

D. Project Consistency with an Adopted IRWM Plan

The 2013 Bay Area IRWM Plan Update integrates long-term planning and high-quality project implementation in an adaptive management framework — fostering coordination and communication among the diverse stakeholders in the region. Focus areas for the Bay Area IRWM Plan include water supply and water quality, wastewater and recycled water, flood protection and stormwater management, as well as watershed management, habitat protection, and restoration. The overall objectives of the Bay Area IRWM Plan are to develop coordination, collaboration, and communication among Bay Area agencies responsible for water and habitat-related issues, achieve greater efficiencies, and build public support for vital projects. The 2013 Plan Update expands upon the 2006 IRWM Plan, documents progress toward meeting IRWM Plan objectives, and identifies ongoing regional needs and issues.

The 2015 IRWM Bay Area Regional Climate Change Preparedness grant proposal includes nine projects that comprise a geographically diverse and well-integrated implementation program that will provide water supply, water quality, and flood protection benefits to the Bay Area’s diverse population. On May 26, 2015, the Bay Area IRWM Coordinating Committee (CC) unanimously approved projects for inclusion in the Bay Area Regional Climate Change Preparedness grant proposal.

All projects in this Proposal are included in the 2013 Plan Update, either as adopted by the Bay Area IRWM Coordinating Committee on March 24, 2014, added by the CC as an Appendix on May 28, 2014, or added by the CC as an Appendix on May 26, 2015 (IRWM Appendices attached).

As requested in the Proposal Solicitation Package (PSP), demonstration of project consistency with the IRWM Plan is provided on the following pages of this Attachment. The Proposal and its nine projects comprise a geographically diverse and well-integrated implementation program with multiple water supply, drought preparedness, human-right-to-water benefits, shoreline resilience, and sea level rise preparedness benefits. This section demonstrates that this Proposal contains significant, dedicated, and well-defined projects that meet multiple Program Preferences of the DWR Prop 84 IRWM Guidelines. The Bay Area Regional Climate Change Preparedness grant proposal consists of grant administration and nine projects that address three primary benefits:

- Water Supply – Drought Preparedness
- Human Right to Water
- Shoreline Resilience – Sea Level Rise Preparedness

To facilitate review, the projects are grouped by primary benefit type, as listed in **Table 1-2**, below.

The overarching goals of the 2013 Bay Area IRWM Plan are as follows:

- Goal 1. Promote environmental, economic, and social sustainability.
- Goal 2. Improve water supply reliability and quality.
- Goal 3. Protect and improve watershed health and function and Bay water quality.
- Goal 4. Improve regional flood management.
- Goal 5. Create, protect, enhance, and maintain environmental resources and habitats.

The five goals listed above address applicable Basin Plan objectives, 20x2020 water efficiency goals, and the requirements of California Water Code (CWC) Section 10540(c). Objectives for the Bay Area Region were developed to support the goals. Demonstration of each project’s consistency with the 2013 Bay Area IRWM Plan objectives is provided immediately following **Table 1-2**.

Table 1-2. Bay Area Regional Climate Change Preparedness Project Identification Numbers and Organization

Primary Project Benefit	Project ID#	Project Proponent/Local Project Sponsor	Project Title
Water Supply – Drought Preparedness	1	San Francisco Estuary Partnership	Bay Area Advanced Quantitative Precipitation Information (AQPI) System
	2	Santa Clara Valley Water District	Anderson Dam Seismic Retrofit Project
	3	Marin Municipal Water District	Marin 2020 Turf Replacement Project
Human Right to Water	4	City of East Palo Alto	East Palo Alto Groundwater Supply Project
	5	San Mateo County RCD	Coastal San Mateo County Drought Relief Phase II
Shoreline Resilience – Sea Level Rise Preparedness	6	State Coastal Conservancy	San Francisquito Creek Flood Protection and Ecosystem Restoration Project
	7	State Coastal Conservancy	Mountain View Shoreline Portion of SBSPR Project
	8	State Coastal Conservancy	Eden Landing Portion of SBSPR Project
	9	State Coastal Conservancy	Novato Creek Flood Protection and Habitat Enhancement Project

Project 1: San Francisco Estuary Partnership – Bay Area AQPI System

The Project aligns with regional priority needs in the Bay Area IRWM Plan as follows:

Objective 1.3: Plan for and adapt to more frequent extreme climate events. This project comprises cutting edge technology using new radars placed strategically within the Bay Area, and greatly improved modeling to observe and forecast extreme weather events. This technology will increase lead times for decision makers to prepare for and mitigate weather damage, including predictions of river and ocean-based flooding.

Objective 1.5: Plan for and adapt to sea level rise. See Objective 1.3 above.

Objective 1.6: Secure adequate support, funding and partnerships to effectively implement plan. This project leverages more than a decade of NOAA–Hydrometeorology research of a state-of-the-art network of precipitation observations and development of the next generation of forecast models. It also leverages USGS research to develop a coastal storm modeling system in San Francisco Bay as well as a high resolution weather forecast model being developed at Scripps Institution of Oceanography at UC San Diego.

Objective 1.7: Avoid disproportionate impacts to disadvantaged communities. This project will improve the use of small, local reservoirs for storage and groundwater recharge management, including those for populations that have no other sources of water, such as the town of Pescadero (a DAC). Further, Bay Area DACs, located largely in low-lying areas, will receive better weather advisories regarding flood events.

Objective 1.9: Support data management for climate change vulnerabilities. See Objective 1.3 above.

Objective 1.10: Enhance monitoring network and information sharing to support proper management of watersheds. Stormwater management modeling will be greatly improved with more accurate forecasting and additional rain gauges to supplement the existing system.

Objective 1.11: Minimize health impacts associated with polluted water. More accurate forecasting will reduce incidents of overflows at wastewater treatment plants. Similarly, providing additional warnings to residents of flood plains will allow them to keep out of harm's way from polluted floodwaters.

Objective 2.1: Provide adequate water supplies to meet demands. The system will be valuable for water resource managers, allowing them to secure water supplies and offset drought impacts.

Objective 2.2: Provide clean, safe, reliable drinking water. More accurate information regarding the location and intensity of precipitation events will allow reservoir operators to more effectively control discharges in advance of storms, thus avoiding unnecessary depletion of water supplies.

Objective 2.3: Minimize vulnerability of infrastructure to catastrophes and security breaches. Advanced warning of precipitation values will help stormwater managers take measures to limit both physical and environmental damage.

Objective 2.6: Expand water storage and conjunctive management of surface and groundwater. Improved precipitation forecasting will provide water managers greater confidence timing the release of surface storage supplies to recharge and infiltrate groundwater basins.

Objective 2.7: Provide for groundwater recharge while protecting groundwater resources from overdraft. See Objective 2.6 above.

Objective 3.3: Minimize point-source and non-point-source pollution. The system will allow water resource managers to minimize water quality impacts to the Bay from combined sewer overflows.

Objective 4.1: Manage floodplains to reduce flood damages to homes, businesses, schools, and transportation. Flood protection and emergency response personnel will be able to anticipate when and where the most severe flooding will occur and take action to reduce damage and warn residents where facilities may not be able to contain flood impacts.

Objective 4.3: Identify and promote integrated flood management projects to protect vulnerable areas. See Objective 4.1 above.

Objective 5.1: Protect, restore, and rehabilitate habitat for species protection. Improved forecasting will provide the capacity for designing and timing water releases to enhance riparian ecosystem structure and function due to establishment of a more variable hydrograph, restoring geomorphic processes and streamflow to benefit aquatic organisms from plants to salmonids.

Objective 5.2: Enhance wildlife populations and biodiversity (species richness). See Objective 5.1 above.

Objective 5.3: Protect and recover fisheries (natural habitat and harvesting). See Objective 5.1 above.

Project 2: Santa Clara Valley Water District – Anderson Dam Seismic Retrofit Project

The Project aligns with regional priority needs in the Bay Area IRWM Plan as follows:

Objective 1.2: Encourage implementation of integrated, multi-benefit projects. Restoring operating capacity to the reservoir will result in water supply, water quality, ecosystem, and recreation benefits.

Objective 1.3: Plan for and adapt to more frequent extreme climate events. Additional 28,500 AF of storage in the reservoir will facilitate adaption to increased air temperatures through a larger coldwater pool for fish, and it will increase water supply for use during droughts.

Objective 1.4: Reduce energy use and/or use renewable resources where appropriate. This project will improve the opportunity to operate the Anderson Hydroelectric Facility.

Objective 1.6: Secure adequate support, funding and partnerships to effectively implement plan. This project is part of the voter approved Safe, Clean Water and Natural Flood Protection Program.

Objective 1.7: Avoid disproportionate impacts to disadvantaged communities. There are multiple CalEnviroScreen disadvantaged communities in Santa Clara County, including several along Coyote Creek in San Jose. The benefits of this project will benefit all of Santa Clara County, including the disadvantaged communities.

Objective 1.13: Increase water resources related recreational opportunities. More surface area will improve aesthetics and increase boating opportunities.

Objective 2.1: Provide adequate water supplies to meet demands. This project will increase the reservoir's water supply yield by an average of 10,500 AFY.

Objective 2.2: Provide clean, safe, reliable drinking water. Anderson Reservoir is used for drinking water treatment plant supply that benefits all of Santa Clara County. Restoring full operating capacity to the reservoir will increase the storage available to manage drinking water quality.

Objective 2.3: Minimize vulnerability of infrastructure to catastrophes and security breaches. The seismic retrofit is designed to ensure that Anderson Dam can withstand the maximum probable earthquake and the probable maximum flood.

Objective 2.6: Expand water storage and conjunctive management of surface and groundwater. The project provides additional storage and yield to support Santa Clara Valley Water District's (SCVWD's) ongoing conjunctive management program. Particularly, the project will benefit groundwater in the Santa Clara Valley and Llagas groundwater subbasins by increasing the availability of water for groundwater recharge.

Objective 2.7: Provide for groundwater recharge while protecting groundwater resources from overdraft. Anderson Reservoir is used for groundwater recharge that benefits all of Santa Clara County where groundwater accounts for up to 50 percent of countywide water use. This project will increase the amount of water available for recharge.

Objective 5.1: Protect, restore, and rehabilitate habitat for species protection. The increased storage increases the coldwater pool for summertime releases.

Objective 5.3: Protect and recover fisheries (natural habitat and harvesting). Releases from Anderson Reservoir provide habitat for anadromous fish downstream in Coyote Creek. The increase in operating capacity will increase the coldwater pool available for summer releases.

Project 3: Marin Municipal Water District – Marin 2020 Turf Replacement Project

The Project aligns with regional priority needs in the Bay Area IRWM Plan as follows:

Objective 1.1: Work with local land, water, wastewater and stormwater agencies, project proponents and other stakeholders to develop policies, ordinances and programs that promote IRWM goals, and to determine areas of integration among projects. This project will support and promote the goals of the water agencies in the Sonoma-Marin Water Saving Partnership, local municipalities, Marin County Storm Water Pollution Prevention Program, California Native Plant Society, Sustainable Marin, Marin Conservation League, as well as enlisting property and landscape managers to help achieve project objectives. Marin Municipal Water District (MMWD) currently collaborates with all of these groups, and approves all commercial landscape construction plans on behalf of local municipalities required to comply with MMWD's conservation code.

Objective 1.2: Encourage implementation of integrated, multi-benefit projects. This project will benefit the stakeholders listed under Objective 1.1 above by achieving real environmental improvements, generating sustainable economic activity, and creating a highly visible community-wide model of sustainable landscape practices.

Objective 2.1: Provide adequate water supplies to meet demands. This project will improve water supply reliability under immediate and long-term drought conditions by permanently reducing commercial, industrial, and institutional (CII) landscape irrigation demand by 18.1 AF each year, thereby freeing up 18.1 AF of potable water annually.

Objective 2.4: Implement water use efficiency to meet or exceed state and federal requirements. This project will contribute to the goal of improving water supply reliability and assist the district in meeting the 20 x 2020 targets required under SBX7-7. Converting non-functional CII turf to low water use landscape will help the district meet the SBX7-7 targets by materially reducing the per capita demand for potable water.

Objective 3.2: Maintain health of watershed vegetation, land cover, natural stream buffers and floodplains, to improve filtration of point and nonpoint source pollutants. This project will improve filtration of point and nonpoint source pollutants by replacing turf areas with landscapes using low impact design and development principles and the Bay-Friendly Landscape practices that include sheet mulching turf in place, use of native and low water use plant species, recycling green waste, elimination of toxic chemical fertilizers and pesticide use, and creating land contours that infiltrate rainfall onsite.

Objective 3.3: Minimize point-source and non-point-source pollution. This project will reduce the non-point-source pollution generated by runoff, overspray, and leaks from overhead irrigation systems currently used to irrigate 443,000 square feet of CII turf. This project will reduce the volume of irrigation runoff entering the environment by replacing commercial turf grass with native and climate appropriate landscaping. As such, it will reduce the amount of pollutants in irrigation runoff that is discharged to downstream water bodies. Reducing the load of nutrients and other pollutants discharged to water bodies would reduce concentrations of such pollutants in those water bodies to some degree.

Objective 3.6: Improve infiltration capacity. This project will improve infiltration capacity by replacing turf areas with landscapes using the best management practices required by MMWD code, which follow low impact design and development principles and the Bay-Friendly Landscape practices that include sheet mulching turf in place, use of native and low water use plant species, recycling green waste, elimination of toxic chemical fertilizers and pesticide use, and creating land contours that infiltrate rainfall onsite.

Objective 5.1: Protect, restore, and rehabilitate habitat for species protection. This project will create an additional 23 acres of urban landscape habitat for pollinating insects, birds, and other invertebrate species. Properties adjacent to creeks, rivers, and baylands will directly benefit natural wetland habitats by increasing the availability of food and cover, and eliminating the frequent noise and pollution caused by turf maintenance operations.

Objective 5.2: Enhance wildlife populations and biodiversity (species richness). Species richness will be enhanced by replacing the current turf monoculture with a palette of native and climate adapted plants.

Objective 5.4: Reduce geographic extent and spread of pests and invasive species. The current turf monoculture will be replaced with non-invasive native plants and climate adapted plants.

Project 4: City of East Palo Alto – East Palo Alto Groundwater Supply Project

The Project aligns with regional priority needs in the Bay Area IRWM Plan as follows:

Objective 1.2: Encourage implementation of integrated, multi-benefit projects. This project has multiple benefits, including (1) emergency preparedness, (2) drought preparedness, (3) increased local water supply reliability and delivery of safe drinking water, (4) groundwater management, (5) water quality improvement, (6) increased drinking water treatment and distribution, (7) resilience to climate change, and (8) direct benefit to a DAC.

Objective 1.3: Plan for and adapt to more frequent extreme climate events. By expanding its water supply portfolio to include the conjunctive use of groundwater, the City will be better prepared to withstand future droughts.

Objective 1.7: Avoid disproportionate impacts to disadvantaged communities. This project will have major benefits to DAC neighborhoods as it will increase system pressures in those neighborhoods, improve fire flow, reduce drought hardships, and reduce the cost of water.

Objective 1.11: Minimize health impacts associated with polluted water. By treating groundwater produced at two new wells proposed under this project, the City will ensure that it is meeting all primary and secondary CA maximum contaminant levels (MCLs). Further, this project provides the City with an alternate source of high quality water to meet customer needs in the event of water quality breaches on the SFPUC regional system, the current single water supplier for the City.

Objective 2.1: Provide adequate water supplies to meet demands. The City's normal year supply deficit will be 1,200 AFY by 2030; drought shortfalls will be even greater. This project is intended to augment the City's supply portfolio by 800 to 1,200 AFY through conjunctive use of groundwater to augment the City's allocation from the SFPUC regional system.

Objective 2.2: Provide clean, safe, reliable drinking water. This project will augment the City's drinking water supplies with water that meets all primary and secondary MCLs. This project will also buffer the City and its customers against water quality breaches on the SFPUC regional system, such as occurred on March 3, 2015, and other potential supply disruptions.

Objective 2.3: Minimize vulnerability of infrastructure to catastrophes and security breaches. Currently the City has no emergency storage or functioning interties that feed its system, which means that if a catastrophic event disrupted its supply from the SFPUC regional system, the City residents and businesses would have no water. This project would create additional local supply that will boost system pressures and serve as an emergency supply.

Objective 2.6: Expand water storage and conjunctive management of surface and groundwater. Reduced use of groundwater in wet and normal years will allow the basin to recharge, such that groundwater is available to augment the City's supply during drought years, support summer peaking demands, and provide water in the event of an emergency.

Objective 2.7: Provide for groundwater recharge while protecting groundwater resources from overdraft. By developing a GWMP and the associated groundwater monitoring and management program, including the installation of a monitoring network, this project will help protect the groundwater resources against overdraft, pollution, degradation or other impairments such as saline intrusion.

Project 5: San Mateo County RCD – Coastal San Mateo County Drought Relief Phase II

The Project aligns with regional priority needs in the Bay Area IRWM Plan as follows:

Objective 1.1: Work with local land, water, wastewater and stormwater agencies, project proponents and other stakeholders to develop policies, ordinances and programs that promote IRWM goals, and to determine areas of integration among projects. This project is a widely supported partnership between Trout Unlimited and American Rivers, coordinated and managed by the San Mateo County Resource Conservation District to enhance water-related resources and balance competing demands on limited water resources in the coastal watersheds of San Mateo County.

Objective 1.2: Encourage implementation of integrated, multi-benefit projects. Project benefits will be seen throughout the watershed at 18 sites. There will also be benefits to upstream and downstream resources.

Objective 1.4: Reduce energy use and/or use renewable resources where appropriate. The project includes fixing broken pipes and leaks and improving water efficiency.

Objective 1.8: Promote community education, involvement and stewardship. This project will improve drought resilience and protect aquatic resources through water conservation improvements.

Objective 1.10: Enhance monitoring network and information sharing to support proper management of watersheds. The project involves the coordination of water management among a variety of community stakeholders.

Objective 1.13: Increase water resources related recreational opportunities. The project will provide a more reliable drinking water supply to residents and visitors seeking recreational activities.

Objective 2.1: Provide adequate water supplies to meet demands. This project will help insure local water supplies can meet demands.

Objective 2.2: Provide clean, safe, reliable drinking water. The project will provide a more reliable drinking water supply.

Objective 2.6: Expand water storage and conjunctive management of surface and groundwater. The project will expand water storage and conjunctive management of surface and groundwater.

Objective 5.1: Protect, restore, and rehabilitate habitat for species protection. The project will better manage stream flows and implement riparian habitat restoration projects in a manner that protects and restores important stream habitat for coho salmon, steelhead trout, California red legged frog, San Francisco garner snake, and other species.

Objective 5.2: Enhance wildlife populations and biodiversity (species richness). See Objective 5.1 above.

Objective 5.3: Protect and recover fisheries (natural habitat and harvesting). See Objective 5.1 above.

Objective 5.4: Reduce geographic extent and spread of pests and invasive species. See Objective 5.1 above.

Project 6: State Coastal Conservancy – San Francisquito Creek Flood Protection and Ecosystem Restoration Project

The Project aligns with regional priority needs in the Bay Area IRWM Plan as follows:

Objective 1.1: Work with local land, water, wastewater and stormwater agencies, project proponents and other stakeholders to develop policies, ordinances and programs that promote IRWM goals, and to determine areas of integration among projects. This project combines the interests of the cities of Palo Alto, Menlo Park, and East Palo Alto, the San Mateo County Flood Control District, and the Santa Clara Valley Water District. In addition, this project is part Santa Clara County’s voter-approved Safe, Clean Water and Natural Flood Protection Program.

Objective 1.5: Plan for and adapt to sea level rise. This project will provide protection against a 1% fluvial event coincident with a 1% tide, with accommodation for 26 inches of projected sea level rise and FEMA freeboard requirements on San Francisquito Creek between East Bayshore Road and the San Francisco Bay.

Objective 1.6: Secure adequate support, funding and partnerships to effectively implement plan. The project builds partnerships, develops technical expertise, and provides funding to effectively begin implement the shoreline resiliency elements of the Bay Area IRWM plan.

Objective 1.7: Avoid disproportionate impacts to disadvantaged communities. The majority of residential homes at risk of flooding from the East Bayshore Road to the San Francisco Bay are located in East Palo Alto (a DAC).

Objective 1.13: Increase water resources related recreational opportunities. The project will increase the width of the paved or gravel recreational trails at strategic locations to provide pull out points for pedestrians or bicyclists to let maintenance vehicles travelling along the levee to pass. Benches and interpretive panels will be placed at the footing of the existing Friendship Bridge on the East Palo Alto side, on the new “island” created at the existing south footing of the Friendship Bridge, and on the new levee on the Palo Alto side.

Objective 3.1: Protect, restore, and rehabilitate watershed and bay processes. The project will create approximately 16 acres of new or improved mid-marsh habitat, and an estimated 4.0 acres of new or improved low-marsh habitat.

Objective 3.2: Maintain health of watershed vegetation, land cover, natural stream buffers and floodplains, to improve filtration of point and nonpoint source pollutants. See Objective 3.1 above.

Objective 3.3: Minimize point-source and nonpoint-source pollution. This project will reduce flood-related debris and pollutant loading in San Francisquito Creek and the San Francisco Bay. Also, it will completely eliminate flooding through the 100-year fluvial event coincident with the 100-year high tide, taking into account a potential 26-inch rise in sea level over the next 50 years.

Objective 3.4: Control excessive erosion and manage sedimentation. The new channel design is expected to result in reduced sedimentation throughout the reach, which will generate a reduction in suspended solids. In addition, sediment transport will be improved throughout the project reach, reducing fluvial aggregation and providing a source of sediment to build up high-marsh.

Objective 4.1: Manage floodplains to reduce flood damages to homes, businesses, schools, and transportation. The project has been designed to prevent flooding in a 100-year fluvial event that coincides with the 100-year high tide, taking into account a potential 26-inch rise in sea level over the next 50 years.

Objective 5.1: Protect, restore, and rehabilitate habitat for species protection. The project will create increased tidal marshland habitat at appropriate elevations for intertidal wetland plant and animal species. Another benefit will be the restoration of high tide refugial habitat for sensitive wildlife species at the ecotone between tidal wetland and upland habitats.

Objective 5.4: Reduce geographic extent and spread of pests and invasive species. The conversion of low quality floodplain terrace habitat to higher quality marshplain habitat dominated by native tidal salt and brackish marsh species is the key element to the restoration goals of the project.

Project 7: State Coastal Conservancy – Mountain View Shoreline Portion of SBSPR Project

The Project aligns with regional priority needs in the Bay Area IRWM Plan as follows:

Objective 1.1: Work with local land, water, wastewater and stormwater agencies, project proponents and other stakeholders to develop policies, ordinances and programs that promote IRWM goals, and to determine areas of integration among projects. This project is a component of a Resilience Program that is highly collaborative, involving a diverse partnership of flood protection, habitat restoration, and wastewater entities.

Objective 1.2: Encourage implementation of integrated, multi-benefit projects. The project is an innovative multi-benefit shoreline flood protection, habitat restoration, wastewater and sediment reuse project that will demonstrate proactive solutions to climate change in the region.

Objective 1.5: Plan for and adapt to sea level rise. Resilience features of this project include creation of upland transition zones with slope ratios of up to 30:1 to buffer ecosystems and provide resilience to sea level rise by providing wetland migration accommodation space and reducing wave run-up impacts for adjacent levees.

Objective 1.6: Secure adequate support, funding and partnerships to effectively implement plan. The project builds partnerships, develops technical expertise, and provides funding to effectively begin implement the shoreline resiliency elements of the Bay Area IRWM plan.

Objective 1.8: Promote community education, involvement and stewardship. Viewing and interpretative platforms and trails will be established to improve recreation and public access to the pond cluster.

Objective 1.13: Increase water resources related recreational opportunities. See Objective 1.8 above.

Objective 3.1: Protect, restore, and rehabilitate watershed and bay processes. The project area consists of a cluster of former salt ponds, the levees surrounding each pond, and fringe marsh outside of the pond and slough levees. Restoration activities include breaches of levees at various locations which will restore bay functioning at the project site.

Objective 3.2: Maintain health of watershed vegetation, land cover, natural stream buffers and floodplains, to improve filtration of point and nonpoint source pollutants. The project improves and restores functioning of natural baylands that buffer coastal flooding and storm surge, provide valuable habitat and vegetative cover for wildlife and filtrate non-point source pollutants.

Objective 3.3: Minimize point-source and nonpoint-source pollution. Wetland systems absorb nutrients and other pollutants, polishing and sequestering them in marsh soils. The project will increase water quality for San Francisco Bay.

Objective 3.4: Control excessive erosion and manage sedimentation. Enhanced tidal/fluvial connections will increase natural sediment delivery to the marshes.

Objective 3.5: Improve floodplain connectivity. The restoration of tidal marshes will enhance tidal and fluvial connections.

Objective 3.6: Improve infiltration capacity. Enhanced tidal/fluvial connections will help alleviate upstream flooding and improve local water quality.

Objective 4.1: Manage floodplains to reduce flood damages to homes, businesses, schools, and transportation. Restoration of over 800 acres of tidal marsh habitat will provide an estimated 1.5 miles of shoreline protection, helping prevent flooding to the communities of Mountain View and Palo Alto comprising thousands of businesses and homes.

Objective 4.2: Achieve effective floodplain management that incorporates land use planning and minimizes risks to health, safety and property by encouraging wise use and management of flood-prone areas. The project pairs land use planning focused on reducing civic flood risks with natural area and floodplain management in an area vulnerable to storms and sea-level rise.

Objective 4.3: Identify and promote integrated flood management projects to protect vulnerable areas. Tidal wetland restoration has been incorporated into the flood risk reduction elements in order to make a more resilient shoreline.

Objective 5.1: Protect, restore, and rehabilitate habitat for species protection. This project includes creation of wildlife habitat features and other levee alterations to improve the overall ecological conditions.

Objective 5.3: Protect and recover fisheries (natural habitat and harvesting). Enhanced tidal/fluvial connections will provide fisheries habitat on a known salmonid stream.

Project 8: State Coastal Conservancy – Eden Landing Portion of SBSPR Project

The Project aligns with regional priority needs in the Bay Area IRWM Plan as follows:

Objective 1.1: Work with local land, water, wastewater and stormwater agencies, project proponents and other stakeholders to develop policies, ordinances and programs that promote IRWM goals, and to determine areas of integration among projects. This project is a component of a Resilience Program that is highly collaborative, involving a diverse partnership of flood protection, habitat restoration, and wastewater entities.

Objective 1.2: Encourage implementation of integrated, multi-benefit projects. The project is an innovative multi-benefit shoreline flood protection, habitat restoration, wastewater and sediment reuse project that will demonstrate proactive solutions to climate change in the region.

Objective 1.5: Plan for and adapt to sea level rise. This large-scale tidal wetland restoration (over 2,000 acres) will be implemented in conjunction with an innovative bayside berm approach (a FEMA-compliant feature that functions like a natural barrier island) to provide flood protection. Restored interior wetlands will dampen the incoming tides, allowing inner levees within the ponds to be subject to much lower water levels and wave heights, thereby providing multiple layers of tidal flood protection.

Objective 1.6: Secure adequate support, funding and partnerships to effectively implement plan. The project builds partnerships, develops technical expertise, and provides funding to effectively begin implementing the shoreline resiliency elements of the Bay Area IRWM plan.

Objective 1.8: Promote community education, involvement and stewardship. This project can involve community-based restoration in partnership with Save the Bay.

Objective 1.13: Increase water resources related recreational opportunities. This project will improve alignments of the Bay Trail.

Objective 3.1: Protect, restore, and rehabilitate watershed and bay processes. This project will restore over 2,000 acres of tidal marsh and create an innovative bayside berm for flood protection.

Objective 3.2: Maintain health of watershed vegetation, land cover, natural stream buffers and floodplains, to improve filtration of point and nonpoint source pollutants. See Objective 3.1 above.

Objective 3.3: Minimize point-source and nonpoint-source pollution. Wetland systems absorb nutrients and other pollutants, polishing and sequestering them in marsh soils. The project will increase water quality for San Francisco Bay.

Objective 3.5: Improve floodplain connectivity. The restoration of tidal marshes will enhance tidal and fluvial connections, in particular restoring tidal flow connections to lower Alameda Creek.

Objective 4.1: Manage floodplains to reduce flood damages to homes, businesses, schools, and transportation. This project will provide flood protection for thousands of homes and businesses.

Objective 4.3: Identify and promote integrated flood management projects to protect vulnerable areas. See Objective 4.1 above.

Objective 5.1: Protect, restore, and rehabilitate habitat for species protection. Restored interior wetlands will dampen the incoming tides, allowing inner levees within the ponds to be subject to much lower water levels and wave heights, thereby providing vastly improving habitat values and increasing potential rearing habitat for steelhead trout.

Objective 5.3: Protect and recover fisheries (natural habitat and harvesting). This project will create new connections between the Alameda Creek anadromous fishery and the San Francisco Bay.

Project 9: State Coastal Conservancy – Novato Creek Flood Protection and Habitat Enhancement Project

This project align with regional priority needs in the Bay Area IRWM Plan as follows:

Objective 1.1: Work with local land, water, wastewater and stormwater agencies, project proponents and other stakeholders to develop policies, ordinances and programs that promote IRWM goals, and to determine areas of integration among projects. This project is component of a Resilience Program that is highly collaborative, involving a diverse partnership of flood protection, habitat restoration, and wastewater entities.

Objective 1.2: Encourage implementation of integrated, multi-benefit projects. The project is an innovative multi-benefit shoreline flood protection, habitat restoration, wastewater and sediment reuse project that will demonstrate proactive solutions to climate change in the region.

Objective 1.3: Plan for and adapt to more frequent extreme climate events. This project will demonstrate multi-objective benefits for both habitat enhancement and flood control by combining urban flood protection for downtown Novato with shoreline and habitat adaptation to sea level rise.

Objective 1.5: Plan for and adapt to sea level rise. Novato Creek Phase I would include construction of 4,500 linear feet of new sea level rise adaptive setback levees designed with ecotone transition habitat and relocation and consolidation of existing stormwater pumping facilities to respond to sea level rise conditions.

Objective 1.6: Secure adequate support, funding and partnerships to effectively implement plan. The project builds partnerships, develops technical expertise, and provides funding to effectively begin implementing the shoreline resiliency elements of the Bay Area IRWM plan

Objective 1.8: Promote community education, involvement and stewardship. Both projects can involve community-based restoration in a collaboration with Students and Teachers Restoring A Watershed (STRAW).

Objective 1.13: Increase water resources related recreational opportunities. The Bel Marin Keys Wetland Restoration project will include ¼ mile of new Bay Trail.

Objective 3.1: Protect, restore, and rehabilitate watershed and bay processes. Both projects include innovative shoreline flood protection and habitat restoration.

Objective 3.2: Maintain health of watershed vegetation, land cover, natural stream buffers and floodplains, to improve filtration of point and nonpoint source pollutants. Novato Creek Phase I would restore approximately 80 plus acres of former tidal marsh. The Bel Marin Keys Wetland Restoration project will develop approximately 360 acres of seasonal wetlands.

Objective 3.4: Control excessive erosion and manage sedimentation. Both projects would include the beneficial reuse of dredged sediment from regional dredging projects.

Objective 3.5: Improve floodplain connectivity. Novato Creek Phase I would reconnect approximately 80 plus acres of tidal wetlands and floodplain in Deer Island to Novato Creek. The Bel Marin Keys Wetland Restoration project will construct a new flood management levee to separate tidal and nontidal areas.

Objective 3.6: Improve infiltration capacity. See Objective 3.2 above.

Objective 4.1: Manage floodplains to reduce flood damages to homes, businesses, schools, and transportation. Novato Creek Phase I would provide flood protection for City of Novato. The Bel Marin Keys Wetland Restoration project will construct a new flood management levee to assist in the protection of the adjacent Bel Marin Keys residential community with 700 homes from flooding.

Objective 5.1: Protect, restore, and rehabilitate habitat for species protection. Novato Creek Phase I would restore approximately 80 plus acres of former tidal marsh along the freshwater/saltwater mixing gradient and reestablish important ecological function and fluvial processes with the historic floodplain. The Bel Marin Keys Wetland Restoration project will construct flood protection necessary to restore a mix of wetlands habitats on the 1576-acre Bel Marin Keys property, preparing the site for seasonal and tidal marsh restoration.



Appendix F-1

Projects Added to the 2013 Bay Area IRWMP by the Coordinating Committee on May 28, 2014

Appendix F-1: Projects Added to the Plan

In anticipation of a third round of Proposition 84 funding, the Coordinating Committee in early 2014 solicited regional and subregional project concept proposals. The solicitation resulted in a total of 54 projects submitted, with the total amount sought for funding exceeding \$420 million. These projects were then scored using 10 factors that had been developed for this concept proposal solicitation. Table F-1-1 lists the scoring factors and potential score for each factor. In some cases just a yes or no answer was all that was required.

Subsequent to the scoring, statewide drought legislation was passed and DWR essentially divided the third round in two parts with the first specifically addressing the drought. The Coordinating Committee then evaluated and rescored the submitted regional and subregional concept proposals as to how they would respond to the drought. The Bay Area regional factors in Table F-1-1 as well as scoring criteria developed after review of the DWR's Drought Solicitation Guidelines and Draft Proposal Solicitation Package (PSP) were key in selecting projects to include in the Drought Solicitation Proposal.

The eight projects listed in Table F-1-2 were ranked highly both because of Plan priorities and drought specific needs and are hereby added to the Plan. Submitted project concept proposals not evaluated for the Drought Round are being carried forward for evaluation under DWR's anticipated final Prop 84 IRWM round in 2015.

Table F-1-1: Project Scoring Factors

Factor	Criteria	Scoring (or yes or no)
1	In the Plan?	(Y/N)
	Goals/Objectives	1 to 3 points (Total of 200 points allocated among the 5 goals; 10 points per objective until 40 points maximum per goal [for flood goal, 40 points if all objectives addressed]) Tier into 3 categories: 1 – 1-66 of 200 2 – 67-123 of 200 3 – 124-200 of 200
2	Readiness to proceed	1 to 3 points 1 – Conceptual or early planning 2 – In CEQA or final design phase 3 – CEQA and all permitting complete – can start construct before April 2015
3	Provides 25% match?	(Y/N)
4	Provides at least two physical benefits?	(Y/N)
	Physical benefits	1 to 3 points 1 - Does not discuss benefits or evidence of minor benefits for project type 2 - Evidence of moderate benefits for project type 3 - Evidence of high level of benefit for project type
5	Benefit-Cost	1 to 3 points 1 - Not discussed or B/C below 1 2 - B/C between 1-3 3 - B/C above 3
6	Cash for consultant to prepare proposal?	(Y/N)
7	Collaboration with other entities	1 to 3 points 1 - Does not discuss or only narrow collaboration 2 - Moderate level of partners, some limitations to partnership 3 - Broad collaboration appropriate to project type
8	Degree of integrated benefits	1 to 4 points 1 - Benefits in only one FA or resource area 2 - Benefits 2 FAs or resource areas 3 - Benefits in 3 FAs or resource areas 4 - Benefits in 4 FAs or resource areas
9	Proposal indicates scalability?	(Y/N)
10	Regionality (for regional proposals only)	1 to 3 points 1 - Does not discuss or constrained to approx 1/3 of relevant part of region or less 2 - Brings benefits to a significant proportion of relevant region (up to 2/3) 3 - Benefits large portions in nearly all of relevant regions

Table F-1-2: Projects Added and Project IRWMP Factors Score

	Project	Total IRWMP Factors Score
1	Bay Area Regional Water Supply and Conservation Project	16.8 / 21
2	Bay Area Regional Recycled Water Project: <ul style="list-style-type: none"> • Calistoga Recycled Water Storage Facility • Continuous Recycled Water Production Facilities and Wolfe Road Recycled Water Pipeline Extension 	16.7 / 21
3	Drought Response & Water Supply Reliability on the Central Coast	13.2 / 18
4	Enhancing and Balancing Beneficial Uses of Water Resources in the Pescadero-Butano Watershed	13.1 / 18
5	Lower Cherry Aqueduct Emergency Rehabilitation Project	12.3 / 21
6	MMWD WaterSMART Irrigation with AMI/AMR	11.5 / 18
7	Rinconada Water Treatment Plant Powdered Activated Carbon (PAC) Treatment for Drought Water Quality Conflicts	9.6 / 18
8	Zone 7 Water Supply Drought Preparedness Project	12.6 / 18



2013

Appendix F-2

Projects Added to the 2013 Bay Area IRWMP by the Coordinating Committee on May 26, 2015

Appendix F-2: Projects Added to the Plan

The California Department of Water Resources (DWR) issued a Draft Implementation Grant Project Solicitation Package on March 12, 2015 which identified eligible projects and presented a draft scoring system for a fourth round of Proposition 84 funding, the 2015 IRWM Implementation Grant Solicitation. The Bay Area Coordinating Committee solicited regional and subregional project concept proposals via a spring solicitation. The solicitation resulted in a total of 45 project concepts submitted.

These 45 submitted project concepts were then reviewed and ranked by the Project Screening Committee (PSC), using the scoring matrix identified in the project solicitation. The matrix, presented in Table F-2-1, lists the scoring factors and potential score for each factor. In some cases just a yes or no answer was all that was required.

Numerous conceptual, hybrid, and feasible options for proposal composition were developed by the PSC in order to utilize the project scoring and ranking, and to adhere to established project selection principles, including: 1) Fair and equitable allocation of funds throughout the Region, Sub-regions, and Functional Areas; 2) Maintaining stakeholder engagement throughout the Sub-regions and Functional Areas; 3) Meeting DWR grant criteria are met, assuring a successful proposal; 4) Efficient use of resources (related to total number of projects in proposal).

The three projects listed in Table F-2-2 were ranked highly under the Bay Area Coordinating Committee's 2015 project solicitation and PSC review process, support Plan priorities and Bay Area project selection principles, and are hereby added to the Plan.



Table F-2-1: Project Scoring Factors

Factor	Criteria	Scoring (or yes or no)
1	In the Plan?	(Y/N)
	Goals/Objectives	1 to 3 points (Total of 200 points allocated among the 5 goals; 10 points per objective until 40 points maximum per goal [for flood goal, 40 points if all objectives addressed]) Tier into 3 categories: 1 – 1-66 of 200 2 – 67-123 of 200 3 – 124-200 of 200
2	Readiness to proceed	1 to 3 points 1 – Conceptual or early planning 2 – In CEQA or final design phase 3 – CEQA and all permitting complete – ready to proceed.
3	Provides 25% match?	(Y/N)
4	Provides two physical benefits?	(Y/N)
	Physical Benefits	1 to 6 points 1 - Does not discuss benefits or evidence of minor benefits for project type 3 - Evidence of moderate benefits for project type 6 - Evidence of high level of benefit for project type
5	Benefit-Cost	1 to 3 points 1 - Not discussed or B/C below 1 2 - B/C between 1-3 3 - B/C above 3
6	Cash for consultant to prepare proposal?	(Y/N)
7	Collaboration	1 to 3 points 1 - Does not discuss or only narrow collaboration 2 - Moderate level of partners, some limitations to partnership 3 - Broad collaboration appropriate to project type
8	Degree of integrated benefits	1 to 4 points 1 - Benefits in only one FA or resource area 2 - Benefits 2 FAs or resource areas 3 - Benefits in 3 FAs or resource areas 4 - Benefits in 4 FAs or resource areas
9	Proposal indicates scalability?	(Y/N)
10	Impact/Effect	1 to 3 points 1 - Does not discuss or impact constrained to approx 1/3 of relevant part of region or less; no relevance to regional priorities 2 - Brings benefits to a significant proportion of relevant region (up to 2/3); somewhat relevant to regional priorities 3 - Benefits large portions in nearly all of relevant region; highly relevant to regional priorities



Table F-2-2: Projects Added and Project IRWMP Factors Score

	Project	Total IRWMP Factors Score
1	Bay Area Regional Shoreline Resilience Program	22.86
2	Coastal San Mateo County Drought Relief Phase II	17.40
3	2020 Turf Replacement Project	16.00