservation, preservation of waterways in their natural state, and recreation be considered public trust resources. The definition is consistent with the draft water quality priorities being developed by the Water Board.
Proposed Clarification for Guidelines:	Water quality improvements are: • Water quality improvements that provide significant public trust resources in the Delta • Water quality improvements that provide significant public trust resources in other river systems • Water quality improvements that clean up and restore groundwater resources For purposes of the Water Storage Investment Program, fishery protection, fish and wildlife conservation, preservation of waterways in their natural state, and recreation are the public trust resources associated with water quality improvements. Therefore, water quality improvements in the Delta or in other river systems that provide these resources may be counted as public benefits. Water quality improvements that clean up and restore groundwater may also be counted as public benefits; specifically, the prevention and clean-up of contaminated groundwater, and restoring water supply in over-drafted aquifers.
Benefits Examples:	Water quality improvements from water storage projects are usually provided by release of stored water to dilute, repel, or replace water of lower quality. Water quality improvements stemming from ecosystem improvements (for example, better water quality from restored wetlands) are recommended for classification as ecosystem benefits. Water quality provided for ecosystem purposes is also recommended for classification as ecosystem benefits.

[1] The California Supreme Court has made it clear that objective of the public trust is always evolving so that a trustee is not burdened with outmoded classifications favoring the original and traditional triad of commerce, navigation and fisheries over those uses encompassing changing public needs. See National Audubon Society v. Superior Court, supra, at p. 434.

[2] United Sates v. State Water Res. Control Bd., 227 Cal. Rptr.161 at pp. 200-201. Referred to colloquially as the "Racanelli decision".

Table 2. Water Quality Improvements (cont'd)

Benefits Examples: (cont'd)	In the Delta, one long-standing water quality problem has been salinity for Delta water users, including Delta agriculture and Delta exports. Large storage projects upstream are used to repel saline water from the Delta. These operations are generally regarded as for nonpublic "water quality" purposes. Releases of stored water may also be used to maintain salinity gradients to encourage primary productivity for ecosystem purposes; however, these operations are generally regarded as for "ecosystem" purposes and not for "water quality" purposes. Storage projects may be used (1) to retain and treat degraded runoff, (2) for mixing with more saline supplies, or (3) for other important local water quality purposes.

Table 3. Flood Control Benefits

Public Benefit Category:	**Flood Control Benefits**
Section in Statute:	§79753 (a) (3)
Language in Statute:	Flood control benefits, including, but not limited to, increases in flood reservation space in existing reservoirs by exchange for existing or increased water storage capacity in response to the effects of changing hydrology and decreasing snow pack on California's water and flood management system.
Initial Clarification of Language in Statute:	Not needed
Additional Considerations:	The phrase "including, but not limited to" suggests that a variety of flood control benefits might be included.
Proposed Clarification for Guidelines:	Flood control benefits, include, but are not limited to, increases in flood reservation space in existing reservoirs by exchange for existing or increased water storage capacity in response to the effects of changing hydrology and decreasing snow pack on California's water and flood management system. This includes any flood control benefits that accrue from the reduction or prevention of the detrimental effects of flooding as a result of new storage projects.
Examples:	Flood control benefits are provided by water storage projects in two ways: 1. Storage space is reserved for the capture of flood flows 2. Benefits may be incidental to the use of storage for other purposes (i.e., the empty storage space provides a benefit, especially following dry years, even though the space is not made available by flood control operations.) Examples include: • Any increase in existing flood reservoir space either by reoperation (including forecast coordinated operations) or reservoir enlargement • New flood reservation space (as in new storage facilities) • Attenuation of damaging flood flows • Reducing potential flood damage by capturing excess flood flows for groundwater recharge • Other aspects of water storage projects that o Reduce the risk to human life, health, and safety from flooding, including protection of public safety infrastructure o Reduce the risk of flood damage o Reduce the operations and maintenance costs of the flood management system

Table 4. Emergency Response

Public Benefit Category:	**Emergency Response**
Section in Statute:	§79753 (a) (4)
Language in Statute:	Emergency response, including, but not limited to, securing emergency water supplies and flows for dilution and salinity repulsion following a natural disaster or act of terrorism.
Initial Clarification of Language in Statute:	Not needed
Additional Considerations:	• The phrase "including, but not limited to" suggests that a variety of emergency response benefits might be included. • Water supplied to water suppliers or customers is considered a non-public benefit; however, does that distinction change under emergency conditions? Should emergency response water supplied to customers during emergencies be considered a public benefit?
Proposed Clarification for Guidelines:	Emergency response includes but is not limited to, securing emergency water supplies and flows for dilution and salinity repulsion following a natural disaster or act of terrorism. Emergency response benefits will qualify if water is held in storage and supply is dedicated to emergency response purposes outside of normal facility operations or average water supply for all other purposes is reduced for the expected (average) amount of water used for emergency purposes.
Examples:	A clear intent of emergency response under §79753(a)(4) is to provide public funding for water storage that can be used to repel seawater from the Delta following a Delta levee failure event, but emergency water storage might have other emergency response benefits following natural disasters or acts of terrorism, such as providing water for fire suppression.

Table 5. Recreational Purposes

Public Benefit Category:	**Recreational Purposes**
Section in Statute:	§79753 (a) (5)
Language in Statute:	Recreational purposes, including, but not limited to, those recreational pursuits generally associated with the outdoors.
Initial Clarification of Language in Statute:	Not needed
Additional Considerations:	**The phrase "including, but not limited to" suggests that a variety of recreational purposes might be included.** However, recreation benefits that may result from water delivered through a municipal water supply system, such as to a public park that is not itself part of the proposed project, golf course, swimming pool, or water-based theme park would not be considered a public benefit for the purpose of the WSIP.
Proposed Clarifications for Guidelines:	Recreational purposes include, but are not limited to, those recreational pursuits generally associated with the outdoors. These shall include outdoor recreation activities associated with water bodies (such as rivers, streams, lakes, wetlands, and the ocean) and wildlife refuges that are accessible to the public. Recreational benefits must be directly affected by the proposed project and open to the public.
Examples:	Recreation benefits are use values, including consumptive use values such as fishing and non-consumptive use values such as aesthetics and wildlife viewing. Generally, recreation benefits are those associated with water provided by the project such as flatwater recreation on storage reservoirs and any additional riverine recreation downstream. Recreation benefits may also be obtained from ecosystem services, but those benefits are re recommended for classification under ecosystem benefits.