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October 3, 2016

Joe Yun
California Water Commission
P.O. Box 924836
Sacramento, CA 94236

Also submitted via email: WSIPcomments@cwcc.ca.gov

Subject: Contra Costa Water District Comments on Water Storage Investment Program Quantification Regulations

Dear Mr. Yun:

Contra Costa Water District (CCWD) appreciates the opportunity to comment on the latest version of the Water Storage Investment Program Quantification Regulations (the regulations). The latest version of the regulations include revisions to the text, new evaluation and scoring criteria, a new technical reference document, and new modeling tools. Overall the regulations provide a robust framework for evaluating state investment in storage projects, however, the regulations impose burdensome requirements on applicants. Although CCWD is capable of meeting the requirements and intends to submit an application for the Los Vaqueros Reservoir Expansion Project, the regulations will increase the cost to develop an application and may ultimately reduce the diversity of projects that seek funding. If the Commission wishes to fund a broad diversity of projects, the regulations should offer flexibility to applicants where possible and minimize unnecessary prescriptive requirements. CCWD has reviewed the regulations and offers the following suggestions to ensure that they are consistent with Proposition 1 and result in a fair and transparent process.

1 Regulations Must Be Consistent with Proposition 1 Legislation

There are at least two sections in the regulations that are inconsistent with Proposition 1 legislation and must be modified. Specifically, the evaluation criteria used to evaluate projects and the state cost share cap for reservoir reoperation and conjunctive use projects should be consistent with Proposition 1.

1.1 Evaluation Criteria

Section 79750 (c) of Proposition 1 states “[p]rojects shall be selected by the commission 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, pursuant to criteria established under this chapter”. The metrics used to score and rank projects should be based on the return for public investment and the magnitude of public benefits, consistent with Proposition 1. The regulations contain the evaluation criterion “water system improvements” to score and rank projects. The water system improvements metrics include total water deliveries in average and dry years, end of May storage, and end of September storage. These metrics should not be used to rank

projects for two key reasons: 1) either the water delivered and stored as described in the metrics provides private water supply benefits, not public benefits, and therefore should not be used to rank projects or 2) public benefits of water delivered and stored are already captured in the evaluation criterion “public benefit ratio” and would therefore be doubled counted in the ranking of projects. If the Commission is interested in understanding how projects may affect statewide water operations, Section 4.3.10 and Section 4.12 of the Technical Reference Document could be modified to include the water system improvement metrics and such benefits could be monetized as appropriate. However, the water supply improvement metrics as currently defined should not be used to rank projects because they do not capture return for public investment as measured by the magnitude of public benefits and therefore are not consistent with Proposition 1. Projects must be ranked consistent with Proposition 1, based on the return on investment and the magnitude of public benefits.

1.2 State Funding Cap for Conjunctive Use and Reservoir Reoperation Projects

Section 79756(a) of Proposition 1 states: “*The public benefit cost share of a project funded pursuant to this chapter, other than a project described in subdivision (c) of Section 79751, shall not exceed 50 percent of the total costs of any project funded under this chapter.*” In turn, Section 79751 identifies eligible projects for funding, including: “*(c) Conjunctive use and reservoir reoperation projects.*” Section 6004 (a)(7)(A)(2) of the regulations should be modified to reflect that reservoir reoperation and conjunctive use projects are exempted from the state cost share cap that applies to other types of projects.

1.3 Funding for Environmental Documentation

In our previous comment letter dated March 14, 2016 CCWD requested that the regulations include provisions to fund the completion of environmental documentation consistent with Proposition 1. CCWD appreciates that the Commission addressed our request and supports the new provisions in Section 6010 of the regulations that lay out the process for applicants to receive early funding to complete environmental documentation and permits.

2 Definition of Capital Costs

In our previous comment letter dated March 14, 2016 CCWD requested that the definition of capital cost be expanded to include the full range of capital costs that applicants will incur. In particular CCWD requested that the definition of capital cost be expanded to include project management, interest during construction, and permitting. Section 6004(a)(5)(D) in the regulations includes interest during construction as a total project cost but not a capital cost. Capitalizing interest during construction of large projects is standard practice and interest during construction should be included in the definition of capital costs. Suggested redline edits to the regulations are provided in Appendix A.

3 Review and Scoring of Applications Must be Fair and Transparent

The review process in the regulations is overly complicated and does not include sufficient public participation. The regulations contain a multi-step review process and it is unclear how or when the Commissioners can exercise judgment. The regulations do not contain a public comment period nor do they describe how public comment or appeals may be used to adjust scoring. The

review and scoring process should be simplified so that it is more transparent to the public and provides the Commissioners the opportunity to exercise judgment. We offer the following suggestions to simplify the review process and improve public participation and transparency.

- Scoring of individual applications should be independent of other projects. The normalization scheme in the regulations should be removed because it has the potential to hold up funding for all projects if scoring for one project is recalculated or appealed.
- Draft scoring recommendations should be presented by staff followed by a 30-day public comment period.
- During the public comment period, applicants should be able to contest or appeal any component of the draft scoring, not just the public benefit ratio.
- Commissioners should be provided the opportunity to adjust the scoring after receiving public comments and reviewing applicant appeals.

4 Climate Change and the Resiliency of Benefits

The resilience of public and non-public benefits should be considered when evaluating and ranking projects. It will be important for all parties, the state and others, to understand the durability and resiliency of all project benefits prior to investing. CCWD recommends that the resilience of benefits be given greater weight in the evaluation of projects. Suggested redline edits to the regulation text are provided in Appendix A.

As noted in our previous comment letter dated March 14, 2016, CCWD supports a robust evaluation of benefit resilience under climate change. CCWD continues to advocate that the evaluation and monetization of project impacts and benefits should be consistent with a project's environmental documentation and that the climate change scenarios provided by the Commission should be used to assess benefit resilience. Incorporating a specific future climate into the baseline, rather than treating climate change as a source of uncertainty, propagates a profound and unnecessary amount of error and uncertainty into the benefit and monetization calculations. There are three main categories of uncertainty associated developing a hydrologic baseline: error in the historical hydrologic record, error within a given model platform, and error associated with linking various modeling platforms. Although the sources of error and uncertainty affect the development of any hydrologic baseline, the magnitude of the error and uncertainty grows dramatically when developing a climate change baseline given the large number of models used. CCWD suggests that the climate change scenarios developed by the Commission should be used as the basis for determining benefit resiliency rather than the baseline for calculating benefits. This will ensure that information contained in the application does not contradict information contained in an applicant's environmental documentation and that benefit resilience is evaluated in a robust manner over a range future climate scenarios.

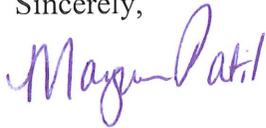
CCWD supports the edits suggested by the Association of California Water Agencies related to Section 6004 of the regulations that would allow for an applicant to select a method for the quantification of benefits not included in the Technical Reference Document if the method is conceptually sound and adequately described and documented in its application.

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Detailed comments on each of the components of the regulations are appended to this letter. Appendix A contains suggested redline edits to the text of the regulations. Appendix B contains comments on the modeling tools. Appendix C contains comments on the technical reference document. We look forward to working with staff and the Commissioners to resolve any outstanding issues before the regulations are adopted in December. Your consideration of our comments is greatly appreciated. If you would like to discuss our comments or have any questions, please do not hesitate to call me at (925) 688-8018 or Maureen Martin at (925) 688-8323.

Sincerely,



Marguerite Patil
Special Assistant to the General Manager

MP/MM:wec

Appendix A
Contra Costa Water District's Redline Edits to the Water Storage Investment Program
Regulations
October 3, 2016

PROPOSED REVISION TO REGULATIONS

The previously proposed regulation text is set forth below in normal type. The proposed changes are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions.

CALIFORNIA CODE OF REGULATIONS
TITLE 23. WATERS.
DIVISION 7. CALIFORNIA WATER COMMISSION
CHAPTER 1 WATER STORAGE INVESTMENT PROGRAM

Article 1 Purpose and Definitions

Section 6000. Chapter 2 of Proposition 1, Water Code section 79701(e), declares the will of Californians that funding within Proposition 1 is provided to obtain three objectives of the California Water Action Plan: more reliable water supplies, restoration of important species and habitat, and more resilient and sustainably managed water infrastructure. Chapter 8 of Proposition 1, Water Code section 79750 requires the Commission to adopt regulations governing the investment of public funds for public benefits associated with water storage. The regulations in this chapter describe the application process to obtain public funding for water storage projects that would provide public benefits, and the methods and criteria to be used by the Commission to evaluate those proposed projects.

Note: Authority Cited: Water Code section 79750.

Reference: Water Code section 79750.

Section 6001~~0~~. Definitions

(a) As used in this Chapter, the terms below shall have the meanings noted:

- (1) "Adaptive management" means a framework and flexible decision-making process for ongoing knowledge acquisition, monitoring, and evaluation leading to continuous improvements in management planning and implementation of a project to achieve specified objectives, per Water Code section 85052.
- (2) "Agricultural water supplier" ~~means a water supplier, either publicly or privately owned, providing water to 10,000 or more irrigated acres, excluding recycled water, per~~ has the same meaning as provided in Water Code section 10608.12.

- ~~(3)~~ “Anadromous” means fish species that live most of their lives in the ocean and travel upstream to spawn in freshwater.
- ~~(34)~~ “Applicant” means the entity(ies) that formally submits an application for funding. ~~This would be the same entity(ies) that would enter into a funding agreement with the Commission should the proposed project be funded.~~
- ~~(45)~~ “Application” means the information submitted to the Commission that is outlined in the application process in section 6003 of these regulations. ~~requests Program funding for a proposed project.~~
- ~~(56)~~ “Attraction flow” means water with appropriate chemistry, velocity, quantity, and location to attract fish migrating upstream.
- ~~(67)~~ “Avoided cost” means the reduction in a without-project future condition cost that would occur as a result of a proposed project.
- ~~(78)~~ “Beneficial uses of the Delta” means the beneficial uses identified in the State Water Board’s “Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary” issued by the State Water Resources Control Board (December 2006).
- ~~(89)~~ “Beneficiary(ies)” means a person, organization, or group of persons or organizations that receives benefits from a proposed project.
- ~~(910)~~ “Best available science” means the use of the high-value information and data, specific to the decision being made and the time frame available for making that decision, to inform and assist management and policy decisions.
- ~~(11)~~ “CALFED” means ~~CALFED Bay Delta Program developed by a consortium of state and federal agencies with management and regulatory responsibilities in the San Francisco Bay/Sacramento San Joaquin Delta Estuary through the CALFED Bay Delta Program, which by means of the final programmatic environmental impact statement/environmental impact report, identified the preferred programs, actions, projects, and related activities that would provide solutions to the San Francisco Bay/Sacramento San Joaquin Delta Estuary ecosystem, including the Bay Delta and its tributary watersheds.~~
- ~~(1012)~~ “CALFED surface storage projects” means projects meeting the requirements of Water Code section 79751(a). For the purposes of this program, this includes Los Vaqueros Reservoir Expansion, In-Delta Storage Project, Sites Reservoir, and Temperance Flat Reservoir.
- ~~(13)~~ “California’s CWA 303(d) list” means ~~the list of impaired water bodies developed by the State Water Resources Control Board and approved by the U. S. Environmental Protection Agency, as it may be amended from time to time, prepared pursuant to section 303(d) of the Federal Water Pollution Control Act Amendments of 1972 (codified at 33 United States Code (U.S.C.) § 1313(d).) The list identifies waterbodies that do not meet, or are not expected to meet, water quality standards (i.e., impaired waterbodies).~~
- ~~(114)~~ “Capital costs” means the costs of construction or acquisition of a tangible physical property with an expected useful life of 15 years or more. Capital costs include the following items:

- (A) Major maintenance, reconstruction, or demolition for purposes of reconstruction of facilities, reoperation, or retrofitting.
 - (B) Equipment with an expected useful life of two years or more
 - (C) Costs incidentally but directly related to construction or acquisition, including, but not limited to, planning, engineering, construction management, architectural, and other design work, environmental impact reports and assessments, required environmental mitigation or compliance obligation expenses, appraisals, legal expenses, site acquisitions, interest during construction, permitting, and necessary easements.
- (12) ~~15~~ "CEQA" means the California Environmental Quality Act (Public Resources Code section 21000 et seq.).
- (13) "CDFW" means the California Department of Fish and Wildlife.
- ~~(16) "Certainty of improvement" means the degree of confidence that the proposed improvement will provide the intended benefit.~~
- ~~(14) 17~~ "Commission" means the California Water Commission.
- ~~(18) "Commitment" means an agreement or pledge to assume a financial obligation at a future date. Commitments may be in the form of adopted resolutions, letters, contracts, or signed statements by an authorized representative.~~
- ~~(19) "Complete application" means an application that consists of all of the required information and supporting documentation, submitted prior to the close of a solicitation period.~~
- (15) ~~20~~ "Conjunctive use project" means the coordinated and planned management of existing surface water and groundwater resources in order to maximize the efficient use of both resources. Conjunctive use projects may include development of new operational agreements and construction of appurtenant infrastructure. To be considered for a maximum project cost share exception, ~~per~~pursuant to Water Code section 79756(a), these projects shall ~~utilize~~use existing facilities and resources to the maximum extent practicable. Conjunctive use projects do not include those that meet the definition of groundwater storage projects.
- ~~(21) "Constant dollar year" means the year to which all dollar values are adjusted for inflation so the values can be compared.~~
- (16) ~~22~~ "Construction period" means the time during which construction occurs, normally stated as the first year and the last year of construction.
- (17) ~~23~~ "Cost-effective(ness)" means a demonstration that a proposed project's cost is the least-cost feasible means of providing the same or greater amount of benefit. Cost-effectiveness can apply to the project as a whole (total costs to provide the full set of benefits) or to an individual public benefit relative to the Program cost share for that public benefit.
- (18) ~~24~~ "Cost allocation" means the process for assigning costs to beneficiaries.
- (19) ~~25~~ "Cost share" means the portion of total project cost that is paid by a specific beneficiary or funding source. It may be expressed in dollars or as a percent of total cost.

- (20) “Current conditions” means the existing conditions as presented in an applicant’s CEQA document.
- ~~(26) “Days” means calendar days.~~
- (2127) “Delta” means the Sacramento-San Joaquin Delta as defined in Water Code section 85058.12220 and the Suisun Marsh as defined in Public Resources Code section 29101.
- (2228) “Delta outflow” means the Net Delta Outflow Index as identified in the State Water Resources Control Board’s “Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary” (December 2006).
- (2329) “Department” means the Department of Water Resources.
- (2420) “Dewatering” means a condition when water surface elevation drops below bed elevation exposing redds to ambient conditions or stranding juvenile salmonids.
- (2531) “Disadvantaged communities” has the same definition as means communities with an annual median household income that is less than 80 percent of the statewide annual median household income, per Water Code section 79505.5.
- (2632) “Discount rate” means the real interest rate (i.e., the rate without inflation) used to adjust constant dollar benefits received or costs incurred during the planning horizon to dollars at a common point in time.
- (2733) “Duration of improvement” means the length of time an improvement is expected to exist or provide intended benefits.
- (2834) “Ecosystem improvements” means a public benefit that includes 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, per Water Code section 79753(a)(1). Ecosystems include both aquatic and terrestrial habitats and natural communities.
- (2935) “Emergency response” means has the same meaning as Water Code section 79753(a)(4) which is a public benefit that provides an amount of water storage or supply dedicated to emergency response purposes that are outside of normal facility operations or average water supply for all other purposes (i.e., water supply is reduced for the expected (average) amount of water used for emergency purposes). For the purposes of this Program, emergency response water (i.e., water from dedicated emergency storage) supplied to customers for human health and safety purposes during declared emergencies will be considered a public benefit under this category. Per Water Code section 79753(a)(4), 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.
- ~~(36) “Encumbered” means the collective internal accounting and bond accountability actions initiated by Staff to assign specific amounts of authorized general obligation bond funding to a specific funding recipient through a binding agreement.~~
- (3037) “Entrainment” means fish being transported along with the flow of water into unnatural or harmful environments.

- (~~3138~~) “Environmental documentation” means documentation required for compliance with CEQA as defined in California Code of Regulations, Title 14, section 15361.
- (~~3239~~) “~~Existing~~ environmental mitigation or compliance obligations” means legally enforceable requirements or conditions in existing statutes, regulations, permits, contracts, licenses, or grants, or orders and decisions from courts or state agencies intended to protect the human or natural environment.
- (~~40~~) “~~Feasible~~” means ~~capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.~~
- (~~3341~~) “Flood control benefit” ~~means~~ has the same meaning as Water Code section 79753(a)(3) which is a public benefit that reduces or prevents the extent or magnitude of the expected detrimental effects of flooding as a result of new, expanded, or reoperated storage projects. Per Water Code section 79753(a)(3), 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.
- (~~42~~) “~~Floodplain~~” means ~~an area of low-lying ground periodically inundated by stream or river flow.~~
- (~~43~~) “~~Flow regimes~~” means ~~river or stream flows that support a specified hydrologic condition.~~
- (~~44~~) “~~Fry~~” means ~~a recently hatched fish that has emerged from the gravel.~~
- (~~3445~~) “~~Functional~~ flow regimes” means flow conditions that retain specific process-based components that support geomorphic or ecological functions for the streams and rivers. Ecological functions are the biological, chemical, and physical structural components of an ecosystem and how they interact with each other.
- (~~3546~~) “Funding agreement” means an agreement between the ~~California Water~~ Commission and the funding recipient to implement the proposed project.
- (~~3647~~) “Funding recipient” means an applicant ~~which~~ who receives a letter of maximum conditional eligibility and enters into a final funding agreement commitment through the Program.
- (~~3748~~) “Geographic scope” means the area covered by a model or analysis used to calculate physical changes resulting from a project.
- (~~3849~~) “Groundwater contamination prevention project” means a project that provides water storage benefits and prevents groundwater contamination by eliminating or reducing sources of contamination; prevents seawater intrusion through the use of seawater or hydraulic barriers; prevents the migration of contaminants into down gradient groundwater basins or aquifers; or otherwise prevents groundwater contaminate plumes from expanding or spreading. Contamination means an impairment of the quality of the groundwaters of the State.
- (~~3950~~) “Groundwater dependent ecosystem” has the same meaning as California Code of Regulations, Title 23, section 351(m). ~~means communities of plants and animals that~~

~~depend on groundwater emerging from aquifers or on groundwater occurring near the ground surface.~~

- (4051) “Groundwater remediation project” means a project that provides water storage benefits and removes or reduces one or more constituents resulting from a discharge or release of waste that has degraded groundwater quality or impaired beneficial uses, or a project that restores groundwater basin storage or storage capacity by reducing constituent concentrations below levels that impair beneficial uses of the groundwater.
- (4152) “Groundwater storage project” means a designed project that captures, infiltrates, injects, or recharges (direct or in-lieu) water supplies into a groundwater basin for later use or to avoid or address undesirable groundwater results.
- (4253) ~~“Groundwater Sustainability Agency (GSA)” has the same meaning as Water Code section 10721(j). means groundwater sustainability agency.~~
- (4354) ~~“Groundwater Sustainability Plan (GSP)” has the same meaning as Water Code section 10721(k) means groundwater sustainability plan.~~
- (4455) “Immediacy of improvement action” means the amount of time that will elapse between the initiation of an improvement action that will result in a measurable improvement and the completion of that action. ~~how much time will elapse before an improvement action will be completed.~~
- (56) ~~“Improvement action” means the initiation of an activity that results in a “measurable improvement”.~~
- (4557) “In-river rearing” means when a fish holds in a river to feed, grow, or survive prior to upstream or downstream migration.
- (58) ~~“Invasive species” means organisms (plants, animals, or microbes) that are not native to an environment, and once introduced, they establish, quickly reproduce and spread, and cause harm to the environment, economy, or human health.~~
- (4659) “Local surface storage project” means a project that stores water above ground in a natural or artificial impoundment that improves the operation of water systems in the state and provides public benefits. Local surface storage projects are not wholly owned or operated by the Department or U.S. Bureau of Reclamation but rather by a local agency.
- (4760) “Magnitude of improvement” means the quantity ~~and scale~~ of the improvement.
- (4861) “Measurable improvements” means changes in physical, chemical, or biological conditions that provide public benefits and can be quantified at a specific location and time.
- (4962) ~~“Mutual water company” has the same meaning as Public Utility Code section 2725. means a private corporation or association organized for the purposes of delivering water to its stockholders and members at cost, including use of works for conserving, treating, and reclaiming water.~~
- (5063) “Net improvement” means the gain or enhancement of a resource condition determined by comparing the with- and without-project future conditions less any negative outcomes of a proposed project.

- (5164) "Non-natal tributary" means any waterway that is not the stream or river where an anadromous fish was born.
- (5265) "Nonprofit organization" has the same meaning contained in Water Code section 79702(p). ~~means an organization qualified to do business in California and is qualified under 26 U.S.C. §501(c)(3).~~
- (5366) "Non-public benefit" means a benefit provided by a proposed project other than the public benefits identified in Water Code section 79753(a)(1-5).
- (5467) "Operations" means any decision or action, purposeful or incidental, to control or regulate the free flow of water by diverting to, impounding in, or releasing from a surface or groundwater storage or other facility(ies).
- (5568) "Permits" means any federal, state, or local approvals, certifications, or agreements required to construct, implement, or operate a ~~proposed~~ project.
- (5669) "Physical benefit" means a desired improvement in a good or service that is provided by a proposed project, measured in a physical, non-monetary unit.
- (5770) "Physical change" means expected change in: surface water and groundwater operations; water flow, Delta and riverine conditions; surface water and groundwater quality; aquatic and terrestrial biological resources; energy resources; recreation resources; or other resources affected by the change in diversion, storage, or use of water created or caused by a proposed project.
- (5874) "Planning horizon" means the future time period, in years, over which project costs will be paid and benefits received, normally based on the expected project life plus the construction period. The planning horizon may not exceed the expected life of the project facilities plus the construction period, or 100 years, whichever is less.
- ~~(72) "Pre application" means the first step in a two-step application process.~~
- (5973) "Present value" means the monetary value of future costs or future benefits of a proposed project, converted to a common point in time using the discount rate. As used in this Chapter, present values of costs or benefits of a project are expressed at the start of a proposed project's operation, unless otherwise specified.
- (6074) "Program" means the Water Storage Investment Program.
- (6175) "Project life" means the expected time period in which a project physically performs its intended function.
- (6276) "Public agency" shall have the same meaning provided in water Code section 79702(s). ~~means a state agency or department, special district, joint powers authority, city, county, city and county, or other political subdivision of the state.~~
- (6377) "Public benefit(s)" for purposes of this chapter, has the same meaning as includes those public benefits associated with water storage projects outlined provided in Water Code section 79753(a), and include ecosystem improvements, water quality improvements, flood control benefits, emergency response, and recreational purposes.
- ~~(78) "Public utility" means every common carrier, toll bridge corporation, pipeline corporation, gas corporation, electrical corporation, telephone corporation, telegraph corporation, water corporation, sewer system corporation, and heat corporation, where~~

the service is performed for, or the commodity is delivered to, the public or any portion thereof (Public Utility Code section 216).

- (64) “Public Benefit Ratio” means the ratio of the monetized public benefits to the Program funding request.
- ~~(6579)~~ “Ramping rate” means a progressive change in the discharge of water to a stream or river channel, measured as flow per unit time.
- ~~(6680)~~ “Realization of benefit” means the expected time that will elapse before an improvement will achieve measurable outcomes.
- ~~(6781)~~ “Recreational purposes” means a public benefit that provides recreation activities typically 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 be open to the public, and may provide interpretive, educational, health, or intrinsic value.
- ~~(6882)~~ “Redd” means a gravel nest, excavated by a spawning female salmonid, for the deposition of eggs.
- ~~(6983)~~ “Regional surface storage project” means a project that stores water above ground in a natural or artificial impoundment that improves the operation of water systems in the state and provides public benefits. Regional surface storage projects are not wholly owned or operated by the Department or U.S. Bureau of Reclamation but rather by a local agency or regional entity.
- ~~(7084)~~ “Reservoir reoperation project” means a project that involves the modification of the operations of an existing surface storage reservoir to achieve public benefits. A reservoir reoperation project may include construction of appurtenant infrastructures such as spillways, radial gates, tunnels, or conveyance facilities necessary for the improved operation of the existing reservoir. Such projects must result in long-term operational changes that provide public benefits, and operational changes must be documented in a facility’s operating permits and the contracts with entities responsible for managing and monitoring the public benefits.
- ~~(7185)~~ “Resilience to the effects of climate change” means the flexibility a proposed project will have to adapt to hydrologic variability, sea level rise, and other effects of climate change to ensure provision of public benefits.
- ~~(86)~~ “Restore” means a return to a close approximation of a prior condition.
- ~~(87)~~ “Return on investment” means the present value of net benefits received over the planning horizon divided by the present value of costs.
- ~~(88)~~ “Salmonid” means fish in the family Salmonidae, including salmon and trout.
- ~~(89)~~ “Sensitivity analysis(es)” means modeling studies that show how much model results change when the value of an uncertain input is varied over its range of uncertainty. It includes reconsideration of conclusions based on the evaluation of model results that are shown to change. For some input changes, conclusions can be tested through simplified calculations or qualitative reasoning and may not need additional model studies.

- ~~(90)~~ “~~Solicitation period~~” means the time period during which the Commission will accept ~~submittals for the pre application and full application.~~
- (7294) “Spatial distribution” means the geographical arrangement of a habitat, phenomenon, or species in a given area.
- (7392) “Spatial resolution” means the minimum length, area, or volume of an affected physical resource necessary to demonstrate and describe benefits or impacts.
- (7493) “Spatial scale” means the geographical dimensions of an improvement.
- (7594) “Staff” means the employees of the Commission, other state agencies, and contractors designated by the Commission to assist in preparation and review of applications and administration of the Program, including evaluating the technical aspects of a proposed project.
- (76) “State Water Board” means the State Water Resources Control Board.
- (7795) “State water system” means all of the state’s water systems collectively, including local, regional, state, and federal systems that provide water resources benefits within California, regardless of whether the benefits are public or private.
- (7896) “Straying” means an anadromous fish migrating into a non-natal waterway.
- (7997) “Temporal distribution” means the time of year or season in which an improvement will occur.
- (8098) “Temporal scale” means the scheduled time in the calendar year during which an improvement action will be implemented
- (8199) “Threshold” means, in the context of adaptive management, a numerical value for a specific metric that is a boundary between acceptable and unacceptable situations or conditions, or a specific metric that must be exceeded for a certain reaction, result, or condition to occur.
- (82100) “Time-step” means the amount of time for which equations in a time-sequential model are recalculated; normally hourly, daily, monthly or annually.
- (83101) “Tributaries to the Delta” means all river systems that make up the Sacramento River watershed and the San Joaquin River watershed (i.e., the topographic hydrologic basins). Tributaries to the Delta include areas upstream of dams or other impoundments. Tributaries to the Delta do not include the Trinity River watershed or the Tulare Lake Basin.
- (84102) “Tribe” means a federally-recognized Indian tribe ~~and any entity created by a federally-recognized Indian Tribe,~~ or Indian tribes/groups listed on the Native American Heritage Commission’s California Tribal Consultation List.
- (85103) “Trigger” means, in the context of adaptive management, an event, situation, or measurement that initiates or requires a management action.
- (86104) “Undesirable groundwater result(s)” ~~has the same meaning provided in means, as defined in Water Code section 10721(w)(1-6), one or more of the following effects caused by groundwater conditions occurring throughout the basin:~~
- (A) ~~Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon. Overdraft during a period of drought is not~~

sufficient to establish a chronic lowering of groundwater levels if extractions and recharge are managed as necessary to ensure that reductions in groundwater levels or storage during a period of drought are offset by increases in groundwater levels or storage during other periods.

- (B) ~~Significant and unreasonable reduction of groundwater storage.~~
- (C) ~~Significant and unreasonable seawater intrusion.~~
- (D) ~~Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies.~~
- (E) ~~Significant and unreasonable land subsidence that substantially interferes with surface land uses.~~
- (F) ~~Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.~~

~~(87405) “Urban water supplier” has the same meaning as Water Code section 10617 means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre feet of water annually, per Water Code section 10617.~~

~~(88406) “Water quality improvements” means a public benefit that includes water quality improvements that provide significant public trust resources in the Delta or in other river systems, or water quality improvements that clean up or restore groundwater resources, per Water Code section 79753(a)(2). Public trust resources related to water quality improvements, for the purposes of this program and quantifying public benefits, mean fishery protection, fish and wildlife conservation, preservation of waterways in their natural state, and recreation. Water quality improvements in the Delta, or in other river systems, that provide these public trust resources are public benefits.~~

~~(89407) “Willingness to pay” means a monetary measure of what Californians would be willing to relinquish for a quantity of a good or service if there was no alternative means of obtaining that same quantity.~~

~~(90408) “With-project future conditions” means a quantitative and qualitative description of the conditions assumed at the future condition years 2030 and 2070 with a proposed project; it is based on the without-project future conditions and includes additions or modifications specific to the proposed project’s description and operations.~~

~~(91409) “Without-project future conditions” means a quantitative and qualitative description of the infrastructure, population, land use, water use, water operations, agreements, laws, regulations, future climate and sea level conditions, and other characteristics relevant to the proposed project that are assumed at a particular year in the planning horizon the future condition years 2030 and 2070 without a proposed project.~~

NOTE: Authority cited: Water Code section 79705, 79750, 79754.

Reference: Water Code section 79712, 79750, 79751, 79752, 79753, 79755, 79756, 79757.

Article 2. ~~Application Process, General Provisions, General Selection Process, and Funding Commitments~~

Section 6002. This article describes the information that shall be included in the application, including how the applicant quantifies the public benefits and the information necessary for the Commission to make an evaluation of the application and supporting information.

Section 6001. General Provisions

(a) Confidentiality

~~(1) Information submitted to the Commission pursuant to this chapter is subject to the provisions of the California Public Records Act (California Government Code section 6250 et seq.). Documents that may pose security concerns should be marked "confidential" and will be treated pursuant to the following provisions:~~

~~(A) Any person submitting to the Commission any records containing data claimed to be "confidential" or otherwise exempt from disclosure under Government Code section 6254 or 6254.7 or under other applicable provisions of law shall, at the time of submission, identify in writing the portions of the records containing such data as "confidential" and shall provide the name, address, telephone number, and email address of the individual to be contacted if the Commission receives a request for disclosure of or seeks to disclose the information claimed to be confidential. The Commission shall not disclose data identified as confidential, except in accordance with the requirements of this subchapter. The following information shall be considered confidential if marked as such by the applicant:~~

- ~~1. Records of Native American graves, cemeteries, and sacred places and records of Native American places, features, and objects described in sections 5097.9 and 5097.993 of the Public Resources Code maintained by, or in the possession of, the Native American Heritage Commission, another state agency, or a local agency;~~
- ~~2. A document prepared by or for a state or local agency that assesses its vulnerability to terrorist attack or other criminal acts intended to disrupt the public agency's operations;~~
- ~~3. Critical infrastructure information; and~~
- ~~4. Existing facility as-builts and operation manuals.~~

~~(B) Upon receipt of a request from a member of the public that the Commission disclose information claimed to be confidential or if the Commission seeks to disclose such information, the Commission shall inform the individual designated in subsection (A) by telephone and by email that disclosure of the information is sought. The entity claiming confidentiality shall file with the Commission documentation in support of the claim of confidentiality. The documentation must be received within five (5) days from the date of the telephone contact and email notification, whichever occurs first.~~

~~(C) The documentation submitted in support of the claim of confidentiality shall include the following information:~~

- ~~1. The statutory provision(s) under which the claim of confidentiality is asserted;~~

2. A specific description of the information claimed to be entitled to confidential treatment;
 3. The period of time for which confidential treatment is requested;
 4. The extent to which the information has been disclosed to others and whether its confidentiality has been maintained or its release restricted;
 5. Confidentiality determinations, if any, made by other public agencies as to all or part of the information and a copy of any such determinations, if available;
- and
6. Whether it is asserted that the information could be used in a manner to threaten the security of the project.

(D) Documentation, as specified in subsection (C), in support of a claim of confidentiality may be submitted to the Commission prior to the time disclosure is sought.

(E) The Commission shall, within ten (10) days of the date it sought to disclose the information or received the request for disclosure, or within 20 days of that date if the Commission determines that there are unusual circumstances, as defined in Government Code section 6253, review the request, if any, and supporting documentation, if received within the time limits specified in subsection (B) above, including any extension granted, and determine whether the data is entitled to confidential treatment pursuant to Government Code section 6254, 6255 or 6254.7 or other applicable provisions of law and shall either:

1. Decline to disclose the data and, if a request was received, provide a justification to the person making the request and to the person claiming the data is confidential for the determination pursuant to Government Code section 6255; or
2. Provide written notice to the person claiming the information is confidential and, if a request was received, to the person requesting the information that it has determined that the information is subject to disclosure, that it proposes to disclose the information, and that the information shall be released 21 days after receipt of the notice by the person claiming confidentiality, unless the Commission is restrained from so doing by a court of competent jurisdiction. The Commission shall release the information in accordance with the terms of the notice unless so restrained.

(F) Should judicial review be sought of a determination issued in accordance with subsection (E), either the person requesting data or the person claiming confidentiality, as appropriate, may be made a party to the litigation to justify the determination.

(b) Eligibility

(1) Eligible applicants consist of the following:

- (A) Public agencies;
- (B) Nonprofit organizations;
- (C) Public utilities;
- (D) Federally recognized Indian tribes;

- (E) State Indian tribes listed on the Native American Heritage Commission's California Tribal Consultation List;
- (F) Mutual water companies; and
- (G) For CALFED surface storage projects, local joint powers authorities, per Water Code section 79759(a) - (c).

(2) Eligible project types include:

- (A) CALFED surface storage projects;
- (B) Groundwater storage projects;
- (C) Groundwater contamination prevention or remediation projects that provide water storage benefits;
- (D) Conjunctive use projects;
- (E) Reservoir reoperation projects;
- (F) Local surface storage projects that improve the operation of water systems in the state; and
- (G) Regional surface storage projects that improve the operation of water systems in the state.

NOTE: Authority cited: Water Code section 79705, 79712, 79750, 79754, 79757.

Reference: Water Code section 79705, 79712, 79750, 79754, 79757.

Section 60032. General Selection Process Application Submittal.

(a) The Commission shall use a two-step application process. Each step shall have a distinct solicitation period, defined in this regulation. The first step, the pre-application, contains basic applicant and project information. Applicants may consider the Commission's feedback and public comments received by the Commission, as well as information posted on other projects, before proceeding to the second step, preparation of a full application. The second step, the full application, contains detailed technical information and a presentation and analysis of proposed project benefits that is submitted for funding decisions.

(b) Mandatory Pre-application Process

(1) The Commission shall notify the public of the pre-application solicitation on its website and through its electronic mailing list. Alternatively, if requested by a potential applicant, notice shall be provided by regular mail. The pre-application solicitation shall be open for a minimum of two months. Applicants shall complete and submit a pre-application in an electronic format to the Commission prior to the close of the pre-application solicitation period. Staff shall post all pre-applications received on the Commission's website within 14 days of the close of the solicitation period.

(2) The pre-application shall contain:

- (A) Contact information, including the name of the entity, the contact person at the entity, email address, entity address and phone number;
- (B) Proposed project name, location, water source, and description including operations;
- (C) Description of eligibility, including the specific provision of section 6001(b) that qualifies the applicant to apply;

- (D) Estimated amount of Program funds being requested, estimated total capital cost, and estimated total project cost;
- (E) Potential beneficiaries and cost share partners, of both public benefits and non-public benefits;
- (F) Approximate location, description, and magnitude of measurable improvements to the Delta ecosystem or to the tributaries to the Delta;
- (G) Summary of the estimated magnitude of physical public benefits over the planning horizon;
- (H) Summary of local, regional, or state water supply reliability or operational improvements provided by the project, including how the project may support the long-term provision of safe and affordable water supplies to one or more systems in the State Water Resources Control Board's Small Water Systems Program;
- (I) Summary of how the proposed project integrates with existing projects or could integrate with other projects to increase benefits;
- (J) Statement as follows: "[Applicant] acknowledges that the pre-application is the initial step in the selection process and does not guarantee project funding, and that a full application is necessary to fully establish eligibility and provide information necessary for funding decisions by the Commission"; and
- (K) Statement attesting that the information provided in the pre-application is true and correct.

(3) Staff shall review all complete pre-applications, submitted by the close of the solicitation period, and assess the information to determine whether each proposed project appears to meet the eligibility requirements.

(4) Staff shall provide preliminary feedback on the pre-applications to the Commission at a regularly scheduled Commission meeting. The preliminary feedback will be made available to the public by posting on the Commission's website.

(5) The Commission shall consider Staff's feedback and public comments and provide final feedback to potential applicants on their pre-applications. This feedback will include either a statement that the pre-application information appears to meet the Program provisions for eligibility and measurable improvements to the Delta or to the tributaries to the Delta, or provide recommendations to address deficiencies or strengthen applications, including eligibility issues. The final feedback shall be posted on the Commission's website.

(c) Full Application Process

- (1a) The Commission shall notify the public of the solicitation when applications will be accepted on its website and through its electronic mailing list. Alternatively, if requested by a potential applicant, notice shall be provided by regular mail. The ~~full~~ application solicitation shall be open for a minimum of ~~six~~ five months from the date the notice is published. Applicants shall complete and submit an ~~an~~ full application, using the Department's Grants Review and Tracking System (GRanTS) on-line application submittal tool, by the close of the ~~full~~ application solicitation period. Staff shall post all applications received on the Commission's website within

30 days of the close of the solicitation period, with the exception of potentially confidential documents subject to the process described in ~~subsection 60151(a).~~

~~(21) A complete application shall contain all of~~ The application shall consist of the following information:

- (A) Maximum ten page executive summary describing the project facilities and operations; project interactions with existing projects and operations; physical and economic public benefits; non-public benefits; project resiliency to sources of uncertainty; water system improvements including regional and State system reliability; flexibility through integration with other projects; and other relevant information the applicant deems necessary to inform the Commission;
- (AB) Project name and objective, county, latitude, longitude, water source, watershed, groundwater basin, hydrologic region, senate district, assembly district, congressional district, project description, and maps, schematics, and engineering drawings to support the project description;
- ~~(BC)~~ Signed resolution from the authorized representatives or governing authority of the applicant designating an authorized representative to submit the application and execute an agreement with the State for Program funding indicating agreement with the contents of the application and acknowledgement that they would enter into a funding agreement with the Commission if the application is successful;
- ~~(CD)~~ Contact information, including the name of organization, the point of contact and position title at the organization, email address, entity address and phone number;
- ~~(DE)~~ Explanation of eligibility, including ~~the~~ which specific subsection of Water Code section 79712 or 79759 provision of section 6001(b) that qualifies the applicant to apply and the subsection of Water Code section 79751 which qualifies the project type;
- ~~(EE)~~ Amount of Program funding requested, total capital costs, estimated total project cost, benefit and cost analysis, and cost allocation, and commitments from duly authorized representatives of non-public benefit cost share partners providing at least 75 percent of the non-public benefit cost share;
- ~~(FG)~~ Estimated project schedule that presents the anticipated timeline until the initial year of project operation;
- ~~(GH)~~ Detailed description of the anticipated project operations; A preliminary operations plan or documentation describing, at a minimum, the following items:
 - 1. Project operations and public benefits under a range of hydrologic conditions, including wettest and driest years and multiple dry years;

2. The actions that will be taken to meet the desired public benefit objectives;
 3. How operations will be monitored to ensure public benefit outcomes; and
 4. Preliminary adaptive management strategies, including:
 - a. Potential uncertainties that may impact project operations in the future;
 - b. Potential measurable objectives, performance measures, thresholds, and triggers to monitor project performance and achievement of desired outcomes; and
 - c. How operational decisions will be made if conditions fall outside the range of anticipated conditions or if public benefits are not provided as anticipated in the application.
- (I) Explanation that the project does not adversely affect any river afforded protection in the California Wild and Scenic Rivers Act or the Federal Wild and Scenic River Act;
- (J) Where an urban water supplier or agricultural water supplier is the applicant, verification from the Department that the urban or agricultural water supplier is in compliance or is working with the Department toward compliance with the requirements of Water Code section 10608.56;
- (K) If applicable, identify affected basins, as defined by Water Code section 10722 et seq., and how the project will be integrated with future GSP(s). Explain how the project will reduce, eliminate, or have an effect on undesirable results within the affected groundwater basin(s). Describe how the applicant will work with GSA(s) or adjudicated participants of the basin.
- (HL) Documentation, analytical methods and results that ~~and analyses that~~ support, substantiate, and quantify ~~all the~~ claimed physical benefits, ~~as~~ further defined in section 6004, ~~and~~ including measurable improvements to the Delta or to the tributaries to the Delta. If a project is not within the watershed of the Delta, specific contracts shall be identified that would be changed or entered into to demonstrate some assurance of benefits to the Delta ecosystem and provide supporting documentation of the parties' willingness to enter into such amendments or agreements including an explanation of how these changes will assure measurable ecosystem improvements to the Delta, including rationale for methodologies and datasets used;

- (M) Explanation of how the project improves the operations of the state water system;
- (~~N~~) Summary of local, regional, or state water supply reliability or operational improvements provided by the project, including how the project may support the long term provision of safe and affordable water supplies to one or more systems in the State Water Resources Control Board's Small Water Systems Program;
- (O) Physical and Economic Benefits Summary tables incorporated by reference herein (August 2016) and documentation that supports the quantification and monetization requirements listed in subsection 6004 (a)(4) of these regulations;
- (~~P~~) Documentation that demonstrates the project's engineering, environmental, economic, and financial feasibility as specified in the Water Storage Investment Program Technical Reference Document (Technical Reference) (August 2016), incorporated herein by reference, including completed draft feasibility studies (if available) that have been reviewed, approved, and signed by an engineer licensed by the California Board for Professional Engineers, Land Surveyors, and Geologists;
- (~~K~~) A description of managerial, technical, and financial capacity of the applicant;
- (~~L~~) Summary of how the project integrates with existing projects or could integrate with other projects to increase benefits;
- (Q) Summary of how the applicant is coordinating with the owners and operators of facilities of water systems not owned or operated by the applicant or project partners that may be affected by the project; .
- (~~R~~) A description of how the proposed project's public benefits address the Program ecosystem and water quality priorities as provided in section 6007 (c), as well as required Ecosystem Priorities Application Worksheets (August 2016), incorporated herein by reference, and Water Quality Priority Application Tables (August 2016), incorporated herein by reference;
- (~~N~~) Preliminary monitoring, assurances, and reporting plan, as described in section 6007;
- (~~S~~) Applicant's supporting documentation and explanation of how the project advances the long-term objectives of restoring ecological health and improves water management for beneficial uses of the Delta;
- (~~T~~) All publicly-available environmental documentation for the project;
- (U) Summary of how the project may impact environmental or cultural resources and how the project will mitigate or minimize impacts to these resources;

- (V) If applicable, evidence of Tribal Cultural Resource consultation under CEQA;
- (QW) A discussion of how the applicant will ensure that the proposed project will comply with and be consistent with all applicable local, state and federal laws and regulations, including existing environmental mitigation or compliance obligation requirements;
- (RX) A listing of ~~all local, state, and federal permits, certifications, and other approvals~~ known to be necessary for construction and operation, along with a description of the status of and time to obtain each permit, ~~certification, and other approval; and~~
- (Y) If applicable, request for early funding for completion of environmental documentation and/or permitting, the amount requested, associated schedule, budget, and scope of work for requested activities per section 6010;
- (SZ) Statement, under penalty of perjury pursuant to the laws of the State of California, attesting that the information provided in the full application is true and correct to the best of the applicant's knowledge;
- (AA) A summary of ~~public~~ benefits that cannot be monetized in the ~~quantification of public benefits and does not address an ecosystem or water quality priority;~~
- (BB) A description and assumptions of the with-project conditions, as defined in subsection 6004(a)(2);
- (CC) If the applicant does not use the model products and assumptions per subsection 6004 (a)(1), a description of the assumptions the applicant used to determine the without-project future conditions; and
- (DD) The applicant's uncertainty analysis required by subsection 6004(a)(8).

Section 6004. Requirements for the Quantification of Benefits

- (a) The applicant shall quantify the net physical and economic public and non-public benefits that would be provided by the proposed project. The applicant shall indicate whether a benefit is public or non-public to provide an accurate cost allocation to determine allowable Program funding. The net benefits shall be calculated using the physical, chemical, or biological change in each benefit resource condition that is created by or caused by the proposed project, less any negative impacts created or caused by the proposed project as compared to the without-project conditions at the same reference point (i.e. 2030 future conditions, 2070 future conditions). To comply with this section, the applicant shall select the most appropriate method described in the Technical Reference to quantify the physical and economic magnitude of the net public and non-public benefits of the proposed project. An applicant may also select a method not included in the Technical Reference if the method is conceptually sound and adequately described and documented in its Program application. The quantification of benefits shall include the following:
 - (1) Without-Project Future Conditions. The applicant ~~shall~~ is encouraged to use the data and model products defined in the Technical Reference for the two without-project

future conditions (2030 future conditions and 2070 future conditions) provided by the Program. If the model products provided by the Program do not adequately describe the without-project future conditions relevant to the project, applicants may also use other tools or models to complete the description of the without-project future conditions.

(A) The without-project future conditions shall be defined for surface water and groundwater operations and physical, chemical, biological, economic, and other resource conditions; and include information relevant to quantifying the potential public and non-public benefits and costs of the proposed project for the planning horizon.

(B) The without-project future conditions shall include the infrastructure, population, land use, water use, water operations, laws, regulations and other characteristics relevant to the analysis of the project. The without-project future conditions shall be developed using best available information on existing conditions and include projects, programs, and water management actions that would be reasonably expected to occur in the foreseeable future. To be included in the without-project future conditions, projects, programs, and water management actions must be under construction or approved and permitted. Potential sources of uncertainty in future conditions are addressed in section 6004(a)(8).

(C) The applicant's analysis of without-project future conditions shall include any watershed(s) or region(s) that affect or are affected by the proposed project. If the project affects State Water Project or Central Valley Project operations or both, the analysis must include the watersheds where the affected State Water Project or Central Valley Project facilities and water uses, as applicable, are located.

(D) ~~The without project future conditions shall represent the change in climate and sea level conditions for California at the years 2030 and 2070. The level of change in climate and sea level conditions for 2030 and 2070 is defined in Section 2.12 of the Technical Reference.~~

(2) With-Project Future Conditions. The applicant shall define and assess the with-project future conditions with the proposed project. The with-project future conditions shall be based on the without-project future conditions and include all additions or modifications specific to the proposed project. Additions or modifications include proposed changes in infrastructure, land use, water use, water operations, and regulations that describe the with-project condition.

(3) Calculation of Physical Changes and Resulting Benefits. The applicant shall quantify and describe the physical changes, including public and non-public physical benefits. The physical changes are the difference between the with-project future conditions and without-project future conditions at the same reference time period. ~~The determination of potential physical benefits (i.e., positive or beneficial physical changes) shall account for any negative physical changes or impacts that are not fully mitigated.~~

- (A) To calculate the physical changes, the applicant shall:
1. Use a geographic scope, spatial resolution, and time-step that are sufficient to accurately quantify the physical benefits claimed.
 2. Document how calculations of expected physical changes are derived and show the relationship between the proposed project, its operations, and the expected physical changes, including public and non-public physical benefits created or caused by the proposed project. The operations of the proposed project shall be described in detail. Any changes in the project's water operations and related benefits during the planning horizon shall be disclosed.

(B) The applicant shall disclose and quantify, where possible, any significant impacts or negative effects the proposed project would impose on the ecosystem, water quality, uses and storage of water, or resources and water supply relative to the without project future condition during the planning horizon, to the extent that those impacts are less than fully mitigated. If the analysis used is different from that shown in the applicant's CEQA or other environmental documents, the applicant shall describe how and why they are different and the implications of those differences, consistent with the applicant's environmental documentation, to the extent that those impacts would be less than fully mitigated.

(4) Monetization of the Physical Benefits. The applicant shall estimate the monetary value of physical benefits in accordance with subsections 6004(a)(4)(A) – (K). The appropriate level of analysis for monetizing each public benefit type may depends on the magnitude of that public benefit compared to other public benefits and the size of the proposed project. If physical benefits cannot be monetized, the applicant shall provide justification why and include a qualitative description of the importance of the benefits; primarily, who is affected, how, and how often, and provide other evidence to show how the physical change is beneficial and important to Californians.

(A) The analysis shall be conducted in constant 2015 dollars as described in the Technical Reference section 5.2.5. All future economic benefits shall be displayed in constant dollars for each year of the planning horizon. Economic benefits estimated prior to 2015 shall be escalated to 2015 values using the yearly average Consumer Price Index for California (index CPI-U for California). Applicants may use other index values to update older benefit estimates if justification is provided.

(B) The planning horizon is the expected life of the proposed project in years plus the construction period, or 100 years, whichever is less.

(C) A 3.5 percent real (inflation-free) discount rate shall be used for all calculations that convert a constant dollar monetary value of benefit or cost into an equivalent value at another point in time.

- (D) Where future population levels are relevant to physical and/or economic benefits calculations, the applicant shall use the most current population forecasts published by the California Department of Finance.
- (E) The applicant shall determine the cost-effectiveness of the proposed project by calculating, displaying, and justifying the cost of the least-cost alternative means for providing the same amount or more of the total physical benefits as provided by the proposed project, if there is at least one feasible alternative means of providing the same amount or more of the total physical benefits.
- (F) The applicant shall calculate, display, and justify, for each benefit category, the benefits monetized using one or more of the following approaches, if they are applicable to the proposed project:
1. Avoided cost;
 2. Cost of feasible alternative means that provide at least the same physical benefit; and
 3. Willingness to pay for the benefit, if it can be justified and documented.
- (G) If there are multiple reasonable economic methods for any benefits, the applicant shall justify the method selected.
- (H) Where applicable, monetized benefits shall consider how the dollar value of the physical benefits vary by the hydrologic conditions.
- (I) The applicant shall tabulate, for each future condition, the dollar amount of physical benefits monetized using each of the applicable approaches in section 6004(a)(4)(F). When the dollar amounts vary by hydrologic condition, the tabulated value at each future condition shall be the expected dollar value considering the frequency of hydrologic conditions in the datasets used to calculate physical changes.
- (J) To calculate the present value of the benefits for a project, the economic analysis requires dollar benefits calculated for every year in the planning horizon. To calculate the net benefits from the start of project operations until 2030, applicants may interpolate between current conditions benefits and 2030 future conditions benefits. If current conditions benefits estimates are not available, applicants shall extrapolate from the quantification under 2030 future and 2070 future conditions to obtain quantified benefits and impacts for the years of operation before 2030. To calculate the net benefits for years between 2030 and 2070, applicants shall interpolate using a linear trend between 2030 future and 2070 future conditions benefits. To calculate the net benefits from 2070 until the end of the planning horizon (as applicable to project with an expected project life extending beyond 2070), applicants shall assume 2070 benefits.
- (K) The applicant shall monetize any significant impacts ~~or negative effects~~ the proposed project would have on the ecosystem, water quality, ~~uses and storage of water, or resources and water supply, consistent with the applicant's CEQA or other environmental documentation. relative to the without-project conditions,~~

~~in the planning horizon, to the extent that those impacts are less than fully mitigated. For each benefit category, the applicant shall display the net benefit (monetized benefit minus monetized unmitigated impact).~~

- (5) Estimate of the Total Project Costs. The applicant shall include the total project costs, including ~~construction cost, interest during construction, land acquisition, capital costs, long term monitoring, initial and future environmental mitigation or compliance obligations,~~ operations and maintenance, ~~long term financing costs,~~ repair, and replacement costs during the planning horizon using methods described in Technical Reference section 8.
- (A) All cost estimates shall be in 2015 dollars.
- (B) All cost estimates shall be less than or equal to five (5) years old at the time of the submission of the application.
- (C) Cost estimates that are less than or equal to five (5) years old at the time of the submission of the application shall be escalated to 2015 dollars using U.S. Bureau of Reclamation Construction Cost Trends.
- (D) ~~Interest during construction is the interest that accrues on capital costs expended during project construction. It shall be calculated as the interest an applicant pays between the time the construction cost is incurred and the start of project operations.~~
- (E) Project cost estimates shall be reviewed, approved and signed by an engineer licensed by the California Board for Professional Engineers, Land Surveyors, and Geologists.
- (6) Comparison of Net Benefits to Total Project Costs. The applicant shall display and compare the present value of economic net benefits and total project costs.
- (A) For each benefit category, the applicant shall provide the following items:
1. The present value of the expected value of economic net benefits over the planning horizon, expressed in 2015 dollars, discounted to the first year of project operations; and
 2. The estimated Program cost share for each public benefit category, in present value dollars at the first year of project operation, and an explanation of how the cost share was calculated, consistent with Technical Reference section 8.
- (B) For the economic public benefits, the applicant shall calculate the expected public benefit ratio pursuant to the Program as the ratio of the present value of the economic net public benefits to the total requested Program cost share.
- (7) Cost Allocation to Beneficiaries. The applicant shall provide a proposed allocation of total project costs to all project beneficiaries, including the Program, and an explanation of how the allocation was calculated, consistent with Technical Reference section 8.
- (A) Public benefit cost shares for the five public benefit categories may be allocated to the State of California, the United States, local governments, or private interests. The total requested Program cost share is the portion of the public benefit cost shares allocated to the Program, and:

1. Shall consider the share of public benefits received by Californians;
2. Shall not exceed 50 percent of the total capital costs of any funded project, unless the project is a conjunctive use or reservoir reoperation project;
3. Shall be at least 50 percent ecosystem improvements;
4. Shall not be associated with ~~existing~~ environmental mitigation or compliance obligations other than those associated with providing the public benefits; and
5. ~~Shall consider the cost share of new environmental mitigation or compliance obligation costs associated with providing the public benefits, which shall not exceed the percentage of the public cost allocation for the related public benefit category.~~

(8) Sources of Uncertainty Analysis. The applicant shall disclose how the expected physical public and non-public benefits that would be provided by the proposed project are expected to change due to the following sources of uncertainty:

- (A) Climate change. The applicant shall describe how potential changes in climate represented by conditions that are warmer/drier and cooler/wetter than in the ~~without project 2070~~ future conditions could affect the public and non-public benefits claimed. The level of change in climate to be explored is provided in the Climate Change and Sea Level Rise section of the Technical Reference. Applicants shall describe how operations of the proposed project could be adapted to sustain benefits under the described conditions. The applicant shall provide documentation or calculations and assumptions used to support the conclusions.
- (B) Future projects and water management actions. Applicants shall disclose how potential future projects and water management actions, as may be included in the applicant's CEQA cumulative impact analysis, could affect the public and non-public benefits claimed.
- (C) Other sources of uncertainty identified by the applicant. Applicants shall disclose any other potential sources of uncertainty and describe alternative operational strategies or adaptations the proposed project could employ to provide alternative benefits or to maintain the level of benefits provided by the project if future conditions differ from the with-project future conditions described in subsection 6004(a)(2).

(9) Documentation. The applicant shall provide the data, assumptions, analytical methods and modeling results, calculations, and sources of information used to quantify the public benefits of the project. The applicant shall use sources of information that are publicly available, whenever possible, and other information submitted with the application.

NOTE: Authority cited: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757. Reference: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.

Article 3. Commission Methodology and Evaluation Criteria.

Section 6005. The Commission shall evaluate information provided in the application to assess, score and rank potential projects pursuant to the criteria established in this article. All projects must satisfy the following conditions:

- (a) Each project is required to meet the basic eligibility requirements outlined in subsection 6006 (c)(1) of this regulation.
- (b) Each project is required to meet the additional eligibility requirements outlined in subsection 6006 (c)(2) of this regulation.
- (c) Each application is required to meet the completeness requirements outlined in subsection 6006 (c)(3) of this regulation.

NOTE: Authority cited: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757. Reference: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.

Section 6006. Eligibility and Completeness.

~~(3) Completeness Review~~

- ~~(Aa) Staff shall review each full application for completeness and basic eligibility within 45 days of the end of the solicitation period or submission, whichever is later.~~
- ~~(Bb) If any completeness or basic eligibility deficiencies are identified, Staff shall notify the applicant in writing at the email address provided in the application and provide a list of the identified deficiencies.~~
- ~~(Cc) The applicant shall be provided a 14-day period to submit the required information to Staff. The Commission shall determine an application to be incomplete or ineligible if an applicant does not furnish the required information within the 14-day period. The Commission shall determine if incomplete or ineligible applications progress to the technical review.~~

~~(41) Basic Eligibility Review~~

~~(A) Staff shall review the following information to determine the basic eligibility of the application: Each complete application's submitted documentation shall be reviewed for basic eligibility in accordance with subsections 1-7 below:~~

- ~~1. Demonstration that the applicant is eligible, as listed in section 6001(b)(1); The project must meet the criteria in the following Water Code sections:
 - ~~a. Water Code sections 79712 or 79759; and~~
 - ~~b. Water Code section 79751.~~~~
- ~~2. Demonstration the project is an eligible project type listed in Section 6001(b)(2); The Program cost share is less than or equal to 50 percent of the proposed project's total capital costs, unless the project is a conjunctive use or reservoir reoperation project; and~~
- ~~3. Commitments from duly authorized representatives of non-public benefit cost-share partners providing at least 75 percent of the non-~~

~~public benefit cost share. The monetized ecosystem improvement benefits comprise at least 50 percent of the monetized public benefits for which funding is requested from the Program.~~

~~4. Submittal of a publicly available version of the proposed project's environmental documentation that demonstrates the project will comply with all local, state and federal environmental laws, regulations and other requirements.~~

~~5. Submittal of completed feasibility studies~~

~~6. Where an urban water supplier or agricultural water supplier is the applicant, verification from the Department that the urban or agricultural water supplier is in compliance or is working with the Department toward compliance with the requirements of Water Code section 10608.56.~~

~~7. For a proposed project that directly affects groundwater levels or quality, the applicant must demonstrate the following:~~

~~a. For projects in an adjudicated groundwater basin, describe how the project conforms with the applicable requirements of a water rights adjudication in the subject groundwater basin(s), per Water Code section 10753.7(b)(1)(C).~~

~~b. For projects in a non-adjudicated basin do either (i) or (ii) below:~~

~~(i) If the project is located in medium and high priority groundwater basins as determined by the Department, the applicant must do both of the following:~~

~~1. Explain how the applicant has prepared and implemented, participates in, or consents to be subject to an existing groundwater management plan or other plan that meets the requirements of Water Code section 10753.7; and~~

~~2. Describe the current status of basin efforts to comply with regulations adopted by the Department pursuant to Water Code section 10733.2, effective as of the application submittal date, including status of formation of a groundwater sustainability agency (GSA) and progress toward a groundwater sustainability plan (GSP).~~

~~(ii) If the project is located in low or very low priority groundwater water basins as determined by the Department, the applicant must do one of the following:~~

1. Describe the current status of the basin efforts to comply with regulations adopted by the Department pursuant to Water Code section 10733.2, effective as of the application submittal date, including status of formation of a GSA and progress toward a GSP, per Water Code section 10720.7(b); how the groundwater basin is managed prior to the completion of the GSP; and how the project is consistent with the management of the basin.
2. Explain how the applicant has prepared and implemented, participates in, or consents to be subject to an existing groundwater management plan or other plan that meets the requirements of Water Code section 10753.7.
3. If compliance with subsection (6)(b)(iii)(2) is not possible, and the applicant is a local agency as defined in Water Code section 10752, provide a statement that commits the applicant to developing a groundwater management plan that meets the requirements of Water Code section 10753.7 within one (1) year of the application submission date.

(B) Each complete application's submitted documentation shall be reviewed for Program eligibility and confirmed during the technical review in accordance with subsections 1-2 below:

1. Does not adversely affect any river afforded protection in the California Wild and Scenic Rivers Act or the Federal Wild and Scenic Rivers Act pursuant to California Public Resources Code section 5093.50 et seq. or 16 U.S.C. § 1271 et seq. as required by Water Code section 79711(e) and 79751(a); and
2. Provides measurable improvements to the Delta ecosystem or to the tributaries to the Delta.

(2) Additional Eligibility. Once basic eligibility is established under subsection 6006(c)(1), staff shall review information contained in the application to determine the project:

- (A) Does not adversely affect any river afforded protection in the California Wild and Scenic Rivers Act or the Federal Wild and Scenic Rivers Act pursuant to 16 U.S.C. §1271 et seq or California Public Resources Code section 5093.50 et seq., respectively, as required by Water code sections 79711(e) and 79751(a);

- (B) Provides measurable improvements to the Delta ecosystem or to the tributaries to the Delta. If a project is not within the watershed of the Delta staff shall review and evaluate the information regarding assurances to the ecosystem improvement benefits provided in the application;
 - (C) Improves the operations of the state water system;
 - (D) Is cost effective;
 - (E) Provides a net improvement in ecosystem and water quality conditions; and
 - (F) Advances the long-term objectives of restoring ecological health and improves water management for beneficial uses of the Delta.
- (3) Completeness.
- (A) The application shall be considered complete if it includes all of the following:
 1. Project description and location;
 2. Contact information;
 3. Signed resolution or intent to pass resolution from the authority of the submitting entity;
 4. Program funding request, total capital costs, total project cost, benefit and cost analysis, and cost allocation;
 5. Estimated project schedule;
 6. Environmental documentation;
 7. Urban water supplier or agricultural water supplier requirements, if applicable;
 8. Groundwater requirements, if applicable;
 9. Preliminary operations plan;
 10. Description of claimed ecosystem and water quality priorities and accompanying data and information;
 11. Economic tables;
 12. Analytical methods and results used to quantify public benefits;
 13. Permits list, status, and schedule; and
 14. Feasibility study components.

Section 6007(5) ~~Technical Staff~~ Review.

(a) There is no one metric that could effectively be used to evaluate projects. Therefore, the following criteria shall be used to determine the expected return for public investment. The following project components shall be evaluated and scored by the technical reviewers and recommended to the Commission. The sum of the components' score shall be considered the expected return for public investment:

- (1) Public benefits ratio;
- (2) The total relative environmental value;
- ~~(3) The magnitude of water system improvements;~~
- (4) The implementation risk; and

~~(54)~~ The project's **benefit** resiliency; and

~~(65)~~ The non-monetized benefit.

(b) Public benefit ratio.

(1) Staff shall evaluate information provided in the application to assess a project's public benefit ratio as follows:

(A) The monetized public benefits must be public benefits defined in Water Code section 79753. Staff shall review and evaluate the supporting information for the following components and consider the reasonableness of the assumptions, completeness and quality of analysis, and appropriate use of data and analytical methods to calculate the public benefit ratio pursuant to section 6004:

1. Preliminary operations plan;
2. Analytical methods and results;
3. Magnitude of physical, biological, or chemical benefit that could be monetized; and
4. Cost allocation.

(B) Staff shall rely on information supplied by the applicant and may perform independent calculations. If a public benefit ratio component is not supported by the information submitted in the application, technical reviewers may adjust it. ~~If the methods used or values supplied are not supported and technical reviewers cannot adjust the public benefit ratio, the public benefit value shall be removed from the public benefit ratio calculation.~~ Adjustments made to the public benefit ratio ~~may~~ shall result in adjustments to the project's Program cost share. ~~Following this review, staff shall publish on the Commission's website the public benefit ratio and adjusted Program cost share approved or modified by staff for each application with comments indicating the reasons for any modifications.~~

~~(C) Staff's revised value for the public benefit ratio may be greater than or less than the value stated in the application, based on staff's evaluations. If staff revised the public benefit ratio, the applicant may appeal, pursuant to section 6009 of these regulations.~~

(c) Total relative- environmental value.

(1) Based on information supplied in the application, a total relative environmental value shall be calculated separately by CDFW and State Water Board for the ecosystem improvements and the water quality improvements, respectively. Relative environmental value criteria outlined in Tables 2 and 4 for ecosystem and water quality improvements, respectively, shall be used to determine a project's relative environmental value for each of the CDFW and State Water Board priorities (shown in Tables 1 and 3, respectively) claimed by the applicant.

(A) Ecosystem Improvements Relative Environmental Value.

1. CDFW shall determine the relative environmental value for ecosystem improvements provided by a project. CDFW shall consider information supporting ecosystem benefits including the analytical methods, modeling results, and physical, chemical, or biological information.

Table 1. Ecosystem Priorities

In accordance with Water Code section 79754, CDFW has identified ecosystem priorities that could be realized by water storage projects. These priorities, which are not listed in rank order and are considered equal, are presented below:

Flow and Water Quality

Provide cold water at times and locations to increase the survival of salmonid eggs and fry.
Provide flows to improve habitat conditions for in-river rearing and downstream migration of juvenile salmonids.
Maintain flows and appropriate ramping rates at times and locations that will minimize dewatering of salmonid redds and prevent stranding of juvenile salmonids in side channel habitat.
Improve ecosystem water quality.
Provide flows that increase dissolved oxygen and lower water temperatures to support anadromous fish passage.
Increase attraction flows during upstream migration to reduce straying of anadromous species into non-natal tributaries.
Increase Delta outflow to provide low salinity habitat for Delta smelt, longfin smelt, and other estuarine fishes in the Delta, Suisun Bay, and Suisun Marsh.
Maintain or restore groundwater and surface water interconnection to support instream benefits and groundwater dependent ecosystems.

Physical Processes and Habitat

Enhance flow regimes or groundwater conditions to improve the quantity and quality of riparian and floodplain habitats for aquatic and terrestrial species.
Enhance the frequency, magnitude, and duration of floodplain inundation to enhance primary and secondary productivity and the growth and survival of fish.
Enhance the temporal and spatial distribution and diversity of habitats to support all life stages of fish and wildlife species.
Enhance access to fish spawning, rearing, and holding habitat by eliminating barriers to migration.
Remediate unscreened or poorly screened diversions to reduce entrainment of fish.
Provide water to enhance seasonal wetlands, permanent wetlands, and riparian habitat for aquatic and terrestrial species on State and Federal wildlife refuges and on other public and private lands.
Develop and implement invasive species management plans utilizing techniques that are supported by best available science to enhance habitat and increase the survival of native species.
Enhance habitat for native species that have commercial, recreational, scientific, or educational uses.

2. CDFW shall apply the following relative environmental value criteria to score each of the priorities listed in Table 1 that an applicant claims would be provided by the project. The score shall be assigned by evaluating the degree of change between with and without project conditions, and the degree to which ecosystem benefits associated with each claimed priority would be provided by a project. CDFW shall give each criterion listed in Table 2 equal weighting:

Table 2. Ecosystem Relative Environmental Value Criteria

- | |
|--|
| <ol style="list-style-type: none"> 1. <u>Intentionally omitted.</u> 2. <u>Magnitude of ecosystem improvements.</u> |
|--|

Commented [A1]: Suggest a total of 10 categories roughly consistent with water quality categories to make scoring simple. Also moving benefit resilience into separate category of scoring.

- 3. Spatial ~~and temporal~~ scale of ecosystem improvements.
- ~~3-4. Temporal scale of ecosystem improvements.~~
- 4-5. Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers to achieve the ecosystem benefits.
- 5-6. Immediacy of ecosystem improvement actions and realization of benefits.
- 6-7. Duration of ecosystem improvements.
- 7-8. Consistency with species recovery plans and strategies, initiatives, and conservation plans.
- 8-9. Location of ecosystem improvements and connectivity to areas already being protected or managed for conservation values.
- 9-10. Efficient use of water to achieve multiple ecosystem benefits.
- Resilience of ecosystem improvements to the effects of changing environmental conditions, including hydrologic variability and climate change.

3. The number of ecosystem priorities claimed by the project shall also be considered in project scoring.

(B) Water Quality Improvements Relative Environmental Value

1. The State Water Board shall determine the relative environmental value for water quality improvements provided by a project. The State Water Board shall consider information supporting water quality benefits including the analytical methods, modeling results, and physical or chemical information.

Table 3. Water Quality Priorities

<p><u>In accordance with Water Code section 79754, the State Water Board has identified water quality priorities that could be realized by water storage projects. These priorities, which are not listed in rank order and are considered equal, are presented below:</u></p>
<p><u>Improve water temperature conditions in surface water bodies that are not meeting water quality standards for temperature.</u></p>
<p><u>Improve dissolved oxygen conditions in surface water bodies that are not meeting water quality standards for dissolved oxygen.</u></p>
<p><u>Improve nutrient conditions in surface water bodies that are not meeting water quality standards for nutrients.</u></p>
<p><u>Improve mercury conditions in surface water bodies that are not meeting water quality standards for mercury.</u></p>
<p><u>Improve salinity conditions in surface water bodies that are not meeting water quality standards for sodium, total dissolved solids, chloride, or specific conductance/electrical conductivity.</u></p>
<p><u>Protect, clean up, or restore groundwater resources in high- and medium-priority basins designated by the Department.</u></p>
<p><u>Achieve Delta tributary stream flows that resemble natural hydrograph patterns or other flow regimes that have been demonstrated to improve conditions for aquatic life.</u></p>
<p><u>Reduce current or future water demand on the Delta watershed by developing local water supplies and improving regional water self-reliance.</u></p>
<p><u>Provide water for basic human needs, such as drinking, cooking, and bathing, in disadvantaged communities, where those needs are not being met.</u></p>

2. The State Water Board shall apply the following criteria to score each of the priorities listed in Table 3 that an applicant designates as being met. The score will be assigned by evaluating the degree of change from with and without project conditions and the degree of meeting optimal values for each priority. State Water Board shall give each criteria listed in Table 4 equal weighting:

Table 4. Water Quality Relative Environmental Value Criteria

1.	Intentionally omitted.
2.	Magnitude of water quality improvements.
3.	Spatial scale of water quality improvements.
4.	Temporal scale of water quality improvements.
5.	Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers for managing water quality benefits.
6.	Immediacy of water quality improvement actions.
7.	Immediacy of the realization of water quality benefits.
8.	Duration of water quality improvements.
9.	Consistency with water quality control plans, water quality control policies, and the Sustainable Groundwater Management Act (2014).
10.	Connectivity of water quality improvements to areas that support beneficial uses of water or are being managed for water quality.
11.	Resilience of water quality improvements to the effects of climate change and extended droughts.
12 10.	Extent to which undesirable groundwater results that are caused by extractions are corrected.

Commented [A2]: Suggest 10 categories so scoring will be easier and consistent across ecosystem and water quality. Moving evaluation of resilience to separate category so resilience of all benefits will be considered.

~~3.~~ The number of water quality priorities claimed by the project shall also be considered in project scoring:

~~(d)~~ Magnitude of Water System Improvements:

~~(1)~~ The public benefits must be associated with water storage projects that improve the operations of the State water system, therefore, staff shall evaluate a project's improvements to the operation of the State water system as follows: Water system improvements shall be evaluated using water supply reliability and water system flexibility metrics provided in the application for both the 2030 Future and 2070 future conditions as specified in section 6004 for all State water systems affected by the project and shown in Table 5:

Table 5 Water System Improvements

Water Supply Reliability
Average Water Deliveries (thousand acre-feet (TAF)/year) (as defined in Technical Reference)
Dry and Critical Years (as defined in Technical Reference) Average Water Deliveries (TAF/year)
Water System Flexibility
— Average End of May Storage (TAF)
— Average End of September Storage (TAF)

~~(2) Staff shall evaluate the water supply reliability and water system flexibility metric values and verify those values are supported by analytical methods and modeling results and the operations plan. Staff shall note where claimed values are not supported by information or documentation provided in the application. These values shall be scored as described in section 6008 of this regulation.~~

(e) Implementation risk.

(1) It is important to understand the likelihood of whether each project will be completed to ensure the public benefits are realized and there are no stranded investments. Therefore, each project's implementation risk shall be considered. Staff shall consider the following items when evaluating a project's implementation risk and shall score them as described in section 6008 of these regulations:

- (A) Technical feasibility, as described in Technical Reference, section 3.5;
- (B) Financial feasibility, as described in Technical Reference, section 3.5;
- (C) Economic feasibility, as described in Technical Reference, section 3.5;
- (D) Environmental feasibility, as described in Technical Reference, section 3.5, and status and schedule of permits.

(f) Project's ~~Benefit~~ resiliency ~~and~~

~~(1) Staff shall consider the following items in evaluating the project benefit resiliency and non-monetized public benefits and score them as described in section 6008 of these regulations:~~

- ~~(A)~~ (A) Resilience of public benefits given hydrologic variability, extended droughts, and climate change.
- (B) Resilience of water supply improvements and other non-public benefits given hydrologic variability, extended droughts, and climate change

~~(C) The sources of uncertainty analysis provided in the application pursuant to section 6004 of these regulations shall be evaluated. Staff shall consider the reasonableness of the assumptions or calculations used to support the conclusions and the project's ability to adapt its operations to sustain benefits under future uncertainties. Staff shall note if conclusions are supported or conclusions lack supporting information or documentation.~~

(g) ~~Non-monetized public benefits:~~

~~(1) Staff shall consider the following items in evaluating the project benefit resiliency and non-monetized public benefits and score them as described in section 6008 of these regulations:~~

- ~~(A) The sources of uncertainty analysis provided in the application pursuant to section 6004 of these regulations shall be evaluated. Staff shall consider the reasonableness of the assumptions or calculations used to support the conclusions and the project's ability to adapt its operations to sustain benefits~~

~~under future uncertainties. Staff shall note if conclusions are supported or conclusions lack supporting information or documentation.~~

(BA) ~~B~~Public benefits claimed that were not monetized will be evaluated using the operations plan, modeling and analytical methods and results, and magnitude of benefits claimed. Staff shall note if the claimed benefit is supported or if the claim lacks supporting information or documentation.

NOTE: Authority cited: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.
Reference: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.

Section 6008. Scoring.

(a) Following the technical review in section 6007 and Commission Appeal Process in section 6009, projects shall be scored.

(1) Each application's expected return for public investment shall be scored based on the following criteria:

(A) Public benefit ratio;

(B) ~~Total~~ Relative environmental

~~(C) Water system improvement;~~

~~(DCB) Implementation risk; and~~

~~(EDC) Project benefit resiliency; and~~

~~(ED) Non-monetized benefit.~~

(b) Component maximum point values are described in Table 6.

Table 6. Maximum Component Scores

<u>Component</u>	<u>Maximum Component Score</u>
<u>Public Benefit Ratio</u>	<u>40</u>
<u>Relative Environmental Value</u>	<u>20</u>
<u>Implementation Risk</u>	12 <u>10</u>
<u>Benefit Resiliency and Non-monetized Benefit</u>	10 <u>25</u>
<u>Non-monetized Benefit</u>	3 <u>3</u>
<u>Expected Return for Public Investment Score</u>	<u>100</u>

~~(c) At the end of the evaluation and appeal process, components listed in subsection 6008(1)(A-D) are expressed in numbers dissimilar to Table 6. For example, public benefit ratios may be values such as 1, 1.2, 1.5, 2, 3, but not near the Table 6 value of 40. Staff shall apply a normalization calculation to transform dissimilar values into their corresponding scoring system values while preserving a project's relative score placement to other projects. The following process will be used to normalize initial component values for public benefit ratio, relative environmental value, water system improvement and implementation risk to staff component scores:~~

~~(1) Evaluation metrics shall be normalized to the scoring scale by the following calculation:~~

$$\text{score} = \text{scoremax} + \frac{\text{evalnum}}{\text{evalnummax}}$$

~~Where:~~

~~"scoremax" is the maximum possible score for each component listed in Table 6~~

~~"evalnum" is each component's value calculated for each project before any normalization; and~~

~~"evalnummax" is the highest value calculated for each component from any project considering all applications, and~~

~~"score" is the staff normalized component score.~~

~~(2) The project's staff normalized component score shall be rounded to the nearest whole number.~~

~~(d) Public benefit ratio scores shall be determined using each application's final public benefit ratio value pursuant to section 6009. 15 20 points shall be awarded for a public benefit ratio exceeding or greater than 1. Up to 20 additional points will be awarded proportional to the amount the benefit ratio is greater than 1, but less than 22. If a public benefit ratio is equal to or exceeds 2, it will receive the maximum score possible of 50 points. Up to 20 points shall be awarded based on the relative ecosystem values (Table #). Each relative ecosystem value will be weighted equally and worth up to 2 points. Up to 20 points shall be awarded based on the relative water quality values (Table #). Each relative water quality value will be weighted equally and worth up to 2 points. Staff shall transform each application's public benefit ratio value to a number on a scale of 0-40 by using the normalization process from subsection 6008(c).~~

~~(e) State Water Board and CDFW shall provide a water quality and ecosystem relative environmental value, respectively, for each application pursuant to section 6007(c). Each relative environmental value will be weighted equally and worth up to 2 points. Staff shall take these values and transform them to a scale of 0-20 using the normalization process from subsection 6008(c). Staff shall then combine the water quality and ecosystem relative environmental value scores for an application to produce an applications combined relative environmental value score as follows:~~

~~(1) For projects with both ecosystem and water quality relative environmental values, the score shall consist of 70% ecosystem and 30% water quality.~~

~~(2) In cases where a water quality relative environmental value is not applicable, the score shall be based solely on ecosystem relative environmental value.~~

~~(f) Staff shall develop a scoring recommendation for the commission's consideration for water system improvement as follows:~~

- ~~(1) The score shall be based on improvements in water supply reliability and water system flexibility provided by the proposed project to all State water systems. Staff shall calculate a score from 0-10 for each of the four water system improvement metrics, long term average water deliveries, dry and critical years average water deliveries, average end of May storage, and average end of September storage, for the 2030 and 2070 Future Conditions. Values for each metric will be normalized to a scale of 0-10 using the normalization process in section 6008(c)(1). Staff shall sum the scores of the four metrics to get a total score for the 2030 Future Conditions and a total score for the 2070 Future Conditions. A composite score shall be calculated that is the sum of 70% of the total score for the 2030 Future Conditions and 30% of the total score for the 2070 Future Conditions. The maximum possible composite score is 40. The scores will be normalized to a scale of 0-20 using the normalization process from subsection 6008(c).~~
- ~~(2) This recommended score will be considered by the Commission and can be changed by a majority vote of the Commission pursuant to section 6011.~~

~~(g) Staff shall develop a scoring recommendation for the Commission's consideration for implementation risk as follows:~~

- ~~(1) A score of 1-5-3 points shall be assigned for each feasibility category: technical, financial, economic and environmental. One point shall be assigned if the feasibility category information indicates a high uncertainty of being able to build or operate the project or the feasibility information is not supported, and 5-3 points will be assigned if the feasibility category information indicates a low risk and the information is well supported. The maximum possible composite score is 2012. The composite score shall be normalized to a scale of 0-10 using the normalization process in section 6008(c).~~
- ~~(2) This recommended score will be considered by the Commission and can be changed by a majority vote of the Commission pursuant to section 6011.~~

~~(h) Staff shall develop a scoring recommendation for the Commission consideration for resiliency and non-monetized benefits for up to 25 points as follows:~~

- ~~(1) A score of 1-10-25 shall be assigned for the project's resiliency as demonstrated by the applicant's disclosure of how the expected physical benefits of the project are expected to change due to sources of uncertainty. 10-25 points shall be assigned to projects showing increasing benefits, 10 points shall be assigned for projects demonstrating benefits at the 2070 Future Conditions can be maintained; and 1-5 points shall be assigned for projects showing declining benefits or changes in benefits are unsupported by documentation or calculations and assumptions. Variations within the described point groupings shall be based on Commission consideration of staff comment from the review.~~

~~(2i) A score of 1-10-3 shall be assigned based on the physical public benefits claimed by the project that cannot be monetized and are not considered in the ecosystem or water quality relative environmental evaluations pursuant to section 6007(c). Points will be assigned based on the importance and magnitude of the non-monetized benefits claimed and verified by staff.~~

~~(3) For projects with non monetized benefits, the score shall consist of 70% resiliency and 30% non monetized benefits. In cases where non monetized benefits are not applicable, the score shall be solely based on resiliency.~~

~~(4) This recommended score will be considered by the Commission and can be changed by a majority vote of the Commission, pursuant to section 6011.~~

- (i) Component criteria scores shall be summed to produce an expected return for public investment score.

NOTE: Authority cited: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.
Reference: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.

Section 6009. Public Review

~~The initial draft scoring will be posted by the Commission staff on the website. Following the release of the draft scoring there will be a public comment period of no less than 30 days.~~

~~During the public comment period applicants may appeal staff scoring.~~

~~The Commission will hold a public meeting after the close of the public comment period to discuss changes to scores of projects and appeals process.~~

~~Final scoring and maximum eligibility letters will be determined by the Commission once public comments have been considered and the appeals process has concluded.~~

Commission Appeal:

~~(a) If the applicant's public benefit ratio is modified in the evaluation process pursuant to section 6007(b)(1)(B), the applicant can appeal the modification-initial staff scoring as follows:~~

- ~~(1) Within three weeks of notification of the revised staff public benefit ratios scoring release, the applicant shall submit an appeal letter to staff via the Commission email address appealing the staff revised public benefit ratio project scoring. The appeal letter shall consist of:
 - ~~(A) A statement clearly appealing the staff revised public benefit ratios score;~~
 - ~~(B) The public benefit ratio value score the applicant claims as the correct value;~~
 - ~~(C) A written rebuttal of specific staff comments or reasons for staff modifications scoring;~~
 - ~~(D) new supporting information, specific to the written rebuttal to support the value the applicant claims is correct; and~~
 - ~~(E) Reference to existing application information to support the rebuttal.~~~~
- ~~(2) The appeal shall not exceed 20 written pages in length using a 12 point font.~~
- ~~(3) Staff shall have a minimum of three weeks to respond to the appeal.~~
- ~~(4) Applicant representatives and staff representatives will appear at the next available Commission meeting to present the appeal and staff response to the Commission.~~
- ~~(5) The Commission will accept or deny the appeal value by majority vote.
 - ~~(A) Acceptance of the appeal value will result in the appeal value replacing the staff recommended public benefit ratios scoring used for scoring in section 6008.~~~~

- (B) Denying the appeal value means the staff revised ~~public benefit ratioscore~~ will stand ~~and be used for scoring in section 6008.~~
- (6) If the ~~public benefit ratioscore~~ changes from the original application, corresponding adjustments shall be made to a project's Program cost share.

Article 4. Conditional Eligibility and Funding Process.

Section 6010. Funding for Environmental Documentation and Permits.

- (a) Pursuant to Water Code section 79755(c), funding for completion of environmental documentation and permits necessary for construction of the project shall be determined once applications are ranked pursuant to section 6011 of these regulations.
- (b) The following conditions apply to funding for completing environmental documents and permits:
 - (1) The Commission shall not allocate funds for any project before December 15, 2016.
 - (2) The funds are not available for reimbursement until an agreement between the State and the applicant for these funds is executed.
 - (3) A cost share of 50% non-Program funding is required to accompany Program funding in completion of the proposed scope of work for completing environmental documents and permits.
 - (4) The funds made available for the purposes of this section shall be considered a portion of the maximum eligible funding request for a project, not to exceed 5% of the maximum eligible funding request for a project pursuant to section 6011.
 - (5) Total Program funding for this section shall not exceed \$135 million.
- (c) A project shall be eligible for funding to complete environmental documentation and permits if all of the following conditions are met:
 - (1) The application contains a specific request for such funding;
 - (2) The application contains a scope of work, schedule, and budget that details tasks to be performed using the funding;
 - (3) The scope of work proposed cannot include work performed prior to submittal of the application;
 - (4) The scope of work includes an introductory paragraph that describes the financial need for early funding including:
 - (A) Explanation of why the early funding is critical to the project;
 - (B) Viability of the project in the absence of early funding; and
 - (C) How the project will proceed once early funding is expended;
 - (5) The application's implementation risk decision criteria score is no less than 7, pursuant to section 6008(g);
 - (6) The Commission has assigned a maximum conditional eligibility amount to the project pursuant to section 6011; and
 - (7) The Commission has reviewed the financial need for early funding contained in the scope of work and has decided that the early funding request is warranted.

(d) Activities reasonably related to completion of environmental documentation and permitting may be included in the scope of work for this funding.

(e) Funding for completion of environmental documentation and permits will be disbursed as follows:

(1) Staff shall use the maximum conditional eligibility amounts and Commission determination regarding early funding requests, pursuant to section 6011 and assign early funding amounts consistent with this section beginning with Rank 1 projects as identified in section 6011 until the cumulative total of \$135 million in Program funding is reached, or all eligible projects, as determined by this section, have received early funding, whichever occurs first.

~~(A) The following items shall be reviewed and evaluated from applications that are deemed complete and meet basic eligibility requirements by the review outlined in sections 6002(c)(3) and 6002(c)(4) during the technical review period:~~

- ~~1. Magnitude of the quantified public benefits, as quantified pursuant to section 6004;~~
- ~~2. Resiliency of quantified public benefits to future uncertainty;~~
- ~~3. Cost and cost share;~~
- ~~4. Return on investment;~~
- ~~5. Cost effectiveness;~~
- ~~6. Improvements to the water supply reliability of local, regional, state, or small water system and operation of the state water system;~~
- ~~7. Project's engineering, environmental, economic, and financial feasibility, based on documentation submitted with the completed application;~~
- ~~8. Priorities and relative environmental values for ecosystem and water quality improvements;~~
- ~~9. Monitoring and management of public benefits;~~
- ~~10. How the proposed project integrates with existing projects or could integrate with other projects to increase benefits;~~
- ~~11. Quality of the analyses and documentation; and~~
- ~~12. Technical, managerial, and financial capacity.~~
- ~~13. Confirmation of Program eligibility requirements as described in section 6002(c)(4)(B).~~

~~(B) The technical review period shall not exceed 18 months.~~

~~(C) The technical reviewers shall determine whether the application contents are sufficient to conduct the necessary review, whether additional or clarifying information is necessary, or whether there are errors in the quantification of public benefits or cost allocation.~~

(D) Staff shall work with the Department, State Water Resources Control Board, California Department of Fish and Wildlife, and consultants contracted by these agencies.

(E) The technical reviewers shall evaluate the methods, assumptions, and conclusions used in the quantification of public benefits required by section 6004. For ecosystem improvement benefits and water quality improvement benefits, the technical reviewers from the California Department of Fish and Wildlife and State Water Resources Control Board shall also evaluate the benefits as they relate to the ecosystem and water quality priorities and relative environmental values.

(F) If additional or clarifying information is necessary, or quantification errors are found, Staff shall notify the applicant in writing at the email address provided and provide a list of the needed information, clarifications, or errors. If the applicant's quantification errors changed the amount of public benefits or the cost shares of the projects, the applicant shall provide an updated quantification of benefits, sensitivity analysis, or updated cost allocation as appropriate. The applicant shall have 60 days to respond. If the requested information is not provided within 60 days, the application shall be evaluated as originally submitted, with the identified deficiencies being taken into consideration during the technical reviews, independent peer reviews, and by the Commission.

(G) To ensure that technical reviewers are free from bias, Staff shall evaluate potential reviewers for conflicts of interest consistent with the review required pursuant to Government Code section 1090.

(6) Independent Peer Review

(A) Staff shall work with independent peer reviewers consisting of technical experts that are not associated with the technical reviewers, applicant, or project beneficiaries. The independent peer reviewers shall consider the conclusions of the technical reviews, determine whether they agree with the conclusions, and provide comments as warranted.

(B) The independent peer reviewers may contact the technical reviewers should the reviewers have any clarifying questions before completing the evaluation.

(C) To ensure that peer reviewers are free from bias, Staff shall evaluate potential reviewers for conflicts of interest consistent with the review required pursuant to Government Code section 1090.

(7) Commission Initial Funding Decision Process

(A) Staff shall provide to the Commission all completed technical reviews and independent peer reviews of the application for the Commission's deliberation at a regularly scheduled Commission meeting. Staff shall post the technical reviews and independent peer

reviews on the Commission's website when they are provided to the Commission.

(B) Prior to making an initial funding decision, the Commission shall make the following determinations:

1. The proposed project is cost-effective;
2. The proposed project improves the operations of the state water system;
3. The proposed project provides a net improvement in ecosystem and water quality conditions;
4. The proposed project has net public benefits (i.e., benefits less impacts) greater than the cost to provide the public benefits and the proposed project has been ranked relative to the other projects based on its return on investment for all the public benefits;
5. The proposed project provides measurable improvements to the Delta ecosystem or to the tributaries to the Delta;
6. The Program cost share is less than or equal to 50 percent of the proposed project's total capital costs, with the exception of conjunctive use projects and reservoir reoperation projects, as defined in Water Code section 79751. Program cost share for conjunctive use projects and reservoir reoperation projects defined in Water Code section 79751(c) may be greater than 50 percent of the proposed project's total capital costs pursuant to Water Code section 79756(a);
7. The Program-funded ecosystem improvements benefits make up at least 50 percent of the total public benefits funded by the Program;
8. The proposed project is feasible;
9. The proposed project will advance the long-term objectives of restoring ecological health and improving water management for beneficial uses of the Delta; and
10. The proposed project is consistent with all applicable laws and regulations.

(C) The Commission shall make initial funding decisions based on the technical reviews, independent peer reviews, and public input provided to the Commission.

1. The Commission shall not expend funds for the costs of environmental mitigation measures or compliance obligations except for those associated with providing the public benefits.

(8) The Commission shall post its initial funding decisions on the Commission's website. Applicants and the public shall have at least 21 days to respond to the Commission's initial funding decisions.

~~(9) The Commission shall consider public comments and will finalize the funding decisions at a subsequent regularly scheduled Commission meeting.~~

NOTE: Authority cited: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79754, 79755, 79757.

Reference: Water Code section 79705, 79711, 79751, 79757, 79755, 10733.2, 10753.7.

Section 6011. Commission Maximum Conditional Eligibility Determination. The Commission shall determine a maximum conditional eligibility amount for projects based on ranking, as determined by section 6011. The maximum conditional eligibility amount is a "not to exceed" amount of potential funding, contingent on the applicant meeting the conditions of section 6013 necessary for the commission to make a funding allocation. The total sum of maximum conditional eligibility amounts shall not exceed the available funding amount.

(a) Staff shall provide to the Commission all component scores (including appealed public benefit ratio, pursuant to section 6009, and technical review comments for the Commission's deliberation.

(b) The Commission shall review the component scores and approve or make adjustments to ~~water system improvement, public benefit ratio, relative environmental value,~~ implementation risk, ~~benefit resiliency, and /non-monetized public-benefit scores~~ as follows:

- (1) ~~Water System Improvement. The Commission shall consider information provided in the application executive summary and policies of the State to adjust the water system improvement score. The Commission may change the component score as described in section 6011(b)(4).~~ Public Benefit Ratio. The Commission shall consider the staff review, public comments, and any appeals received. Commission may change the component score and must be approved by a majority vote of the Commission.
- (2) Implementation Risk. The Commission shall consider the technical review comments for implementation risk and evaluate if the review comments are consistent with the implementation risk score assigned by reviewers. If the Commission determines it is not consistent, the Commission may change the component score ~~and such changes must be approved by a majority vote of the Commission. as described in section 6011(b)(4).~~
- (3) Resiliency of ~~and Non-monetized Public~~ Benefits. The Commission shall consider the technical review comments for resiliency ~~of y/non-monetized public~~ benefits and evaluate if the review comments and score are consistent. If the Commission determines it is not consistent, the Commission may change the component score ~~as described in section 6011(b)(4); and such change must be approved by a majority vote of the Commission~~
- (4) ~~The Commission may adjust a project's component score for items listed in section 6011(b)(1) – (3). The water system improvement score may be adjusted by plus or minus six points. The implementation risk and resiliency/non-monetized benefit scores may be adjusted by plus or minus three points each. In all cases of score adjustment, the adjusted component cannot exceed the maximum component score in section 6008, Table 6. Adjusted scores must be approved by a majority vote of the Commission.~~

- (5) Staff shall adjust the total expected return for investment scores to reflect the Commission adjusted component scores.
- (c) Before the Commission assigns a maximum eligibility amount to a project, the Commission shall make the following determinations, based on the technical review and appeal:
- (1) The proposed project is cost effective;
 - (2) The proposed project improves the operations of the State water system;
 - (3) The proposed project provides a net improvement in ecosystem and water quality conditions;
 - (4) The proposed project has net public benefits (i.e., benefits less impacts) greater than the cost to provide the public benefits and the proposed project has been ranked relative to the other projects based on its total project return on investment score;
 - (5) The proposed project provides measurable improvements to the Delta ecosystem or to the tributaries to the Delta;
 - (6) The Program cost share is less than or equal to 50 percent of the proposed project's total capital costs, with the exception of conjunctive use projects and reservoir reoperation projects, as defined in Water Code section 79751. Program cost share for conjunctive use projects and reservoir reoperation projects defined in Water Code section 79751(c) may be greater than 50 percent of the proposed project's total capital costs, pursuant to Water Code section 79756(a);
 - (7) The Program-funded ecosystem improvement benefits make up at least 50 percent of the total public benefits funded by the Program;
 - (8) The proposed project appears to be feasible;
 - (9) The proposed project will advance the long-term objectives or restoring ecological health and improving water management for beneficial uses of the Delta; and
 - (10) The proposed project is consistent with all applicable laws and regulations.
- (d) Staff shall use the Commission adjusted scores and resulting total expected return on public investment scores to provide the Commission the ranked projects separated into three ranks as follows:
- (1) Rank one (Rank 1) shall include projects with a total expected return on public investment score of ~~85-80~~ or higher;
 - (2) Rank two (Rank 2) shall include projects with a total expected return on public investment score between 70 and ~~8479~~;
 - (3) Rank three (Rank 3) shall include the remainder of projects.
- (e) Staff shall provide the Commission with suggested maximum conditional eligibility amounts, determined as follows:
- (1) No single project shall receive a maximum conditional eligibility amount equal to the total available Project funding;
 - (2) Staff will first assign suggested maximum conditional eligibility amounts equal to Rank 1 project eligible Program cost shares;
 - (3) If maximum conditional eligibility amounts from section 6011(e)(2) exceed the available funding amount, staff shall assign maximum conditional eligibility amounts proportional to the expected return on public investment scores;

- (4) Staff shall assign maximum conditional eligibility amounts to Rank 2 only if the sum of Rank 1 conditional eligibility amounts are less than the total available funding. Staff shall assign Rank 2 maximum eligibility amounts by applying section 6011(e)(1) and (2) to projects in Rank 2; and
- (5) Staff shall not assign any maximum conditional eligibility amounts to projects in Rank 3.
- (f) Staff shall also indicate which applications have requested early funding and the amount of the early funding request.
- (g) The Commission shall review the suggested maximum conditional eligibility amounts provided by staff and make adjustments or accept the staff suggestion according to the following:
 - (1) In adjusting any individual project's maximum conditional eligibility, the Commission shall consider:
 - (A) Leveraging of private, federal, or local funding pursuant to Water Code section 79707;
 - (B) The ability of the collective suite of projects to advance the long term objectives of restoring ecological health and improving water management for beneficial uses of the Delta;
 - (C) Implementation of the California Water Action Plan 2016 Update (January 14, 2016).
 - (2) Projects in Rank 3 shall be considered for funding only if there is remaining available funding and all projects in Rank 1 and Rank 2 are funded to the full amount of the projects' requests.
 - (3) For projects where the Commission has assigned a maximum conditional eligibility amount and the applicant has requested early funding, the Commission shall determine if early funding should be allowed after reviewing the funding need information contained in the early funding scope of work. Staff shall disburse early funding based on the Commission's determinations and limits pursuant to section 6010.

NOTE: Authority cited: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79754, 79755, 79757.

Reference: Water Code section 79705, 79711, 79751, 79757, 79755, 79755, 10733.2, 10753.7.

Section 6012. Agency Findings.

- (a) The agency finding, required by Water Code section 79755(a)(3), for the purposes of the Program is a preliminary assessment of public benefits based on information supplied in the application that indicates that a project's public benefits meet the requirements of Water Code section 79750 et seq.
- (b) CDFW and State Water Board shall base their respective findings on:
 - (1) The technical review of the ecosystem and water quality public benefits, respectively;
 - (2) The requirements of Water code section 79753; and
 - (3) The agency's assessment of a project's relative environmental value in achieving the priorities identified by the agency.

- (c) The Department shall base its findings on the technical review of the flood control, emergency response, and recreation public benefits, if applicable.
- (d) If CDFW, State Water Board or the Department (each a reviewing agency) finds the public benefits as described in a project's application meet all of the requirements of Water Code section 79750 *et seq.* for which the reviewing agency is responsible, the reviewing agency shall provide to the Commission a written statement confirming the finding.
- (e) A finding does not commit the reviewing agency to a definite course of action regarding any subsequent determination or approval by the reviewing agency under any regulatory or statutory authority beyond this section 6012, and the finding shall not be construed to limit any agency's obligations under any statute or regulation.
- (f) Only those public benefits found to be consistent with Water Code section 76750 *et seq.*, as determined by the findings from the reviewing agencies will be considered by the Commission for ranking the projects.
- (g) Changes in the amount of public benefits may occur from the time of the reviewing agencies' findings to the time an applicant enters into a contract with the reviewing agency. Prior to entering into a contract with the project applicant, as required by Water Code section 79755(a)(3), the agencies responsible for administering the public benefits shall confirm that the public benefits, as modified, continue to meet the requirements of Water Code section 79750 *et seq.*

Section 60013. Funding ~~Commitments~~Agreements.

- (a) Letter of Maximum Conditional Eligibility. Conditional Funding Commitment
 - ~~(1) The Commission shall adopt a resolution for each successful applicant documenting any conditional funding commitments.~~
 - ~~(2)~~ After the maximum conditional eligibility determinations are confirmed by the Commission, Staff shall send a letter to each ~~funding recipient~~ applicant whose project received a determination that the project is conditionally eligible for Program funding but additional ~~reflecting the Commission's conditional funding commitment and~~ required information is needed to ~~progress from the conditional funding commitment to the execution of the a~~ funding agreement. The required information shall include:
 - (A) Applicant's audited financial statements;
 - (B) Items stated in section 6013(c);
 - (C) Additional information, as applicable, on the status of environmental documentation, labor compliance, urban water management plans, agricultural water management plans, groundwater management plans, or GSP;
 - (D) Final project costs, schedule, and scope of work; ~~and~~
 - (E) Evidence of bilateral communications between the applicant and any owners and operators of potentially impacted facilities regarding the potential impacts ~~or benefits~~ of the proposed project to their facilities;
 - ~~(F)~~ Reporting interval for status of section 60013(b) items; ~~and~~
 - ~~(G)~~ A statement acknowledging that ~~A~~any applicant seeking funding for a project situated on any land with the following status must demonstrate, ~~prior to the execution~~

of the funding agreement, the existence of a limited waiver of sovereign immunity between the Commission and the governing body of the Tribe entered into pursuant to section 60013(e f)(78):

1. Land that is owned by or subject to an ownership or possessory interest of the Tribe;
2. Land that is "Indian lands" of the Tribe, as that term is defined by 25 U.S.C. §81(a)(1); or
3. Land that is owned by tribal entity, or Tribe, within the external borders of such Indian lands.

(b) For projects that were ranked, but did not receive a maximum conditional eligibility amount, a letter will be sent to the applicant stating that the project is still ranked and may be eligible for funding if additional funding became available.

(bc) The Commission will not encumber funds and funds will not be made available to an applicant, (with the exception of funding associated with subsection 6010) until such time as the provisions of these regulations have been satisfied, the Commission holds a public meeting/hearing allowing for public review and comment on the information required by this subdivision, and the Commission determines that all required provisions have been met. Each applicant shall submit documentation demonstrating that the following items from Water Code section 79755(a) have been completed:

- (1) The project applicant has entered into a contract pursuant to Water Code section 79755(a)(2) with each party that will derive benefits, other than public benefits that ensures each party to the contract will pay its share of the total costs of the project;
- (2) The project applicant has entered into a contract with the ~~California Department of Fish and Wildlife~~CDFW, the State Water ~~Resources Control~~ Board, and the Department that administer public benefits of the project after the individual agency makes a finding that the public benefits of the project meet all of the requirements of Water Code section 79750-79760;
- (3) The project applicant has submitted completed feasibility studies;
- (4) The project applicant has completed the final environmental documentation associated with the project; and
- (5) The project applicant has secured all known required permits obtained all federal, state, and local approvals, certifications, and agreements required.

(ed) The applicant shall submit to the Commission progress reports, monthly, quarterly, semi-annually or annually, as directed by the Commission, that document progress the applicant is making toward complying with the items contained in this section, including any changes in the magnitude of public benefits magnitude that could affect cost allocation.

(ee) Funding for the Completion of Environmental Documentation and Permitting of a Project. Notwithstanding subsection 6013(b), the Commission may provide funding for a project to complete environmental documentation and obtain the necessary permits for constructing and operating the project when the conditional funding commitment letter of conditional eligibility

~~is sent is made.~~ Funding for activities associated with the completion of environmental documentation and obtaining permits shall be subject to the following conditions:

- (1) Funds shall be specifically requested by the applicant in the application;
- ~~(12)~~ Funds will shall not be disbursed until the applicant enters into a funding agreement with the Commission and has met all disbursement conditions;
- ~~(23)~~ Funding to be provided for the completion of environmental documentation and obtaining permits shall be identified in the letter of conditional eligibility is included in the conditional funding commitment; and
- ~~(34)~~ Funding for the completion of environmental documentation and obtaining permits shall not exceed 105 percent of the maximum amount of Program funding the project is eligible for conditional funding commitment.

(ef) Final Funding Agreement Commitment

- (1) Funding for the capital costs of a project remains contingent until all items in section 60013~~(bc)~~ are complete and have been submitted to the Commission. The Commission may determine at a regularly scheduled meeting that the applicant has failed to make substantial progress toward completing these required documents and ~~rescind the conditional commitment of funds~~ the project is no longer eligible for program funding.
- (2) After January 1, 2022, a project will not be eligible for funding if the following conditions are not met:
 - (A) All feasibility studies are complete and draft environmental documentation is available for public review;
 - (B) The Commission makes a finding that the project is feasible, and will advance the long-term objectives of restoring ecological health and improving water management for beneficial uses of the Delta;
 - (C) The Director of the Department receives commitments from not less than 75 percent of the non-public benefit cost shares of the project;
- ~~(23)~~ Applicants shall provide an updated calculation of the quantification of benefits or sensitivity analysis if changes have occurred since the conditional funding commitment. Changes in quantification of public benefits will change the Program's cost share in the Commission's final funding commitment. Cost allocation and public benefit quantification calculation if changes to the proposed public benefits have occurred since the receipt of the letter of maximum conditional eligibility. Staff shall evaluate the changes to ensure the maximum conditional eligibility amount is still allowable, given the updated cost allocation and the requirements of Water Code sections 79756(a) and (b).
- ~~(34)~~ When an applicant has complied with the requirements in section 6013(f)(1), (2) and (3), the Commission shall consider any changes that have occurred to the project since the conditional funding commitment maximum conditional eligibility determination determine the and make a final Program cost share funding commitment at a publicly noticed Commission meeting.

- (45) The Program cost share shall be encumbered after all items in section 60013(e)(3) are complete and the Commission approves final funding.
- (56) Funds will not be disbursed until the applicant enters into a funding agreement with the Commission and has met all relevant disbursement conditions.
- (67) The Commission shall not reimburse any costs incurred prior to November 4, 2014, and shall not allocate funds for any project before December 15, 2016.
- (78) Tribal Waiver Requirements. If the funding recipient is a Tribe, the following requirements must be met before funding for projects located on land with any of the specified status in section 60013(a)(21)(FG) can receive funds enter into a funding agreement with the Commission pursuant to this section.
- (A) The governing body of the Tribe must enter into a limited waiver of sovereign immunity with the Commission related to its receipt of funding for the duration of the planning horizon period of the project. This waiver must include a consent to suit by the State of California, ~~California Water~~ Commission, the Department, CDFW, the State Water Board or the California Attorney General's Office in the courts of the State of California, with respect to any action in law or equity commenced by the State of California, ~~California Water~~ Commission or Department of ~~Water Resources~~, CDFW the State Water Board or the California Attorney General's Office to enforce the restrictions on the use of funds or the operation of the project by the Tribe related to funds received pursuant to this chapter, irrespective of the form of relief sought, whether monetary or otherwise, except for purposes of relief under this limited waiver, Tribes shall receive the same protections as a California public entity under California Government Code sections 818 and 818.8.
- (B) The Tribe must provide the Commission with documentation demonstrating the limited waiver of sovereign immunity entered into pursuant to this section has been properly adopted in accordance with the Tribe's Constitution or other organic law, by-laws and ordinances, and applicable federal laws.
- (C) The limited waiver of sovereign immunity related to operations and management of the proposed project and its public benefits must remain in effect until the end of the project's planning horizon.

NOTE: Authority cited: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.
Reference: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.

Article 3. Quantification and Management of Benefits

Section 6004. Requirements for the Quantification of Benefits

- (a) ~~The applicant shall quantify the magnitude of public and non-public benefits that would be provided by the proposed project. The applicant shall indicate whether a benefit is public or non-~~

public to provide an accurate cost allocation to determine allowable Program funding. The magnitude of benefits shall be calculated using the physical, chemical, or biological change in each benefit resource condition that is created by or caused by the proposed project, less any negative impacts created or caused by the proposed project. To comply with this section, the methods used by the applicant to quantify the benefits shall use the best available science and include the following characteristics:

(1) Define the Without Project Future Conditions. The applicant shall define the without project future conditions for surface water and groundwater operations and physical, chemical, biological, economic, and other resource conditions as needed to quantify the potential benefits and costs of the proposed project. The without project future conditions shall include the infrastructure, population, land use, water use, water operations, laws, regulations, future climate and sea level conditions, and other characteristics relevant to the project that are assumed at a particular year in the planning horizon. The without project future conditions shall be developed using best available information on existing conditions and projections of reasonably foreseeable future conditions. Reasonably foreseeable future conditions that require actions of others or that are structural in nature must be defined sufficiently and documented in feasibility study or environmental documentation in order to be included in the without project future conditions.

(A) If the without project future conditions are different from those shown in the applicant's CEQA No Project Alternative required by California Code of Regulations, Title 14, section 15126.6, subdivision(e), the applicant shall describe how and why the conditions are different and the implications of those differences, including the results of any sensitivity analyses conducted.

(B) The applicant's analysis of without project future conditions shall include any watershed(s) or region(s) that affect or are affected by the proposed project. If the project affects State Water Project or Central Valley Project operations or both, the analysis must include the watersheds where the affected State Water Project or Central Valley Project facilities, as applicable, are located.

(C) The without project future conditions shall represent the "median level of change in future climate and sea level conditions" for California at mid-century (characterized by climate conditions during the 30 years surrounding 2050). The "median level of change in future climate and sea level conditions" are represented by a combination of changes in temperature and sea level for the period of (2036-2065) that differs from the historical period average (1961-1990) by the following amounts:

1. No change in average statewide precipitation;
2. Average statewide temperature of 4.9 degrees Fahrenheit warmer; and
3. Sea level rise of 30 centimeters.

(D) The applicant shall include in the without project future conditions information relevant to estimating benefits or costs associated with the proposed project. For proposed projects with planning horizons that extend beyond years covered by existing planning and environmental documentation, reasonable assumptions or extrapolations may be used to estimate the without project future condition and explained.

(2) Define the With Project Future Conditions. The applicant shall define and assess future conditions with the project completed as proposed. The with project future conditions shall be based on the without project future conditions and include all additions or modifications specific to the proposed project.

(3) Calculating Physical Changes. The applicant shall quantify the physical changes between the with project future conditions and without project future conditions that would be created or caused by the proposed project. The calculation of potential physical benefits (i.e., positive or beneficial physical changes) should consider any negative physical changes or impacts, including any non-mitigable impacts.

(A) To calculate the physical changes, the applicant shall:

1. Use sequential hydrologic datasets (including precipitation, inflows, storage, flows, water diversions, water consumption), drawn from the available historical records sufficient to account for the range of meteorologic and hydrologic variability, including driest and wettest years, and extended droughts.
2. Use a geographic scope, spatial resolution, and time step that are sufficient to accurately quantify the physical benefits claimed.
3. Revise the datasets from subsection (3)(A)1. to describe the without project future conditions over the planning horizon, adjusted to reflect changes to the historical infrastructure, population, land use, water use, water operations, agreements, laws, regulations, future climate and sea level conditions, and other characteristics relevant to the project that are assumed at a particular year in the planning horizon. If the applicant determines that an alternative approach is appropriate, the applicant shall provide justification for the alternative approach.
4. Document how calculations of expected physical changes are derived and show the relationship between the proposed project, its operations, and the expected physical changes, and public and non-public benefits created or caused by the proposed project.

(B) The applicant shall disclose and quantify, where possible, any impacts, or negative effects, the proposed project would impose on the ecosystem, water quality, uses and storage of water, or resources relative to the without project future condition, to the extent that those impacts are less than fully mitigated.

(4) Monetize the Value of Project Benefits. The applicant shall estimate the monetary value of physical benefits in accordance with subsections (A) — (I) below. The appropriate level of analysis for monetizing each public benefit type depends on the magnitude of that public benefit compared to all public benefits or the size of the proposed project. If physical benefits cannot be monetized, the applicant shall provide justification why and include a qualitative description of the benefits.

(A) The analysis shall be conducted in constant 2015 dollars. All future benefits must be displayed in constant dollars for each year of the planning horizon. Monetized benefits estimated prior to 2015 shall be escalated to 2015 values using the yearly average

Consumer Price Index for California (index CPI-U for California). Applicants may use other index values to update older benefit estimates if justification is provided.

(B) The planning horizon is the expected life of the proposed project in years plus the construction period, or 100 years, whichever is less.

(C) A 3.5 percent real (inflation free) discount rate shall be used for all calculations that convert a constant dollar monetary value of benefit or cost into an equivalent value at another point in time.

(D) Where future population levels are relevant to benefits calculations, the applicant shall use the most current population forecasts published by the California Department of Finance.

(E) The applicant shall calculate, display, and justify the cost of the least cost alternative means for providing the same amount or more of the total physical public benefits as provided by the proposed project, if there is at least one feasible alternative means of providing the same amount or more of the total physical public benefits.

(F) The applicant shall calculate, display, and justify, for each benefit category, one or more of the following monetary benefits, if they are applicable to the proposed project:

1. Avoided cost;
2. Cost of feasible alternative means that provide at least the same physical benefit; and
3. Willingness to pay benefit, if it can be justified and documented.

(G) The applicant shall tabulate the amount of physical benefits monetized using each of the applicable methods in subsection (F) above.

(H) If annual benefit estimates change during the planning horizon, describe why they change and provide the calculations and assumptions used.

(I) In order to calculate the present value of the benefits for a project, the economic analysis requires dollar benefits for every year of the planning horizon. The climate change and sea level conditions for the without project future conditions described in section 6004(a)(1)(C) represent year 2050. In calculating the benefits prior to 2050, applicants shall interpolate between current conditions benefits and 2050 conditions benefits. For projects extending beyond 2050, applicants shall use 2050 conditions as the basis for calculating benefits for each year from 2050 until the end of the planning horizon.

(5) Estimate the Project Costs. The applicant shall include the total project costs, including construction, interest during construction, contingencies, land acquisition, monitoring, environmental mitigation or compliance obligations, operations and maintenance, repair, and replacement costs within the planning horizon.

(A) All cost estimates shall be in 2015 dollars.

(B) All cost estimates shall be no more than five (5) years old at the time of the submission of the application.

(C) Cost estimates that are less than or equal to five (5) years old at the time of the submission of the application shall be escalated to 2015 dollars using U.S. Bureau of Reclamation Construction Cost Trends.

- (D) Project cost estimates shall be reviewed, approved, and signed by an engineer licensed by the California Board for Professional Engineers, Land Surveyors, and Geologists.
- (E) Future real energy costs or energy cost savings shall be escalated 1.7 percent annually to 2024, unless otherwise justified. Real unit energy costs shall be held constant thereafter, unless justified. Justification must state the reasons for and calculation of the different escalation or future value, and the study or other published information used.
- (F) The costs for conveying water through existing conveyance facilities shall be based on existing non-energy variable costs and escalated energy costs.
- (6) Compare Benefits to Costs. The applicant shall display and compare the present value of monetized benefits and costs of the proposed project.
- (A) For each benefit category, the applicant shall provide the following items:
1. The present value of the expected value of monetary benefits over the planning horizon; and
 2. The estimated Program cost share for each public benefit category, in present values, and an explanation of how the cost share was calculated.
- (B) For the monetized public benefits, the applicant shall calculate the expected return for public investment pursuant to the Program as the ratio of the present value of the net public benefits to the total requested Program cost share.
- (7) Allocate Costs to Beneficiaries. The applicant shall provide a tentative allocation of all costs to the project beneficiaries and an explanation of how the allocation was calculated.
- (A) Public benefit cost shares for the five public benefit categories may be allocated to the State of California, the United States, local governments, or private interests. The portion of public benefit cost shares allocated to the Program:
1. Shall consider the share of public benefits received by Californians;
 2. Shall not exceed 50 percent of the total capital costs of any funded project;
 3. Shall provide ecosystem improvements that are at least 50 percent of the total public benefits of a funded project;
 4. Shall not be associated with existing environmental mitigation or compliance obligations except for those associated with providing the public benefits; and
 5. Shall consider the cost share of environmental mitigation or compliance obligation costs associated with a proposed project component, which shall not exceed the percentage of the public cost allocation for the related public benefit category.
- (8) Sources of Uncertainty. The applicant shall conduct sensitivity analyses to describe how the expected physical changes and public benefits that would be provided by the proposed project might change due to potential uncertainties not included in the without-project future conditions and the with-project future conditions described in Section 6004(a)(1) (2).
- (A) Sensitivity analyses, with the best available science, shall include:
1. Climate change and sea level rise.

a. Quantitative analysis that includes changes in precipitation, temperature, and sea level that represent the “high degree of change toward challenging future climate and sea level conditions” for California at mid-century (characterized by climate conditions during the 30 years surrounding 2050). The “high degree of change toward challenging future climate and sea level conditions” are represented by a combination of changes in precipitation, temperature, and sea level for the period (2036-2065), that differs from the historical period average (1961-1990) by the following amounts:

- (i) Average statewide precipitation of 11.4 percent drier;
- (ii) Average statewide temperature of 5.0 degrees Fahrenheit warmer; and
- (iii) Sea level rise of 60 centimeters.

b. Discussion and supporting quantitative or qualitative analysis to disclose how potential changes in precipitation, temperature, and sea level in the region(s) that supply water to the project and receive water from the project might reduce the public benefits claimed and how, if reduced, operations of the proposed project could be adapted to sustain public benefits. Potential changes should represent climate changes at the watershed level that are regionally consistent in magnitude with projections of statewide changes in precipitation, temperature, and sea level for the period (2070-2099), that differs from the historical period average (1961-1990) by the following amounts:

- (i) Average statewide precipitation of up to 15 percent wetter and up to 6 percent drier;
- (ii) Average statewide temperature of at least 5.3 and up to 8.8 degrees Fahrenheit warmer; and
- (iii) Sea level of at least 60 and up to 105 centimeters.

2. Future projects and water management actions:

a. Qualitative analysis using future projects and water management actions included in the applicant’s CEQA cumulative impact analysis that could affect the public benefits claimed.

(9) Documentation. The applicant shall provide the data, assumptions, methods, calculations, and sources of information. The applicant shall use sources of information that are publicly available, whenever possible, or submitted with the application.

NOTE: Authority cited: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.

Reference: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.

Section 6005. Priorities

(a) In accordance with Water Code section 79754, the California Department of Fish and Wildlife has identified ecosystem priorities that could be realized by water storage projects. These priorities, not listed in rank order, are presented below:

(1) Flow and Water Quality

(A) Provide cold water at times and locations to increase the survival of salmonid eggs and fry.

(B) Provide flows to improve habitat conditions for in-river rearing and downstream migration of juvenile salmonids.

(C) Maintain flows and appropriate ramping rates at times and locations that will minimize dewatering of salmonid redds and prevent stranding of juvenile salmonids in side channel habitat.

(D) Improve ecosystem water quality.

(E) Provide flows that increase dissolved oxygen and lower water temperatures to support anadromous fish passage.

(F) Increase attraction flows during upstream migration to reduce straying of anadromous species into non-natal tributaries.

(G) Increase Delta outflow to provide low salinity habitat for Delta smelt, longfin smelt, and other estuarine fishes in the Delta, Suisun Bay, and Suisun Marsh.

(H) Maintain or restore groundwater and surface water interconnection to support instream benefits and groundwater-dependent ecosystems.

(2) Physical Processes and Habitat

(A) Enhance flow regimes or groundwater conditions to improve the quantity and quality of riparian and floodplain habitats for aquatic and terrestrial species.

(B) Enhance the frequency, magnitude, and duration of floodplain inundation to enhance primary and secondary productivity and the growth and survival of fish.

(C) Enhance the temporal and spatial distribution and diversity of habitats to support all life stages of fish and wildlife species.

(D) Enhance access to fish spawning, rearing, and holding habitat by eliminating barriers to migration.

(E) Remediate unscreened or poorly screened diversions to reduce entrainment of fish.

(F) Provide water to enhance seasonal wetlands, permanent wetlands, and riparian habitat for aquatic and terrestrial species on State and Federal wildlife refuges and on other public and private lands.

(G) Develop and implement invasive species management plans utilizing techniques that are supported by best available science to enhance habitat and increase the survival of native species.

(H) Enhance habitat for native species that have commercial, recreational, scientific, or educational uses.

(b) In accordance with Water Code section 79754, the State Water Resources Control Board has identified water quality priorities that could be realized by water storage projects. These priorities, not listed in rank order, are presented below:

(1) Improve water temperature conditions in water bodies on California's CWA 303(d) list that are impaired for temperature.

(2) Improve dissolved oxygen conditions in water bodies on California's CWA 303(d) list that are impaired for dissolved oxygen.

(3) Improve nutrient conditions in water bodies on California's CWA 303(d) list that are impaired for nutrients.

(4) Improve mercury conditions in water bodies on California's CWA 303(d) list that are impaired for mercury.

(5) Improve salinity conditions in water bodies on California's CWA 303(d) list that are impaired for sodium, total dissolved solids, chloride, or specific conductance/electrical conductivity.

(6) Protect, clean up, or restore groundwater resources in high and medium priority basins, as determined by the Department.

(7) Achieve Delta tributary stream flows that resemble natural hydrograph patterns or other functional flow regimes that have been demonstrated to improve conditions for aquatic life.

(8) Reduce current or future water demand on the Delta watershed by developing local water supplies and improving regional water self-reliance.

(9) Provide water for basic human needs, such as drinking, cooking, and bathing, in disadvantaged or similarly situated communities, where those needs are not being met.

NOTE: Authority cited: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.

Reference: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.

Section 6006. Relative Environmental Value

(a) In accordance with Water Code section 79754, the California Department of Fish and Wildlife has determined how relative environmental values shall be assessed for ecosystem benefits. The criteria presented below, not listed in rank order, will be used to determine the relative environmental value of the ecosystem improvement benefits:

(1) Number of ecosystem priorities targeted by the project.

(2) Magnitude and certainty of ecosystem improvements.

(3) Spatial and temporal scale of ecosystem improvements.

(4) Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers to achieve the ecosystem benefits.

(5) Immediacy of ecosystem improvement actions and realization of benefits.

(6) Duration of ecosystem improvements.

(7) Consistency with species recovery plans and strategies, initiatives, and conservation plans.

(8) Location of ecosystem improvements and connectivity to areas already being protected or managed for conservation values.

(9) Efficient use of water to achieve multiple ecosystem benefits.

(10) Resilience of ecosystem improvements to the effects of changing environmental conditions, including hydrologic variability and climate change.

(b) In accordance with Water Code section 79754, the State Water Resources Control Board has determined how relative environmental values shall be assessed for water quality benefits. The criteria presented below, not listed in rank order, will be used to determine the relative environmental value of water quality improvement benefits:

(1) Number of different water quality priorities for which corresponding public benefits are provided by the project.

(2) Magnitude and certainty of water quality improvements.

(3) Spatial and temporal scale of water quality improvements.

- (4) Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers for managing water quality benefits.
- (5) Immediacy of water quality improvement actions and realization of benefits.
- (6) Duration of water quality improvements.
- (7) Consistency with water quality control plans, water quality control policies, and the Sustainable Groundwater Management Act (2014).
- (8) Connectivity of water quality improvements to areas that support beneficial uses of water or are being managed for water quality.
- (9) Resilience of water quality improvements to the effects of climate change and extended droughts.
- (10) Extent to which water quality improvement provides water for basic human needs, such as drinking, cooking, and bathing, in disadvantaged or similarly situated communities, where those needs are not being met.
- (11) Extent to which undesirable groundwater results that are caused by extractions are corrected.

NOTE: Authority cited: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.

—Reference: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.

Section 600714. Managing Public Benefits

(a) The applicant shall describe how the proposed project will be operated and managed to provide the public benefits claimed. The applicant shall submit the following information to the Commission with its full application:

- (1) Identification of the public benefits claimed.
- (2) A preliminary operations plan or documentation describing, at a minimum, the following items:
 - (A) Project operations and public benefits under a range of hydrologic conditions, including wettest and driest years and multiple dry years;
 - (B) How operations will be monitored to ensure public benefits are provided;
 - (C) How operational decisions will be made if conditions fall outside the range of anticipated conditions or if public benefits are not provided as anticipated in the application; and
 - (D) Potential management or corrective actions that could be taken if monitoring results fall outside of the range of expected values or if intended outcomes are not achieved by the project.
- (3) A preliminary monitoring, assurances, and reporting plan that includes the following items:
 - (A) Measurable goals and objectives;
 - (B) Metrics used to evaluate project performance;
 - (C) Conceptual models relevant to each monitoring action;
 - (D) Physical, chemical, or biological parameters measured;
 - (E) Location and frequency of monitoring actions;
 - (F) Thresholds and triggers to initiate management actions;

~~(G) Parties, including public agencies responsible for administering the public benefits, responsible for conducting the monitoring program;~~

~~(H) Reporting frequency; and~~

~~(I) Assurances describing, at a minimum, the following:~~

~~i. Funding sources and financial commitments to implement the monitoring and reporting;~~

~~ii. How monitoring results and summary of public benefits provided by the project will be provided to the Commission and will be made publicly available; and~~

~~iii. Commitment to the implementation of an adaptive management program.~~

(ba) Any project funded under the Program shall, on an annual basis commencing with the end of the first full year of operation, submit a publicly available report to the Commission and the public agencies identified in Water Code section 79754. The report shall include, at a minimum, a description of actual project operations, documentation of annual public benefits provided, and description of any changes in the amount or type of public benefits and why those changes occurred. The reports shall be submitted annually for the life of the project or until such time as the Commission makes a determination on a case-by-case basis that the reports can be provided less frequently or are no longer necessary. This and any additional reporting requirements shall be implemented through the funding agreement or agency contracts specified in Water Code 79755(a)(3).

(eb) ~~Per section 6003(b)(2)~~ Pursuant to the requirements of Water Code section 79755, any project funded under the Program shall enter into a contract with ~~the California Department of Fish and Wildlife~~ CDFW, the State Water Resources Control Board, and the Department of Water Resources to administer the public benefits of the project. These contracts shall supersede any preliminary operations, monitoring, and management commitments made in this section under subsection (a).

(ec) ~~Per section 6003(b)(5)~~, Pursuant to the requirements of Water Code section 79755, any project funded under the Program shall have secured all known required permits. These permits shall supersede any preliminary operations, monitoring, and management commitments made in this section under subsection (a).

(ed) Per section 60013(ef), any project funded under the Program shall enter into a funding agreement with the Commission. The funding agreement shall include language consistent with the requirements of the contracts and permits identified in subsections (eb) and (ec) and describe how the funding recipient will ensure the public benefits identified for the project are achieved. The funding agreement shall also describe the conditions under which the Commission may rescind Program funding if the project does not provide the identified public benefits.

NOTE: Authority cited: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.

Reference: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.

Article 5. General Provisions.

Section 6015. Confidentiality.

(a) Information submitted to the Commission pursuant to this chapter is subject to the provisions of the California Public Records Act (California Government Code section 6250 *et seq.*). Documents that may pose security concerns should be marked "confidential" and will be treated pursuant to the following provisions:

(1) Any person submitting to the Commission any records containing data claimed to be "confidential" or otherwise exempt from disclosure under Government Code section 6254 or 6254.7 or under other applicable provisions of law shall, at the time of submission, identify in writing the portions of the records containing such data as "confidential" and shall provide the name, address, telephone number, and email address of the individual to be contacted if the Commission receives a request for disclosure of or seeks to disclose the information claimed to be confidential. The Commission shall not disclose data identified as confidential, except in accordance with the requirements of this subchapter.

(2) The following information shall be considered confidential if marked as such by the applicant:

(A) Records of Native American graves, cemeteries, and sacred places and records of Native American places, features, and objects described in sections 5097.9 and 5097.993 of the Public Resources Code maintained by, or in the possession of, the Native American Heritage Commission, another state agency, or a local agency;

(B) A document prepared by or for a state or local agency that assesses its vulnerability to terrorist attack or other criminal acts intended to disrupt the public agency's operations;

(C) Critical infrastructure information; and

(D) Existing facility as-builts and operation manuals.

(b) Upon receipt of a request from a member of the public that the Commission disclose information claimed to be confidential or if the Commission seeks to disclose such information, the Commission shall inform the individual designated in subsection (A) by telephone and by email that disclosure of the information is sought. The entity claiming confidentiality shall file with the Commission documentation in support of the claim of confidentiality. The documentation must be received within five (5) days from the date of the telephone contact and email notification, whichever occurs first.

(c) The documentation submitted in support of the claim of confidentiality shall include the following information:

(1) The statutory provision(s) under which the claim of confidentiality is asserted;

(2) A specific description of the information claimed to be entitled to confidential treatment;

(3) The period of time for which confidential treatment is requested;

(4) The extent to which the information has been disclosed to others and whether its confidentiality has been maintained or its release restricted;

- (5) Confidentiality determinations, if any, made by other public agencies as to all or part of the information and a copy of any such determinations, if available; and
- (6) Whether it is asserted that the information could be used in a manner to threaten the security of the project.
- (d) Documentation, as specified in this section, in support of a claim of confidentiality may be submitted before the Commission receives a request for the information.
- (e) The Commission shall, within ten (10) days of the date it sought to disclose the information or received the request for disclosure, or within 20 days of that date if the Commission determines that there are unusual circumstances, as defined in Government Code section 6253, review the request, if any, and supporting documentation, if received within the time limits specified in subsection (B) above, including any extension granted, and determine whether the data is entitled to confidential treatment pursuant to Government Code section 6254, 6255 or 6254.7 or other applicable provisions of law and shall either:
 - (1) Decline to disclose the data and, if a request was received, provide a justification to the person making the request and to the person claiming the data is confidential for the determination pursuant to Government Code section 6255; or
 - (2) Provide written notice to the person claiming the information is confidential and, if a request was received, to the person requesting the information that it has determined that the information is subject to disclosure, that it proposes to disclose the information, and that the information shall be released 21 days after receipt of the notice by the person claiming confidentiality, unless the Commission is restrained from so doing by a court of competent jurisdiction. The Commission shall release the information in accordance with the terms of the notice unless so restrained.
- (f) Should judicial review be sought of a determination issued in accordance with this regulation, either the person requesting data or the person claiming confidentiality, as appropriate, may be made a party to the litigation to justify the determination.

NOTE: Authority cited: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.
Reference: Water Code section 79705, 79711, 79750, 79751, 79752, 79753, 79755, 79757.

Appendix B
Contra Costa Water District Comments on the Modeling Tools Provided
October 3, 2016

Contra Costa Water District (CCWD) appreciates the release of the modeling tools prior to the adoption of the WSIP regulations. However, there is not sufficient documentation to facilitate a robust review and evaluation of the modeling tools prior to the adoption of the regulations. CCWD has repeatedly requested modeling documentation that describes how the climate change scenarios developed by the Commission would affect existing state-wide water operations and ecosystems within the Delta watershed. If the Commission will be using these climate change scenarios to evaluate projects, the Commission must be able to distinguish the effects of climate change from the effects of a project. Without proper documentation and review, each individual applicant will need to determine the quality of the modeling, correct errors as needed, and validate changes made by Commission staff in the modeling assumptions for themselves, likely leading to inconsistencies in the implementation of the tools across the applications. Failure to properly document and establish the effects of climate change on state-wide water operations and ecosystems within the Delta watershed will result in confusion for applicants, the public, and reviewers. Documentation that includes verification of the DSM2 boundary conditions, validation of the ANN used in the CalSim models, and corroboration among the two modeling platforms should be provided by the Commission to provide confidence in the modeling tool. In the absence of proper documentation and public review of the modeling tools, CCWD has identified a preliminary list of concerns regarding the modeling tools that should be addressed.

CalSim II – Water Operations Model

1. **Watershed runoff and reservoir inflows have changed substantially for the climate change scenarios.** The timing of peak runoff in the Delta watershed in the climate change scenarios has shifted two months earlier on average, such that runoff from the watershed is minimal after April. Furthermore, it appears that there is an increase in runoff in all water year types, especially in critically dry years. For example, in the 2030 Climate Change scenario, Shasta inflow increases by 18% during the 1930s drought and by 6% during the 1990s drought. This change is surprising because it runs counter to the more commonly expected decrease in precipitation and runoff in dry years in the future. The changes in inflows should be verified, explained, and corroborated with results from the downscaled climate change projections and results from the VIC model.
2. **Water year type classification changed more in the San Joaquin Basin than in the Sacramento Basin.** The water year type classification for the 82-year timeseries in the Sacramento River Basin is almost the same under climate change scenarios developed by the Commission as they are in existing conditions of the State Water Project's 2015 Delivery Capability Report (DCR), but the water year type classification in the San Joaquin River Basin changes significantly in the climate change scenario at the year 2070 compared to the conditions in the DCR. For example, in the San Joaquin River Basin, there are 12 more critically dry years in the 2070 climate change scenario than in the 2015 DCR. While this change in water year type classification may be justified, it is important to understand why there is such a large difference between the Sacramento and San Joaquin basins. Possible explanations include different spatial variations in climate change across different

regions of the state or different methodologies to classify water year types in the basins. However, it is important to have a documented explanation for the basis of these changes, because they have large repercussions on the operation of the State Water Project and the Central Valley Project.

3. **Climate change adaptations have been implemented at some, but not all, existing facilities.** Changes were made to the rule curve for San Luis Reservoir; however there was no explanation or justification provided for these changes in the model code or the Technical Reference Document. At a meeting on September 27th, Commission staff indicated that the modifications to the San Luis Reservoir rule curve were developed to adapt to the hydrologic conditions under climate change. However, similar adaptations were not made for other existing Central Valley Project and State Water Project facilities. The uneven application of climate change adaptations may work in favor of certain projects and to the detriment of others. If an applicant's project depends on an existing facility where operations have already been adapted to climate change, it may result in a more favorable benefit calculation than projects that rely on the operation of existing facilities where operations have not been adapted for climate change. This could lead to unintentional bias favoring certain projects. This inadvertent bias is likely to manifest as a geographical preference.

Similarly, operation of the Delta Cross Channel and the equations used to determine the portion of the flow that passes through the Delta Cross Channel when it is open were modified for the climate change scenarios. Such changes in the operations and flow split logic could lead to an artificial improvement in Delta water quality that would not be expected in reality. Delta water quality is of critical importance to CCWD operations, Delta ecosystem benefits, and the ability of the State and Federal water projects to meet the existing required Delta water quality standards. If the modifications make it easier for upstream reservoirs to meet Delta water quality standards by artificially improving Delta water quality in a manner that would not actually occur, the modeling tools do not accurately capture the changes in state-wide water system that would be required to meet existing compliance obligations. It could also show that the projects are in compliance and meeting water quality standards more often than they actually would be. Because there is no explanation provided for the changes in the Delta Cross Channel operations and flow split logic, it unclear whether the changes are intended to be a climate change adaptation measure or are in response to other factors.

4. **Changes were made to State Water Project allocation logic, but not to the Central Valley Project allocation logic.** As noted above, the uneven implementation of climate adaptation measures at specific facilities could inadvertently favor certain projects. Similarly, changes were made to the State Water Project allocation logic in the climate change scenarios provided by the Commission, while no changes were made to the Central Valley Project allocation logic. This has the potential to favor projects that rely on the State Water Project, where allocations have been adapted to climate change, and may work against projects that rely on the Central Valley Project, where operations have not been adapted for climate change. Documentation containing justification for changing the allocation logic for the State Water Project under climate change must be provided, not to mention the reasoning for not adapting the Central Valley Project allocation logic.

Appendix C

Contra Costa Water District's Comments on Technical Reference Document October 3, 2016

- 1) The regulations, Technical Reference Document, and modeling tools should all be consistent. For example, water supply improvements are not described in the technical reference document and are poorly documented in the regulations. As recommended in the cover letter, the water supply improvement metrics could be included in Section 4.3.10 and Section 4.12 of the Technical Reference document. Similarly, Section 4.11.2.3 of the Technical Reference Document indicates that the frequency of drought emergencies must be based upon the available historical record. However, Section 6004 of the regulations indicate that physical changes and associated benefits must be calculated using the climate change hydrology provided by the Program, not the historical hydrology. The Technical Reference Document should be internally consistent and consistent with the regulations.
- 2) The Technical Reference Document should provide guidance on how to evaluate reservoir reoperation projects. There is currently no guidance for reservoir reoperation projects.
- 3) The Technical Reference Document should clarify how the ecosystem and water quality priorities differ from the relative environmental values and how the priorities and the relative environmental values will be used in the evaluation and review process.
- 4) The Technical Reference Document should provide guidance on how to distinguish and monetize benefits that may accrue at facilities owned and operated by parties other than the applicant.
- 5) Given that monetization guidance was provided for a small selected number of potential ecosystem benefits, it may be difficult for applicants to develop defensible unit costs for ecosystem benefits. A technical workshop after the adoption of the regulations would help potential applicants develop their applications in a manner that is reasonable and consistent with judgment of staff or technical experts.