CHAPTER 10: FINANCE

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TABLES

Funding is the primary obstacle in the Santa Cruz Region for implementing many of the projects and programs in Integrated Regional Water Management (IRWM) Plan. The challenge of securing adequate funding for integrated planning and project implementation is not unique to Santa Cruz; it is a significant obstacle statewide and is one of the primary topics addressed in the California Water Plan Update 2013. It is evident that the need for funding substantially exceeds the grant funding available through state bond measures and the prospect of future bond funding remains uncertain. The Santa Cruz Region's success to date in securing local and state funding to support IRWM planning and implementation efforts supported the completion of numerous high priority projects that have incrementally advanced the Region's progress towards the goals of the IRWM Plan. However, to continue this progress, it will require significant investment in planning and capital costs from project construction as well as ongoing funding for operation and maintenance. While future state and federal funding are anticipated to continue to be a source of supplementary funds, the bulk of the cost of developing, maintaining, and implementing the IRWM Plan will be borne by local entities. The total cost of the projects in the 2014 Plan is more than $256,000,000, the individual project costs range from $75,000 to $90,000,000 with a median of $1,000,000.

As described in the following Chapter, the financing of the IRWM Plan has been considered at a programmatic level by the Regional Water Management Group (RWMG) to evaluate various potential funding mechanisms and sources to developing, maintaining, and implementing an IRWM Plan. This Chapter provides a program-level description of the sources of funding that will be utilized for the development and ongoing funding of this IRWM Plan, and the potential funding sources for projects and programs that implement the IRWM Plan.

Table 10 - 1 IRWM Grants Awarded to the Santa Cruz IRWM Region

Grant Program	Grant Amount	Local Match
IRWM Implementation Grant (SWRCB, Prop 50)	$12,500,000	$13,818,205
Proposition 84 IRWM Planning Grant (DWR, Prop 84)	$999,750	$391,028
DAC Outreach Pilot Project Grant (DWR, Prop 84)	$100,000	$0

10.1 ONGOING SUPPORT FOR THE IRWM PLANNING AND EFFORTS

Historically, financial support for IRWM Plan development in the Santa Cruz IRWM Region has come from the participating agencies in the Regional Water Management Group (RWMG). The 2005 Northern Santa Cruz IRWM Plan was funded by contributions from the participating agencies. The 2014 Plan update was funded primarily through Proposition 84 IRWM Planning Grant funds with local assistance from the RWMG. Going forward, the RWMG recognizes that most of the cost to maintain IRWM efforts must come from its member agencies. A demonstration of a commitment to IRWM efforts is the financial contributions ranging from $5,000 - $10,000 from each of the RWMG agencies (excluding the Davenport County Sanitation District) to the Regional Water Management Foundation for a total combined annual contribution of $75,000 for fiscal year 2013-2014 and 2014-2015 to fund staff efforts for IRWM coordination. This enables RWMF staff to provide programmatic IRWM coordination, assistance to the IRWM Steering Committee, support with IRWM planning efforts, conduct outreach

locally as well as to state agencies, and support the region's preparation for future funding opportunities. Following the completion of the 2014 Plan Update, as both the local and state IRWM efforts continue to evolve, the Santa Cruz Region will continue to assess the most feasible and equitable methods to fund IRWM efforts through a variety of avenues as outlined below.

10.2 FUNDING SOURCES FOR PROJECTS/PROGRAMS THAT IMPLEMENT THE IRWM PLAN

State grants through voter-approved bonds have funded a number of IRWM projects. Table 10-1 shows prior IRWM grant awards to the Region. Other grant sources and funding mechanisms have been utilized to implement other projects contained in the IRWM Plan. In-kind services play a large role in project implementation, supporting the technical and administrative oversight required by the projects and the grants themselves.

The majority of the project proponents have not yet successfully identified local funding sources to support implementation of their proposed projects. The combined estimated costs of the projects within the plan is more than $256 million. Most of the projects included within the Santa Cruz IRWM Plan were submitted with the recognition that additional funding from sources such as those listed below will be required for implementation. It should also be recognized that statewide from 1995-2010, 84% of water project funding has come from local sources[1]

Each implementing organization has a unique set of revenue and financing methods and sources. This Plan does not provide an exhaustive list of funding sources available. Potential funding sources for implementing projects are listed in Table 10-2, and the funding mechanisms are further described below. Many of the local funding sources require some sort of approval by the ratepayers as specified in Proposition 218.

Table 10 - 2 Potential Sources of Funding

Funding Mechanisms	Project/ Program Implementation	Project O&M	Certainty & Longevity of Funding
User Rates/User Fees	X	X	Dependent upon rate structure adopted by project proponents
Capacity/Impact Fees	X	X	Dependent upon rate structure adopted by project proponents
Special Assessments	X	X	Dependent upon the ability to demonstrate direct and unique benefits to parcels. Once in place this represents high certainty of funding.
General or Capital Improvement Funds	X		Dependent upon budgets adopted by project proponents and participating agencies
Revenue Bonds	X		Dependent upon debt carried by project proponents, revenue stream, and bond market

[1] California Water Plan Update, 2013.

Funding Mechanisms	Project/ Program Implementation	Project O&M	Certainty & Longevity of Funding
Local, State, or Federal Grant Programs	X		Dependent upon future local, state, and federal budgets, and success in application process
Low-interest Loan Programs	X		Dependent upon future local, state, and federal budgets, and success in application process
Private Philanthropic Funding	X		Dependent on willingness of donors, and success of outreach

Raterpayer Fees and Users Fees

Ratepayer and user fees provide a source of revenue for a water agency or districts for the operation and maintenance of the water system infrastructure. The fee charged to users typically includes a fixed cost component for providing service that does not vary with depending upon the amount of supplied water and a variable cost component that is based upon on the amount of water supplied and includes the associated costs (e.g., pumping, electrical, treatment costs). Customers typically pay a monthly or bi-monthly fixed rate and a variable rate based on the metered usage.

Tiered water rates have a variable fee increases with water consumption. Rates may also vary in response emergency water shortages, such as droughts. For example, in response to the 2013 – 2014 drought, user rates at some agencies in the Region have increased in response to water cutbacks and the need to maintain operating revenue. As users conserve more water, the agency generates less revenue based upon decreased water supplied but the operational costs of maintaining the system do not decrease accordingly.

Regional stakeholders understand the need to fully vet projects before passing the costs of projects on to ratepayers in the form of increased water and wastewater rates. Additionally, regional stakeholders have expressed the need for projects designed to address existing water management needs to be economically sustainable given the population and ratepayer base. As such, the certainty of funding for projects which propose rate increases will be largely dependent on the support garnered for the project and ratepayers' understanding of the project need. Increases in user rates require approval by ratepayers through an opportunity to protest rate increases, as provided under Proposition 218.

Capacity/Impact Fees

Capacity fees are charged to users who create new or additional demand on water or wastewater systems. They are typically charged per connection. A water demand offset charge is another example of a water impact charge. Impact fees can also be charged to offset the costs and/or fund mitigation of other potential impacts such as parks, transportation, drainage, or ecosystem services.

California law requires that these charges comply with the Impact Fee Mitigation Act (AB1600, Government Code 66000 et seq.), which states that there needs to be nexus between the connection and costs, and that fees should be proportionate to the cost of providing service.

Special Assessments

When a government agency funds a public project that provides a direct and unique benefit to certain parcels, the agency can assess a charge against those parcels as compensation for the benefit. The

amount of the assessment is limited by the measurable benefit or increase in value provided to the parcel, and must be approved by a two-thirds majority of voters or a weighted majority of property owners, depending on the type of fee.

As the region works to address critical flood management needs, it may benefit from the formation of a Flood Control Zone or a Joint Powers Authority (JPA) comprised of agencies with authority over flood management. The Flood Control Zone or JPA could focus on the creation of drainage areas, flood control zones, and other special assessment areas to support design, construction, and maintenance of flood and stormwater management facilities that would reduce flood hazard for the parcels in that zone.

General or Capital Improvement Funds

General or capital improvement funds are monies that an agency sets aside to fund general operations and/or facility improvements, upgrades, and at times development. These funds are usually part of the overall revenue stream and may or may not be project specific.

Revenue Bonds

In cases in which large facilities are needed to support current services and future growth, revenue bonds may be issued to pay for new capital. In this way, large facilities can be paid for by bonded debt service at the time of construction with repayment of the debt service over a 20- to 30-year timeframe. This is a preferred approach to paying for high-cost facilities because it avoids the perceived over-collection of fees from past customers that go toward facilities that serve present and future customers. The drawback to bonded debt is that it cannot be accomplished with capacity fees alone due to the variability and uncertainty of new development over time. A user rate is needed as a bond covenant in the event that development fees are not adequate to make the required annual payment for the debt service.

Private Philanthropic Funding

Private funding has been used by non-governmental entities and small districts such as the Resource Conservation District to conduct studies and develop new efforts or fund ecosystem restoration projects. The amount of funding available is generally variable and dependent on numerous factors. Private funding was the primary funding source for the Ecosystem Services Valuation described below.

Payments for Ecosystem Services

Payments for ecosystem services (PES), also known as payments for environmental services (or benefits), are incentives paid in exchange for land management or other activities that provide some sort of ecological service. For example, payments could be made to protect forests that filter and clean source water instead of the more traditional approach of building treatment systems for polluted water. In short, payments for ecosystem services promote the conservation of natural resources using market forces.

Twenty-four specific ecosystem services were identified and assessed by the Millennium Ecosystem Assessment,[2] a 2005 UN-sponsored report designed to assess the state of the world's ecosystems. The report defined the broad categories of ecosystem services as food production (in the form of crops, livestock, capture fisheries, aquaculture, and wild foods), fiber (in the form of timber, cotton, hemp, and

[2] "Living Beyond Our Means; Statement from the board of the Millennium Ecosystem Assessment." 2012-07-09.

silk), genetic resources (biochemicals, natural medicines, and pharmaceuticals), fresh water, air quality regulation, climate regulation, water regulation, erosion regulation, water purification and waste treatment, disease regulation, pest regulation, pollination, natural hazard regulation, and cultural services (including spiritual, religious, and aesthetic values, recreation, and ecotourism). Notably, however, there is a "big three" among these 24 services which are currently receiving the most money and interest worldwide.[3] These are climate change mitigation, watershed services, and biodiversity conservation, and demand for these services in particular is predicted to continue to grow as time goes on.

The Resource Conservation District of Santa Cruz County is leading an ecosystem services valuation project entitled, Healthy Lands and Healthy Economies: Demonstrating the Economic Value of Natural Areas and Working Landscapes. This project used the latest advances in natural resource valuation methods and geographic information systems data, this study identified and assigned dollar values to bundles of ecosystem services by land cover type, and it estimated the total asset value of natural system within the County.

Local, State, and Federal Grant Programs

This section describes potential grant programs that may be used to fund, either partially or fully, the projects included in this IRWM Plan. Grant programs typically require local matching funds. The matching fund requirement demonstrates a local commitment to promoting and completing the study or project. Grant programs that have supported and may be assessed for future IRWM funding include the following:

Proposition 50

- California Department of Water Resources (DWR) Water Use Efficiency Grant Programs

Proposition 84

- Department of Water Resources – IRWM Grant Program
- Department of Water Resources – Local Groundwater Assistance Program
- State Water Resources Control Board - Storm Water Grant Program
- State Water Resources Control Board - Agricultural Water Quality Grant Program
- California Department of Public Health (CDPH) Emergency Grants
- Department of Water Resources – Flood Protection Corridor Program
- Department of Water Resources – Urban Streams Restoration Program

Proposition 1E

- DWR Stormwater Flood Management Grant Program
- California State Parks Office of Grants and Local Service Annual Grant Programs
- Habitat Conservation Fund
- Land and Water Conservation Fund

Other State and Federal

- State Water Resources Control Board - Water Recycling Facilities Planning Grant Program

[3] "Paying Farmers for Environmental Services. United Nations Food and Agriculture Office Report." 2012-07-09.

- State Water Resources Control Board - Clean Beaches Initiative Grant Program
- State Water Resources Control Board - Federal 319 Non-Point Source Grant Program
- Regional Water Quality Control Board - Supplemental Environmental Protection (SEP)
- California State Parks Recreational Trails Program
- U.S. Environmental Protection Agency Environmental Justice Grants and Cooperative Agreements
- U.S. Department of Agriculture Rural Development Grant Assistance
- U.S. Economic Development Administration Investment Programs
- U.S. Bureau of Reclamation Title XVI Water Reclamation and Reuse Program

Low-interest Loan Programs

Several funding agencies provide low-interest loans through a revolving fund program for public water system infrastructure needs specific to drinking water. Low interest loans can provide for significant long-term cost savings by reducing interest payments as compared to traditional bonds. Several funding agencies provide low-interest loans through a revolving fund program for public water system infrastructure needs specific to drinking water. Low interest loans can provide for significant long-term cost savings by reducing interest payments as compared to traditional bonds. Through the Clean Water State Revolving Fund (SRF) loan program the SWRCB offers low-interest loans for wastewater and recycled water projects. CDPH administers the Safe Drinking Water SRF loan program for drinking water-related projects. The California Infrastructure and Economic Development Bank (I-Bank) administers the Infrastructure SRF loan program for financing implementation projects such as sewage collection and treatment, water treatment and distribution, and water supply projects.

The Clean Water SRF program generally has approximately $200 to $300 million available in loans each year to help cities, towns, districts, Native American tribal governments, and any designated and approved management agency under Section 208 of the Clean Water Act to construct publicly-owned facilities including wastewater treatment, local sewers, water reclamation facilities, nonpoint source projects, and development and implementation of estuary comprehensive conservation and management plans. The interest rate is half of the most recent General Obligation (GO) Bond Rate at the time of the funding commitment. In recent years, the Clean Water SRF loan interest rate has ranged from 1.8% to 3.0%. Amounts available through the CDPH Safe Drinking Water SRF loan program vary, but $100 to $200 million is typically available each year. Available loan funding is dependent upon federal appropriations to each program.

10.3 OPERATION AND MAINTENANCE FUNDING FOR IMPLEMENTED PROJECTS

Funding for the operation and maintenance (O&M) of projects included in the Santa Cruz IRWM Plan is expected to derive from many of the same sources that were identified to fund project implementation, with the notable exception of IRWM and other grant sources, and most other state financial assistance programs. Support and funding will likely come primarily from local sources, including in-kind support, user rates, user fees and special assessments. Since regional projects and programs often involve multiple partner agencies, the range of local sources available is broadened. The details of funding and financing larger, multi-partner projects are typically worked out on a project-by-project basis. Large multi-purpose projects typically adhere to standard cost accounting and cost of service principles which are generally described and codified in the agreements for ownership, and the operation and maintenance of facilities is typically developed as part of a project financing package.

O&M costs of proposed implementation projects must be evaluated as the overall viability of a particular project is determined. Prior to advancing a project forward to implementation, an analysis must be completed to establish the ability to operate and maintain the project and project benefits following completion. The annual fiscal impact on user rates, and the willingness of ratepayers to accept any increased cost of service as may be required for project implementation, must be included in this analysis.

To improve the region's ability to provide ongoing support to priority projects, agencies and stakeholders in the region should work together to minimize associated O&M costs and gain savings from economies of scale.

10.3.1 EXAMPLES OF PROJECT FINANCING

Table 10-2 below provides an example subset of the project financing information provided by the project proponents for each of the 76 projects in the 2014 IRWM Plan which summarizes the anticipated and potential sources of funding. Table 10-2 is a subset of the projects included in the IRWM Plan; a full listing of the 2014 IRWM projects, including costs and matching funds, is available at www.SantaCruzIRWMP.org.

Each time the IRWM Project List is updated the project financing information will be updated as well. Project cost and the amount and source of matching funds are known for a majority of the projects submitted to the Plan. It is worth noting the substantial levels of matching funds for each project, and the extent to which project proponents seek to develop a diversified funding approach to support each project. Local sources include in-kind services, direct landowner cost-share and user fees. The table shows the approximate total project cost, and when known, the amount and sources of match, and a narrative discussion of the certainty of match.

Table 10 - 3 Example Subset of Project Financing Information

PROJECT TITLE	Project Type	PROJECT PROPONENT	Functional Area	Estimated Project Cost	Estimated Match Contribution	Source(s) of Match	Certainty of Match
Rio Del Mar Flats Stormwater Drainage Project Along Soquel Creek	Implementation	Santa Cruz County Flood Control and Water Conservation District Zone 6	Flood and Stormwater Management	$3,500,000	$1,264,000	Local; Federal; In-Kind	The County has committed to matching $316,000 as local match for a federal grant for implementation of portions of Phase 1 of the project. There is reasonable likelihood the County will receive the grant for federal funding of $948,000 for a total cost of $1,264,000 (for portions of Phase 1 implementation).
Implementation of portions of the Storm Drain Master Plan Recommendations, Santa Cruz Count, Zone 5 & Zone 6	Implementation	Santa Cruz County Flood Control and Water Conservation District Zones 5 and 6	Flood and Stormwater Mgmt.	$16,250,000	$2,000,000	Local; In-Kind	Match funds will be appropriated once the flood control districts and the Department of Public Works obtain a grant for a portion or all of the projects identified by the Master Plan.
Rural Roads Erosion Control Assistance Program (RRECAP) for Santa Cruz County	Implementation	Resource Conservation District of Santa Cruz County	Water Quality	$900,000	$315,000	Local; Federal; In-Kind	In-Kind: Anticipated. $265,000. Landowners contribute 50% of the construction cost of implemented projects. This an eligibility requirement for landowners receiving funds. The RRECAP Technical Advisory Committee's (local, state and federal resource professionals) time providing technical oversight. Additional in-kind match comes from donated goods and services such as facilities for hosting workshops, presenters, materials, etc. Federal: Anticipated. $40,000. This is in-kind match from the Natural Resources Conservation Service and potentially other EPA 319 (h) funds. Local: Anticipated. $10,000 County and City staff time for GIS services, permitting, etc. Anticipated. $265,000. Landowners contribute 50% of the construction cost of implemented projects. This an eligibility requirement for landowners receiving funds. Additional in-kind match comes from donated goods and services such as facilities for hosting workshops, presenters, materials, etc. Federal: Anticipated. $40,000. this is in-kind match from the Natural Resources Conservation Service and potentially other EPA 319 (h) funds. Local: Anticipated. $10,000 County and City staff time for GIS services, permitting, etc.

PROJECT TITLE	Project Type	PROJECT PROPONENT	Functional Area	Estimated Project Cost	Estimated Match Contribution	Source(s) of Match	Certainty of Match
Performance-based Incentives for Conservation In Agriculture (PICA) - Watsonville Sloughs	Implementation	Resource Conservation District of Santa Cruz County	Water Quality	$550,000	$420,740	Federal; In-Kind; Other	Match has already been secured from the CA State Conservation Innovation Grant ($75,000 in 2011) and CDFA Specialty Crop Block Grant ($310,740 in 2013) to support the PICA pilot in the lower Pajaro River watershed, including Watsonville Slough watershed. This match has funded the development of the project to date. Participating growers will provide an estimated additional $35,000 worth of in-kind match (10 growers, 35 hours each at a rate of $100/hour) for their time participating in the project.
Country Club Hexavalent Chromium Treatment Facility	Implementation	Soquel Creek Water District	Water Quality	$4,000,000	$2,000,000	Local	The District has secured $17.7M in Certificate of Participation (COP) funding to implement capital improvement projects. The subject project can be funded through these COP's.
City of Santa Cruz Drought Mitigation to Improve Potable Water Quality, Implement Conservation Program for Agriculture, and Reduction of Ecosystem Conflicts with Habitat Conservation	Implementation	City of Santa Cruz Water Department	Water Quality	$696,264	$200,000	Local; In-Kind	Match funding of $200,000 is certain for this project. Project related expenditures since 2010 can be documented for staff labor, analytical lab testing, electrical costs of the aerator testing, and consultant fees that directly correspond with the readiness to proceed with project implementation in 2014. There are sufficient funds in the capital improvement budget to provide assurance that project related expenditures will be paid for by the City of Santa Cruz prior to receiving reimbursement from the State of California.
Farm and rangeland soil management for water conservation in Santa Cruz County	Implementation	Resource Conservation District of Santa Cruz County	Water Supply	$550,000	$420,740	Federal; In-Kind; Other	Match has already been secured from the CA State Conservation Innovation Grant ($75,000 in 2011) and CDFA Specialty Crop Block Grant ($310,740 in 2013) to support the PICA pilot in the lower Pajaro River watershed, including Watsonville Slough watershed. This match has funded the development of the project to date. Participating growers will provide an estimated additional $35,000 worth of in-kind match (10 growers, 35 hours each at a rate of $100/hour) for their time participating in the project.

PROJECT TITLE	Project Type	PROJECT PROPONENT	Functional Area	Estimated Project Cost	Estimated Match Contribution	Source(s) of Match	Certainty of Match
Scotts Valley Water District Local and Regional Recycled Water Expansion Project	Implementation	Scotts Valley Water District	Water Supply	$27,100,000	$9,000,000	Local; In-Kind; Other	SVWD has secured capital funds dedicated to implement water quality and/or water supply projects. In addition, SVWD expects to provide in-kind match labor and/or partner contributions to meet the local match requirements for the project. In addition, the project elements have been structured so that they can be scaled up or down and can be implemented as funding becomes available.
Santa Cruz County Regional Recycled Water Feasibility Study	Planning	City of Santa Cruz	Water Supply	$300,000	$75,000	Local	Funding for the regional recycled water feasibility study will be requested from the City of Santa Cruz and SqCWD as match with $75,000 from each agency. No decision has been made yet to pursue the Study at this time by the governing bodies of the City and SqCWD, but match funding is anticipated. Because the SVWD would be supplying tertiary treated recycled water and secondary effluent and water would not be delivered into their service area with this feasibility study, no match funding from SVWD is expected at this time. Total project cost and scope of work could be adjusted depending on the availability of grant funding.
Recovery of the Santa Cruz long-toed salamander and California red-legged frog in the Larkin Valley area	Implementation	Resource Conservation District of Santa Cruz County	Watershed Stewardship/ Aquatic Ecosystems	TBD	$300,000	Local; Federal; In-Kind; Other	CDFW provided $120,848 in planning funds for the development of the Larkin Valley Plan. In addition the RCD has received additional CDFW funds ($130K) for the implementation of a new pond as recommended by the plan. The RCD has pending private funds for salamander recovery in Larkin Valley ($50K)
Salmonid Recovery in the San Vicente Creek Watershed	Implementation	Resource Conservation District of Santa Cruz County	Watershed Stewardship/ Aquatic Ecosystems	TBD	$360,000	Local; Federal; In-Kind; Other	Funding ($183,387) from California Dept of Fish and Wildlife's (CDFW) Fisheries Restoration Grant Program (FRGP) to complete the San Vicente Recovery Plan was received in June 2011. Funding ($25,000) was received from the Moore Family Foundation to improve riparian habitat. Funding from the State Water Resources Control Board ($50K) and CDFW's FRGP ($50K) to implement 8 LWD structures was received in 2008 and 2011, respectively. To remove invasive species, $60K has been requested from the Wildlife Conservation Board (likely to be received in June 2014).
West Branch Struve Slough Habitat Restoration and Enhancement Project	Implementation	Watsonville Wetlands Watch	Watershed Stewardship/ Aquatic Ecosystems	$780,000	$200,000	Local; In-Kind	$200,000 of secured from Watsonville Wetlands Watch, the Pajaro Valley Unified School District, and the City of Watsonville