

**4.2 Format and Reference Guide to Action Plan**

Actions were described using a standardized format, which is explained in Subsection 4.2.1. A quick reference guide to the actions is given in Subsection 4.2.2.

**4.2.1 Action Description Format**

Recommended actions are described in Sections 4.3 through 4.6 of the plan in a standardized format (Table 4.2-1). The issue(s) (i.e., problem, concern) each action is designed to address is described first, followed by a brief description of the action. The type of activity represented by the action is identified (i.e., management and planning, structural BMP, non-structural BMP). Each action is cross-referenced to the goal(s) and objective(s) to which it contributes. Activities associated with the action are listed, as well as, stakeholder roles, frequency of each activity, and first order cost estimates associated with each activity and totaled across activities. Cost considerations associated with implementation of the action are identified, as are potential sources of funding. Time frame considerations associated with implementation and before benefits would be realized from implementation are described. In addition, recommendations for monitoring the effectiveness of the action are given. In cases where the action would result in an on-the-ground project, potential project locations are listed.

**Table 4.2-1. Standardized format used for the description of actions.**

<u>Issue</u>			
<u>Action</u>			
Activities, stakeholder roles, and cost estimate for the action are described below.			
Activities	Stakeholder (Role)	Frequency	Cost Estimate
Total Estimated Cost			
Stakeholders: A = resource/regulatory agencies, B = businesses, C = contractor/consultant, J = Jurisdiction, O = other S = schools/universities, V = volunteers			
Roles: L = lead, Ad = advisory, P = participant, R = review			
Estimated cost: \$ = ≤ \$10,000, \$\$ = > \$10,000 and ≤ \$100,000, \$\$\$ = > \$100,000 and ≤ \$1,000,000, \$\$\$\$ = > \$1,000,000			
<u>Type of Action</u>			
<u>Goal(s) Addressed by the Action</u>			
<u>Objective(s) Addressed by the Action</u>			
<u>Benefit(s) of the Action</u>			
<u>Cost Considerations</u>			
<u>Potential Source(s) of Funding</u>			
<u>Time Frame Considerations</u>			
<u>Potential Project Location(s)</u>			
<u>Monitoring Recommendations</u>			

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The description of the action plan format are explained below.

Issue

The issue statement describes the problem or concern the action is designed to address. It provides background and the rationale or need for the action.

Action

The action statement describes the key elements associated with the action.

*Activities*

The different steps involved in implementing the action are listed under activities. These range from inspections or monitoring, to attending meetings, to design and implementation of structural BMPs, or changing policies and procedures at the municipal level to name a few. Some activities include applying for grant funding, public outreach and involvement, and interacting with elected officials.

*Stakeholders (Roles)*

Stakeholders and their roles are indicated by letter codes, which are defined at the bottom of the action table (Table 4.2-1). Stakeholders include: resource and regulatory agencies (A), businesses (B), contractors and/or consultants (C), jurisdictions (J), other (O), schools and/or universities (S), and volunteers (V). Stakeholders may serve in lead (L), advisory (Ad), participant (P), or review (R) roles.

*Frequency*

The frequency and duration activities would be implemented is identified. Some activities will be done only once, while others will be implemented on a periodic or ongoing basis for short or extended periods of time.

*Cost Estimate*

First order cost estimates are indicated by codes that refer to a cost range, as follows:

\$	<\$10,000
\$\$	≥\$10,000 and < \$100,000
\$\$\$	≥\$100,000 and < \$1,000,000
\$\$\$\$	≥\$1,000,000

Actual costs would be expected to fall within the cost range. More precise estimation of costs was not appropriate for this planning document, which focuses on what type and where actions will be implemented. How activities are performed will be determined during the planning and implementation phase, at which time more precise estimates of costs will be possible.

Some actions require inspection and/or investigation activities that, once completed, will permit more precise determination of costs. For example, some activities include investigation of land availability and costs, drainage easements, and number of locations for implementing the action based on field investigation. Land acquisition and easement agreements will drive the costs

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towards the upper range of the first order cost estimates. Other activities such as obtaining grant funding, developing partnerships, and obtaining assistance from volunteers will help to keep the costs to a minimum.

Type of Action

Each action is categorized according to the type of action involved in its implementation. Watershed management will require a diverse strategy of actions to accomplish the goals and objectives of the WMP.

A total of eight different categories were used to distinguish different types of actions in this plan, including:

1. Land use planning
2. Management planning.
3. Operations and maintenance.
4. BMP Implementation
5. Habitat protection, enhancement, and/or restoration.
6. Education and outreach.
7. Monitoring and/or assessment.
8. Seek Funding

Goal(s) and Watershed Functions Addressed by the Action

As mentioned previously, each action may benefit or affect one or more of the four watershed functions identified in the WMP which is explained here (see Table 3.2-1).

Objective(s) Addressed by the Action:

One action may address one or more objectives which are also summarized in Table 3.2-1.

Cost Considerations

Factors that were considered in the preparation of the cost estimates, which have the potential to most directly affect costs, were listed based on the standardized list of considerations given in Table 4.2-2.

**Table 4.2-2. List of factors considered in developing action cost estimates.**

New staff (or contractors) required	Staff reassignment and/or retraining required	One time implementation cost and/or limited maintenance required	Construction and maintenance (annual or more frequent) required	Land easement may be required	Land purchase may be required
Measures may be required to protect groundwater from hazardous materials	Design plans required	Permits required	Zoning variance required	Equipment purchase required	Monitoring required to determine effectiveness

Potential Source(s) of Funds

Programs and projects could be implemented using a variety of funding sources. The following sources of funding were considered.

- Reallocation of budget.
- Fees.
- Bonds.
- Grants.
- Supplemental RWQCB funds.
- Federal or State Appropriations.

Time Frame Considerations

Two aspects of time frame were considered. One that relates to whether the action would result in near-term benefits and/or long-term benefits and another that considers the time frame within which a program or project could be implemented.

The time frame for implementation will actually vary according to the priority assigned to the action, available funding, resource allocation, nature of constraints, and any necessary agency coordination and/or permitting.

Three potential implementation time frames were considered:

- < 2 years.
- 2-5 years.
- > 5 years.

Potential Project Location(s)

Areas identified within the watershed in which the action potentially could be implemented were listed. Other suitable locations also may exist that could be identified by jurisdictions, stakeholders, or through feasibility analyses.

Monitoring Recommendations

Recommendations were made for evaluating the effectiveness of the action. Monitoring recommendations took into consideration the potential to coordinate with existing jurisdictional or stakeholder monitoring programs, and the RWQCB surface water ambient monitoring program (SWAMP).

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Actions are described in Sections 4.3 through 4.6 of the WMP according to the watershed function and primary goal to which the action applies. This type of organization emphasizes the strategic planning that was developed to address the watershed functions and issues, and to promote effective watershed management associated with increasing public awareness and environmental stewardship. However, it is recognized that implementation of actions most often will be initiated at the local level, and municipalities and other interested stakeholders will be

interested first in what type of actions are recommended for their geographic area, and next how they fit in the larger strategic plan for the watershed. Because of these dual interests in understanding actions from a strategic sense as well as on a geographic scale, Table 4.2-3 lists actions according to the goals they address as well as where in the watershed the action would be implemented. While action items presented in the issues/action matrices found in Section 3 identify actions and how they address issues within a *single* watershed function (i.e., water quality, water supply, habitat and biological resources and habitat, social and community resources), Table 4.2-3 identifies how actions will address multiple issues across *multiple* watershed functions. This summary begins to integrate the actions and identify actions that have multiple benefits across multiple watershed functions. This table serves as a reference guide to the Action Plan, listing the section of the report where the action is described, the type of action and its base cost, goals addressed by the action, and general locations within the watershed where the action could be implemented.

The geographic areas listed on Table 4.2-3 correspond to the location within the San Dieguito Watershed (i.e., Upper, Middle, Lower Watersheds). Additional summary of projects according to geographic location is given in the Subsection 4.8, Action Plan Summary.

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**Table 4.2-3. List of actions according to type of action goals, and geographic location.**

**Water Quality**

Report Section	Actions to...	Type of Action	Watershed Functions				Location			
			Water Quality	Water Conservation	Biological Resources	Social and Community Resources and Stewardship	Upper Watershed	Middle Watershed	Lower Watershed	Beaches
4.3.2. Reduce Impervious Surfaces and Hardscape	Increase Use of Cluster Development	Land Use Planning, BMP Implementation	X	X	X	X	X	X	X	
	Increase Use of Pervious Pavement During Development and Redevelopment.	Management Planning and BMP Implementation	X	X	X	X	X	X	X	
	Construct Parking Lots With Pervious Pavement	Operations and Maintenance and BMP Implementation	X	X			X	X	X	
	Create Grassy Swales and/or Vegetated Areas to Treat Urban Runoff	BMP Implementation	X	X	X		X	X	X	
	Perform Roadway Improvements using Vegetated Medians, Buffers, and/or Parkways	BMP Implementation	X				X	X	X	
4.3.3 Address Existing Water Quality Limited Segments	Divert Dry Weather Runoff to Sanitary Sewer System if Allowed	BMP Implementation	X	X	X			X	X	X
	Install and Maintain In-Line Separation Units and/or End-Of-Pipe Controls Along All Major Storm Drains to Water Bodies	BMP Implementation	X		X			X	X	X
	Create Wetlands to Treat Urban Runoff	BMP Implementation	X	X	X			X	X	
	Enhance Existing Detention/Retention Basins	BMP Implementation, Habitat Enhancement, Operations and Maintenance	X	X	X			X	X	
	Route Flows to Detention/Retention Basins to Reduce Flooding and to Treat Runoff	BMP Implementation, Operations and Maintenance	X	X	X			X	X	

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Report Section	Actions to...	Type of Action	Watershed Functions				Location			
			Water Quality	Water Conservation	Biological Resources	Social and Community Resources and Stewardship	Upper Watershed	Middle Watershed	Lower Watershed	Beaches
4.3.4 Evaluate and Implement Landuse-Based Best Management Practices	Management of Grazing Animal Waste	BMP Implementation	X		X		X	X	X	
	Management of Confined Animal Waste	BMP Implementation	X		X		X	X	X	
	Management of Pet Waste in Public Areas	BMP Implementation, Education and Outreach	X		X		X	X	X	X
4.3.5 Reduce Erosion in Recreational Activities	Actions to Reduce Erosion in Recreational Activities	BMP Implementation	X		X		X	X	X	
	Actions to Reduce Erosion in Agricultural Activities	BMP Implementation	X		X		X	X	X	
4.3.6 Reduce Litter	Increase Public Outreach and the Number of Trash, Cigarette, and Recyclable Containers in High Priority Areas	BMP Implementation, Education and Outreach	X		X		X	X	X	X
	Install and Maintain Catch Basin Inserts in High Priority Areas	BMP Implementation, Operations and Maintenance.	X		X			X	X	

**Water Supply**

Report Section	Actions to...	Type of Action	Watershed Functions				Location			
			Water Quality	Water Conservation	Biological Resources	Social and Community Resources and Stewardship	Upper Watershed	Middle Watershed	Lower Watershed	Beaches
4.4.2 Reduce Potable Water Use	Add Water Conservation to Municipal Education And Outreach Programs	Outreach and Education	X	X		X	X	X	X	
	Increase Water-Wise Landscaping	Management Planning, Outreach and Education	X	X	X		X	X	X	
4.4.3 Increase Reclaimed Water Use	Increase Use and Expansion of Recycled Water System	Management Planning, Operations and Maintenance, Outreach and Education		X			X	X	X	
	Increase Installation of Rainwater Harvesting Systems and Cisterns	Management Planning, Operations and Maintenance, Outreach and Education		X			X	X	X	
	Develop and Construct New Alternative Water Sources	Management Planning, Operations and Maintenance		X			X	X	X	X
4.4 Maintaining and Enhancing Ground Water Supplies	Source Water Protection	Management Planning								
	Increase Infiltration Opportunities	BMP Implementation, Operations and Maintenance, Habitat Enhancement	X	X				X	X	
	Injection of Reclaimed Water into Major Aquifers	Management Planning, Operations and Maintenance		X				X	X	

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**Biological Resources and Habitat**

Report Section	Actions to...	Type of Action	Watershed Functions				Location			
			Water Quality	Water Conservation	Biological Resources	Social and Community Resources and Stewardship	Upper Watershed	Middle Watershed	Lower Watershed	Beaches
4.5.2 Protecting Special Biological Resources	Support MSCP, Equivalent Programs, Existing and Proposed Habitat Plans	Land Use Planning and Management Planning, Habitat Protection	X		X	X	X	X	X	X
	Protect Rancho Guejito, Ramona Grasslands, Volcan Mtn, and Native Grasslands through Implementation of Habitat Acquisition Plan	Land Use Planning and Management Planning, Habitat Protection	X		X		X	X		
	Support Tax Breaks for Preservation of Native Habitat	Land Use Planning and Management Planning, Habitat Protection	X		X	X	X	X	X	
4.5.3 Ecological Enhancement Restoration Rehabilitation	Complete San Dieguito River Park and Trail and Support Sensitive Trail Design	Land Use Planning and Management Planning, Habitat Protection, Enhancement, and Restoration, Public outreach and education	X	X	X	X	X	X	X	
	Support Transnet Phase II and Identify Wetland Mitigation Sites	Land Use Planning and Management Planning, Habitat Restoration and Enhancement	X		X			X	X	
	Adopt a Stream Program to Facilitate Restoring a more Natural Flow Regime and Maintain Soft Bottom Streams	Land Use Planning and Management Planning, Habitat Restoration and Enhancement	X	X	X		X	X	X	
4.5.4 Exotic Species Removal and Native Reestablishment	Remove Exotic and Invasive Species and Reestablish Native Species	Habitat Enhancement and protection	X		X		X	X	X	
	Institute Municipal Ordinances to Require use of Native Plants for Landscaping	Land Use Planning and Management Planning		X	X		X	X	X	
	Institute Municipal Ordinances Prohibiting the Sale of Invasive Plant Species	Land Use Planning and Management Planning	X		X		X	X	X	

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Report Section	Actions to...	Type of Action	Watershed Functions				Location			
			Water Quality	Water Conservation	Biological Resources	Social and Community Resources and Stewardship	Upper Watershed	Middle Watershed	Lower Watershed	Beaches
4.5.5 Minimize Impact of Urban Development, Agriculture, and Fire on Native Habitat	Support Growth Management Plans and Incorporate Watershed and Groundwater Protection into these Plans	Land Use Planning and Management Planning	X		X		X	X	X	
	Minimize Urban Sprawl, Wetland, and Upland Development Impacts by use of Disparate Planning and Large Lot Zoning	Land Use Planning and Management Planning	X		X		X	X	X	
	Study and Establish Habitat Buffers and Greenway Programs in Urban Areas	Land Use Planning and Management Planning	X		X		X	X	X	
	Develop a Program to Manage Grazing on Public Land and Protect native Habitats and Riparian Areas	Land Use Planning and Management Planning, Habitat Restoration and Enhancement	X		X		X	X		
	Develop a Program to Manage Erosion and Prevent Habitat Degradation	Land Use Planning and Management Planning, Habitat Restoration and Enhancement	X		X		X	X	X	
4.5.6 Public Outreach and Education	Handouts, Mailers and Newspaper Outreach	Education and Outreach			X					
	Radio, Television, and Internet Outreach	Education and Outreach			X					
	Business Outreach	Education and Outreach			X					
	Interpretational Centers	Education and Outreach			X					
	Education in K-12 Schools	Education and Outreach			X					
	Public Meetings and Workshops	Education and Outreach			X					
	Regulations, Lobbying, and Legislation	Education and Outreach			X					

**Social and Community Resources**

Report Section	Actions to...	Type of Action	Goals				Location			
			Water Quality	Water Conservation	Biological Resources	Social and Community Resources and Stewardship	Upper Watershed	Middle Watershed	Lower Watershed	Beaches
4.6.2 Establish and Maintain Landuse Compatibility	Develop Land Use Buffers Around Sensitive Areas	Land Use Planning			X	X	X	X	X	
	Encourage "Green" Development	Land Use Planning and Management Planning	X	X	X	X				
	Preserve Cultural and Natural Areas.	Land Use Planning			X	X	X	X	X	
	Regional Coordination of Land Use Planning Between Jurisdictions	Land Use Planning	X	X	X	X	X	X	X	
4.6.3 Agricultural Issues	Implement Agricultural BMPs	BMP Implementation	X	X		X	X	X	X	
	Implement Incentives to Sustain and Encourage Agriculture	Land Use Planning	X	X		X	X	X	X	
	Preserve Agricultural Land	Land Use Planning				X	X	X	X	
4.6.4 Watershed Awareness	Create a Watershed Council	Management Planning	X	X	X	X	X	X	X	X
	Develop Curricula Materials Specific to the San Dieguito Watershed and Provide Them to Local Schools	Outreach and Education				X		X	X	X
	Install Informational Kiosks and Interpretive Centers	Outreach and Education				X	X	X	X	X
	Outreach to Tribal Governments	Outreach and Education	X	X	X	X	X	X		
	Seek Funding Sources to Implement Watershed Projects	Seek Funding	X	X	X	X	X	X	X	X