

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

Article 1 Definitions

Section 6000. 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 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.
- (4) “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.
- (5) “Application” means the submission to the Commission that requests Program funding for a proposed project.
- (6) “Attraction flow” means water with appropriate chemistry, velocity, quantity, and location to attract fish migrating upstream.
- (7) “Avoided cost” means the reduction in a without-project future condition cost that would occur as a result of a proposed project.
- (8) “Beneficial uses of the Delta” means the beneficial uses identified in the “Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary” issued by the State Water Resources Control Board (December 2006).
- (9) “Beneficiary(ies)” means a person, organization, or group of persons or organizations that receives benefits from a proposed project.
- (10) “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.

- (12) “CALFED surface storage projects” means 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).
- (14) “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, and necessary easements.
- (15) “CEQA” means the California Environmental Quality Act (Public Resources Code section 21000 et seq.).
- (16) “Certainty of improvement” means the degree of confidence that the proposed improvement will provide the intended benefit.
- (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.
- (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 Water Code section 79756(a), these projects shall utilize 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.
- (22) “Construction period” means the time during which construction occurs, normally stated as the first year and the last year of construction.
- (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.
- (24) “Cost allocation” means the process for assigning costs to beneficiaries.
- (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.
- (26) “Days” means calendar days.
- (27) “Delta” means the Sacramento-San Joaquin Delta as defined in Water Code section 12220 and the Suisun Marsh as defined in Public Resources Code section 29101.
- (28) “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).
- (29) “Department” means the Department of Water Resources.
- (30) “Dewatering” means when water surface elevation drops below bed elevation exposing redds to ambient conditions.
- (31) “Disadvantaged communities” 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.
- (32) “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.
- (33) “Duration of improvement” means the length of time an improvement is expected to exist.
- (34) “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.
- (35) “Emergency response” means 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.
- (37) “Entrainment” means fish being transported along with the flow of water into unnatural or harmful environments.
- (38) “Environmental documentation” means documentation required for compliance with CEQA as defined in California Code of Regulations, Title 14, section 15361.
- (39) “Existing environmental mitigation or compliance obligations” means legally enforceable requirements or conditions in existing permits, contracts, or grants intended to protect the 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.
- (41) “Flood control benefit” means 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.
- (45) “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.
- (46) “Funding agreement” means an agreement between the California Water Commission and the funding recipient to implement the proposed project.
- (47) “Funding recipient” means an applicant which receives a conditional and final funding commitment through the Program.
- (48) “Geographic scope” means the area covered by a model or analysis.
- (49) “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.

- (50) “Groundwater dependent ecosystem” means communities of plants and animals that depend on groundwater emerging from aquifers or on groundwater occurring near the ground surface.
- (51) “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.
- (52) “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.
- (53) “GSA” means groundwater sustainability agency.
- (54) “GSP” means groundwater sustainability plan.
- (55) “Immediacy of improvement action” means 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”.
- (57) “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.
- (59) “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.
- (60) “Magnitude of improvement” means the quantity and scale of the improvement.
- (61) “Measurable improvements” means changes in physical, chemical, or biological conditions that provide benefits and can be quantified at a specific location and time.
- (62) “Mutual water company” 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.
- (63) “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.
- (64) “Non-natal tributary” means any waterway that is not the stream or river where an anadromous fish was born.

- (65) “Nonprofit organization” means an organization qualified to do business in California and is qualified under 26 U.S.C. §501(c)(3).
- (66) “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).
- (67) “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).
- (68) “Permits” means any federal, state, or local approvals, certifications, or agreements required to construct, implement, or operate a proposed project.
- (69) “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.
- (70) “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.
- (71) “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.
- (73) “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.
- (74) “Program” means the Water Storage Investment Program.
- (75) “Project life” means the expected time period in which a project physically performs its intended function.
- (76) “Public agency” means a state agency or department, special district, joint powers authority, city, county, city and county, or other political subdivision of the state.
- (77) “Public benefit(s)” for purposes of this chapter, has the same meaning as 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).
- (79) “Ramping rate” means a progressive change in the discharge of water to a stream or river channel, measured as flow per unit time.
- (80) “Realization of benefit” means the expected time that will elapse before an improvement will achieve measurable outcomes.

- (81) “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, or intrinsic value.
- (82) “Redd” means a gravel nest, excavated by a spawning female salmonid, for the deposition of eggs.
- (83) “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.
- (84) “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.
- (85) “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.
- (91) “Spatial distribution” means the geographical arrangement of a habitat, phenomenon, or species in a given area.
- (92) “Spatial resolution” means the minimum length, area, or volume of an affected physical resource necessary to demonstrate and describe benefits or impacts.
- (93) “Spatial scale” means the geographical dimensions of an improvement.

- (94) “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.
- (95) “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.
- (96) “Straying” means an anadromous fish migrating into a non-natal waterway.
- (97) “Temporal distribution” means the time of year or season in which an improvement will occur.
- (98) “Temporal scale” means the scheduled time in the calendar year during which an improvement action will be implemented
- (99) “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.
- (100) “Time-step” means the amount of time for which equations in a time-sequential model are recalculated; normally hourly, daily, monthly or annually.
- (101) “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.
- (102) “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.
- (103) “Trigger” means, in the context of adaptive management, an event, situation, or measurement that initiates or requires a management action.
- (104) “Undesirable groundwater result(s)” 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.
- (105) “Urban water supplier” 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.
- (106) “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.
- (107) “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.
- (108) “With-project future conditions” means a quantitative and qualitative description of the conditions 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.
- (109) “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 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. General Provisions, General Selection Process, and Funding Commitments

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 6002. General Selection Process

- (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
- (1) The Commission shall notify the public of the 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 full application solicitation shall be open for a minimum of six months. Applicants shall complete and submit a full application, using the Department’s 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 6001(a).
 - (2) A complete application shall contain all of the following information:
 - (A) 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;
 - (B) Signed resolution from the authorized representatives or governing authority of the applicant 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;
- (C) Contact information, including the name of organization, the point of contact and position title at the organization, email address, entity address and phone number;
 - (D) Explanation of eligibility, including the specific provision of section 6001(b) that qualifies the applicant to apply;
 - (E) Amount of Program funding requested, total capital costs, estimated total project cost, benefit and cost analysis, 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;
 - (F) Estimated project schedule that presents the anticipated timeline until the initial year of project operation;
 - (G) Detailed description of the anticipated project operations;
 - (H) Documentation and analyses that support, substantiate, and quantify the claimed physical benefits and measurable improvements to the Delta or to the tributaries to the Delta, including rationale for methodologies and datasets used;
 - (I) 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;
 - (J) Documentation that demonstrates the project's engineering, environmental, economic, and financial feasibility, including completed feasibility studies 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;
 - (M) A description of how the proposed project's benefits address the Program ecosystem and water quality priorities as provided in section 6005;
 - (N) Preliminary monitoring, assurances, and reporting plan, as described in section 6007;
 - (O) Applicant's explanation of how the project advances the long-term objectives of restoring ecological health and improves water management for beneficial uses of the Delta;
 - (P) Publicly-available environmental documentation;
 - (Q) 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;

- (R) 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
- (S) Statement attesting that the information provided in the full application is true and correct.

(3) Completeness Review

- (A) 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.
- (B) 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.
- (C) 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.

(4) Eligibility Review

- (A) 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);
 2. Demonstration the project is an eligible project type listed in Section 6001(b)(2);
 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.
 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)(ii)(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.

(5) Technical Review

(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, 79755, 10733.2, 10753.7.

Section 6003. Funding Commitments

(a) Conditional Funding Commitment

- (1) The Commission shall adopt a resolution for each successful applicant documenting any conditional funding commitments.
- (2) Staff shall send a letter to each funding recipient reflecting the Commission's conditional funding commitment and required information needed to progress from the conditional funding commitment to the execution of the funding agreement. The required information shall include:
 - (A) Applicant's audited financial statements;
 - (B) Items stated in section 6003(b);
 - (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) Reporting interval for status of section 6003(b) items.
 - (F) Any applicant seeking funding for a project situated on any land with the following status must demonstrate the existence of a limited waiver of sovereign immunity between the Commission and the governing body of the Tribe entered into pursuant to section 6003(e)(7):
 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) The Commission will not encumber funds and funds will not be made available to an applicant, until such time as the provisions of these regulations have been satisfied, the Commission holds a public meeting 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, 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.
- (c) 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 public benefit magnitude that could affect cost allocation.
- (d) Funding for Permits. Notwithstanding subsection (b), the Commission may provide funding for a project to obtain the necessary permits when the conditional funding commitment is made. Funding for permits shall be subject to the following conditions:
- (1) Funds will not be disbursed until the applicant enters into a funding agreement with the Commission and has met all disbursement conditions;
 - (2) Funding for permits is included in the conditional funding commitment; and
 - (3) Funding for permits shall not exceed 10 percent of the conditional funding commitment.
- (e) Final Funding Commitment
- (1) Funding for a project remains contingent until all items in section 6003(b) 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.
 - (2) 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.
 - (3) When an applicant has complied with the requirements in section 6003(e)(1) and (2), the Commission shall consider any changes that have occurred to the project since the conditional funding commitment and make a final funding commitment at a publicly noticed Commission meeting.
 - (4) The Program cost share shall be encumbered after all items in section 6003(e)(3) are complete and the Commission approves final funding.
 - (5) Funds will not be disbursed until the applicant enters into a funding agreement with the Commission and has met all relevant disbursement conditions.
 - (6) 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.
 - (7) 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 6003(a)(2)(F) can receive funds 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, 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 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.

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 regions(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 6007. 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.

(b) 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).

(c) Per section 6003(b)(2), any project funded under the Program shall enter into a contract with the California Department of Fish and Wildlife, 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).

- (d) Per section 6003(b)(5), 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).
- (e) Per section 6003(e), 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 (c) and (d) 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.