

4.6 Actions Associated With the Goal to Support Social and Community Resource Needs and Watershed Stewardship

Organization of Section

- 4.6.1 Introduction
- 4.6.2 Actions to Establish and Maintain Land Use Compatibility
- 4.6.3 Actions to Preserve Agricultural Land and Encourage Sustainable Farming
- 4.6.4 Actions to Support Stewardship of the San Dieguito Watershed



4.6.1 Introduction

Issues and Concerns

Environmental stewardship is an important element to the success of watershed management. One way to achieve a reversal in environmental degradation is to change the behaviors and attitudes that have led to the initial or ongoing degradations.

In order to be truly effective, stakeholder involvement must be woven throughout the watershed management process. The first step is to increase public awareness of watershed problems at all ages, across all land uses, and all professions. The awareness in turn cultivates personal awareness and stewardship, which can be further encouraged with organized public involvement activities and reinforced through routine outreach.

Stakeholder outreach conducted during the development of this WMP identified the following objectives as being important to citizens of the San Dieguito Watershed:

- Eliminate land use related conflicts.
- Maintain the agricultural and open space character of the watershed.
- Raise public awareness and increase personal stewardship of the San Dieguito Watershed.
- Involve and encourage public participation in the management and protection of San Dieguito Watershed resources.
- Establish a core group of stakeholders with diverse interests to implement the watershed management plan.

Existing Programs

The MS4 Permit requires each Copermittee to promote public awareness and involvement through the development and implementation of an Educational Component of their JURMP. The Copermittees also implement watershed based education programs through the respective WURMPs. The WURMPs program requires all cities within the watershed to conduct educational activities within their respective jurisdictions, and to participate in watershed-wide

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education programs and events. For example, outreach events target elementary and middle school aged children and residential, commercial, and industrial property owners.

Residential Program

The Residential Program includes the following three components:

- Marking the “No Dumping” message on storm drain inlets and on signs posted at access points to water bodies.
- Implementation of the Regional Hotline, 1-(888) 846-0800, which the public can use to receive storm water management information and to report illegal dumping/discharges onto street surfaces, drainage pipes and ditches, and into storm drains.
- Conducting Outreach and Education, which includes advertising, media relations, instructional materials, and events. The outreach and education program includes the Project Clean Water (www.projectcleanwater.org) and ThinkBlue (www.thinkbluesd.org) web sites, which provide information and links to environmental awareness education programs implemented in the County.

Pollution-specific educational efforts are identified in the San Dieguito WURMP for recognizing, understanding and reducing sources of water pollution. Regional pollutants are included along with general clean water themes such as using mass transportation to reduce automobile related pollutants, using dry cleanup methods to reduce pollutant loads from hardscape surfaces rather than hosing them off, and creating awareness that runoff conveyed through storm drains reaches receiving waters without being treated. Each permittee is required to make outreach materials available to the general public, to target audiences (e.g., schools, community groups, contractors and developers), at appropriate counters (e.g., municipal planning departments), and at events. Outreach materials include information on pollutants, sources of concern, and source abatement. Recently the State of California and Caltrans launched a program that would benefit the watershed with the message “Don’t Trash California” in an effort to reduce litter and trash especially along interstate freeways and state routes.

Educational information is organized on the ThinkBlue (www.thinkbluesd.org) web site according to primary topic areas listed below. For most of these topics, there are brochures and fact sheets to inform and educate the public (Table 4.6-1).

Table 4.6-1. Example fact sheets available at the ThinkBlue website (www.thinkbluesd.org).

- Storm Water Pollution Prevention.
- Restaurants.
- Best Management Practices.
- Impervious Surfaces.
- Car Washing.
- Spills.
- Swimming Pools and Spas.
- Automotive Fluids.

<ul style="list-style-type: none"> • Dangers of improper hazardous waste disposal • Safe use, storage, and disposal of automotive fluids • Proper techniques for draining and cleaning home swimming pools • Car washing tips • Cleaning impervious surfaces • Sewer breaks or overflows • Storm drain stenciling tips • Storm Drains are not Sewers!

The following types of recycling and disposal information are given on the web site.

- City recycling coordinators list.
- Hazardous waste collection schedule and hotline.
- Recycling collection center locator.
- RV sewage disposal locations.
- Solid waste facilities open to public.
- Used oil collection centers.

In addition to the information presented above, ThinkBlue San Diego and Project Clean Water provide environmental awareness education programs within the County. Some of the public and youth educational programs include:

- CREEK- Creek Restoration and Ecology Education for Kids.
- San Diego Stream Team Citizens Monitoring Group.
- Student to Student Environmental Education to Protect the Water.
- Ramona Grasslands and Santa Maria Creek Protection and Restoration Project.
- San Diego Forest Legacy Area Program: Habitat Conservation Planning Public Information Component.
- CREEC – California Regional Environmental Education Community.

The ThinkBlue San Diego and Project Clean Water programs have effectively implemented a week-long environmental curriculum in several of the local school districts and provides the school districts with materials, including videos, guest speakers, and other information necessary to educate school children about storm water pollution. The Copermittees measure the effectiveness of educational programs by assessing knowledge of storm water pollution problems. In addition, the Copermittees are responsible for assessing changes in the behavior of the general public relative to reducing storm water pollution.

The copermittees meet regularly to coordinate regional and local outreach and education to reduce duplication of effort, maintain consistency of the message, and to strengthen educational efforts. The residents within San Diego County identified clean beaches and bays as one of their top regional priorities. The Think Blue San Diego program has won several awards for educational excellence and many of the educational elements and themes have been endorsed by the USEPA. In addition, the Copermittees are responsible for including outreach to ethnic communities and businesses through culturally effective methods including the production of educational materials and websites in multiple languages.

Business Program

The Business Program includes two components:

- Education: includes distribution and discussion of educational materials regarding storm water pollution, business-specific BMPs, and suggestions to facilitate business compliance with storm water regulations. The information also contains ideas and links

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to state developed BMPs that may help the business reduce or eliminate pollutant generation and runoff.

- **Inspection:** involves reviewing the site conditions at a business, determining potential sources of pollution, and investigating any evidence of polluted runoff. The inspector may choose to educate the business owner or enforce a compliance schedule. As part of every enforcement activity, the inspectors take the opportunity to further educate the business.

Other Sources of Public Outreach and Education Information

While information available from the Project Clean (<http://www.projectcleanwater.org>) and ThinkBlue (<http://www.thinkbluesd.org>) web sites serve as the primary sources of public information materials for most jurisdictions, other education and outreach information sources are available and variously used by the different jurisdictions of the San Dieguito Watershed. Table 4.6-2 lists additional sources of useful public outreach and education information.

Table 4.6-2. Sources of public outreach and education information.

<ul style="list-style-type: none"> • http://www.Adopt-a-watershed.org/ • http://www.adoptawaterway.com/ • http://www.americoceans.org/ • http://cfpub.epa.gov/npdes/stormwater/menuofbmps/ • http://www.sdstreamteam.org/ • http://www.scwrp.org/ • http://www.ilacsd.org/ • http://www.calepa.ca.gov/education/
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Recommended WMP Actions to Integrate with the Education Component

Recommendations to augment the municipal storm water Education Component are included in this WMP to focus public awareness on issues and actions for the San Dieguito Watershed, to promote public involvement in projects associated with the implementation of the WMP, and to inform stakeholders of the effectiveness of their actions.

The General Plans of jurisdictions within the watershed include the following issues relative to open space, recreation, and land use:

- Lack of useable open space in multiple family residential projects.
- Need for more neighborhood parks, open space, and interpretive centers.
- Need for a watershed-wide integrated trail plan and bikeways.
- Important to preserve areas of historic, cultural, and scenic significance.
- Important to protect open spaces for conservation of natural resources, and for recreational and educational activities.

The recommended program and project actions to promote public awareness and involvement in the San Dieguito Watershed are listed on Table 4.6-3, and are described in the following three subsections:

- 4.6.2 Actions to Establish and Maintain Land Use Compatibility
- 4.6.3 Actions to Preserve Agricultural Land and Encourage Sustainable Farming
- 4.6.4 Actions to Promote Stewardship of the San Dieguito Watershed

Table 4.6-3. List of program and project actions associated with the goal to promote public awareness and involvement in watershed management.

Report Section	Actions	Social and Community Resources Benefits			Other Benefits					Time Frame to Implement (Years)	Cost Estimate
		Land Use Compatibility	Preserve Agricultural Land and Sustainable Agriculture	Watershed Stewardship	Water Quality	Water Conservation	Habitat	Aesthetics /Recreation	Outside Funding		
4.6.2.1	Develop Land Use Buffers around Sensitive Areas	x	x				x			2-5	\$ per year
4.6.2.2	Encourage “Green” Development	x		x	x	x	x			2-5	\$-\$\$\$\$
4.6.2.3	Support Existing Action to Preserve Cultural and Natural Areas	x					x	x		2	\$-\$\$\$\$
4.6.2.4	Regional Coordination of Land Use Planning between Jurisdictions.	x		x	x	x	x	x		2	\$-\$\$\$
4.6.3.1	Implement Agricultural BMPs		x		x	x				2-5	\$-\$\$ per project
4.6.3.2	Implement Incentives to Sustain and Encourage Agriculture		x		x	x				2-5	\$-\$\$\$\$
4.6.3.3	Preserve Agricultural Land	x	x							5	\$\$-\$\$\$\$
4.6.4.1	Create a Watershed Council	x	x	x	x	x	x	x	x	2	\$ per year
4.6.4.2	Develop Curricula Materials Specific to the San Dieguito Watershed and Provide them to Local Schools			x						2-5	\$-\$\$
4.6.4.3	Install Informational Kiosks and Interpretive Centers			x						2	\$ per area
4.6.4.4	Outreach to Tribal Governments	x	x	x	x	x	x			3	\$ per year
4.6.4.5	Seek Funding Sources to Implement Watershed Projects			x	x	x	x	x	x	2	\$ per year

Note:
 \$ = ≤ \$10,000, \$\$ = > \$10,000 and ≤ \$100,000, \$\$\$ = > \$100,000 and ≤ \$1,000,000, \$\$\$\$ = > \$1,000,000

4.6.2 Actions to Establish and Maintain Land Use Compatibility

Statement of Problem

The primary reasons for the perpetuation of environmental problems are a lack of understanding about the connections between behaviors and water quality issues and/or public indifference.

Existing Actions

The City of San Diego’s Progress Guide and General Plan contains 13 elements addressing the following issues: housing, transportation, commercial, industrial, public facilities, services, safety, open space, recreation, redevelopment, conservation, energy conservation, cultural resources management, seismic safety, and urban design. The basic goal of the plan is the “fostering of a physical environment in San Diego that will be most congenial to healthy human development.” In relation to water quality, a stated sub-goal of the general plan is the “conservation of an urban environment that is in harmony with nature and retains strong linkages with it.”

The Regional Land Use Element of the County of San Diego’s existing General Plan sets as its overall goal the requirement that planning in the County will “accommodate population growth and influence its distribution” in such a way as to “protect and use scarce resources wisely” and to “preserve the natural environment.” Efforts are currently underway to modify the General Plan (GP2020) to improve upon this jurisdictional collaboration to make the language more standardized and consistent. In addition, the General Plan 2020 will guide future land use patterns and establish policies that will help to protect the watershed through many of the mechanisms discussed in this document.

Issue

Future growth faces the challenge of providing housing and facilities for a growing and diverse population at the same time the region is beginning to run out of open land for new development. If current plans are left unchanged, continued development will result in reduced open space, environmental degradation, and an imbalance between land uses.

Purpose

Maintaining land use compatibility is important in order to move towards a sustainable future which encourages growth into existing and future urban areas and smart growth communities. Improved planning strives to foster a healthy environment, a vibrant economy, and a high quality of life for all residents. It balances regional population, housing, and employment growth with habitat preservation, agriculture, open space, and infrastructure needs. It moves us toward a sustainable future with more choices and opportunities for all residents. It reduces land consumption in our rural and agricultural areas, and spurs reinvestment in our existing communities. In addition, it improves connections between land use and transportation plans using smart growth principles and development.

Actions

In order to establish and maintain land use compatibility, four actions are proposed: develop land use buffers around sensitive areas, encourage “green” development, create an inventory and a plan to protect cultural and natural areas, and coordinate regional land use planning between jurisdictions.

4.6.2.1 Develop Land Use Buffers Around Sensitive Areas

Issue

Buffers can serve as natural boundaries between incompatible land uses and natural areas. Development in close proximity to streams can cause pollution problems and increase the risk of flooding. Agricultural and residential areas may be incompatible due to noise and odor problems. Such conflicts are pervasive throughout California's agricultural regions where rapid urbanization encroaches on commercial cropland or approaches concentrated animal facilities.



Action

To protect environmentally sensitive areas and prevent adjacent incompatible land uses, two actions are proposed.

The first action is to draft a stream buffer ordinance. To protect streams and other sensitive habitat, buffers of land should be set aside to provide numerous environmental protection and resource management benefits. While the wording of buffer regulations is flexible, several features were determined to be integral in developing the most effective ordinance possible:

- The use of buffers with other methods (e.g. filtration) will further help to protect streams by cleaning runoff while minimizing human disturbance.
- The creation of a three-zone buffer system with the functions, widths, vegetative targets and management schemes for each zone explained in detail.
- Language that creates the ability to expand the buffer to include the 100-year floodplain, steep slopes, and any adjacent delineated wetlands or critical habitats.
- The establishment of a minimum stream buffer width. A width of approximately 100 feet is recommended in order to recognize all the benefits that the stream buffer can provide.
- A thorough explanation of the limits and uses of the stream buffer system and the requirements expected for any development plan during the entire development process, from initial plan review through construction.
- A system to permanently mark the buffer, both physically on-site and in the land records should be enacted.
- A designated management system for the buffer, detailing permitted and restricted uses within the buffer, and an educational program that ensures that future residents know about the buffer.
- Any waivers or variances which may be granted regarding the buffer should be explained in detail to avoid legal challenges.
- Maintenance guidelines and enforcement procedures for buffer violations should be included.

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The basic structure of a stream buffer in an urban setting is broken up into three zones, each with different functions, width, vegetative targets, and allowed uses. The streamside zone should be maintained as mature forest, with strict limitations on all other uses. It also produces the shade and woody debris that is so important to stream quality and biota. The middle zone is typically 50 to 100 feet usually targeted toward a managed forest with some allowable clearing. The outer zone, usually about 25 feet, encourages forest, but can also include landscaping and turf. The three-zone buffer is variable in width and should be increased to allow for protection of special areas such as wetlands and the floodplain (EPA 2002).

A strong buffer ordinance is only the first step to preserving habitat buffers. Another issue to consider when establishing buffer ordinances is property ownership or established/needed easements. Communities will need an effective buffer program to manage buffers and enforce buffer regulations. During the construction phase, communities need to ensure that the clearing and grading permit is well-integrated with the forest buffer application. After construction, programs that educate citizens about the importance of the buffer and how to manage it can help preserve the buffer's integrity (SMRC 2004).



A second action would be to work with planning authorities to make sure an adequate buffer exists between agricultural and residential areas. Agricultural buffers or agricultural transition areas can reduce conflicts between urban and agricultural land uses. Depending on their design, buffers can also provide associated visual, recreational, and wildlife habitat benefits. The majority of the setback widths in practice are in the range of 75 to 200 feet. When buffer policies include a range of possible widths, the actual width is based on a combination of the agricultural practices (types and methods of spraying), the sensitivity of the surrounding land use (especially schools), and the design of the buffer (presence of wind breaks to reduce spray drift). Some buffer programs in California distinguish between an “urban/agricultural buffer” area directly adjacent to the agricultural parcel for minimal public use and an “agricultural transition” area for public recreational use between the buffer and the urban areas. Setbacks are typically designated on the developer's land, often as a mitigation measure, or a condition of approval (Hammond 2002).

Agricultural buffers can be a technique for minimizing farm-urban edge conflicts. Buffer policies and techniques can help to stabilize edge conditions, protecting agricultural operations and reducing further conversions of farmland to urban uses. Agricultural buffers come in many forms. Whether it is a simple brick wall, a band of open space, or a linear park, agricultural buffers are physical separations between residential and agricultural uses of land. Their purpose is to find a middle ground whereby the farmer can continue to work his or her land without raising the ire of non-farming neighbors. At the same time, buffers are also designed to protect farms from the urban influences that can make farming more difficult than it should be (Hammond 2002).

Activities, stakeholder roles, and cost estimate for the action are described below.

Activities	Stakeholder (Role)	Frequency	Cost Estimate
Adopt Stream Buffer Model Ordinance	J (L)	Once, then update every five years, as needed	\$
Ensure Land Use Plans intend to keep development out of flood plains	J (L)	Once, then update every five years, as needed	\$
Ensure new development provides buffers between agricultural area and other land uses	J (L), B(P)	Ongoing	\$
Total Estimated Cost			\$ per year
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			

Note: Jurisdictions = All cities and county within watershed

Type of Action: Land Use Planning and Regulation

Goal(s) Addressed by Action

- Reduce conflicts between land uses and protect sensitive riparian areas.

Objective(s) Addressed by Action

- Establish buffers to provide numerous environmental protection and resource management benefits
- Provide visual, recreational, and wildlife habitat benefits
- Separate urban and agricultural land uses

Benefit(s) of Action

The stream buffers could have the following benefits:

- Restoring and maintaining the chemical, physical and biological integrity of the water resources
- Removing pollutants delivered in urban storm water
- Reducing erosion and controlling sedimentation
- Stabilizing stream banks
- Allowing infiltration of storm water runoff
- Maintaining base flow of streams
- Contributing the organic matter that is a source of food and energy for the aquatic ecosystem
- Providing tree canopy to shade streams and promote desirable aquatic organisms

Cost Considerations

- Design plans required
- Construction and maintenance

Potential Source of Funds

- Reallocation of budget.

Time Frame Considerations

- Implement in 2 - 5 years.

4.6.2.2 Encourage “Green” DevelopmentIssue

Development that spreads out over large areas of land puts long distances between homes, stores, and job centers. Known as sprawl, it can also increase pollution and alter large areas of open space.

Action

Low Impact Development (LID) projects are being used to address storm water management issues. These primary goals of LID design are:

- To reduce runoff volume through infiltration, retention, and evaporation.
- To find beneficial uses for water rather than exporting it as a waste product down storm sewers.
- To reduce the development footprint.

Green building is being used to address storm water management issues. Using traditional practices, sites are engineered so that water runoff from roads, driveways, and other impervious surfaces is conveyed through the storm drain system. But there are greener ways of managing storm water that builders and developers are using more and more. For example, they are reducing road widths, using grassy swales in place of curbs and gutters, and eliminating or reducing unnecessary sidewalks and other impervious areas. This, in turn, reduces imperviousness and increases the surface area on their sites where water can be readily absorbed into the ground.

Other green development actions would be to implement regulations that require developers to landscape with non-invasive, drought tolerant plants. Some of the economic and environmental benefits of water efficient and native landscaping include reduced water use, reduced runoff, less landscape maintenance and fertilization, conservation of natural resources, and preservation of habitat. Home owners in existing development could be given incentives if they convert their landscaping to native plants.

Smart and compact growth also provide a range of solutions to the problem of sprawl. Smart growth means planning our communities so that our streets will be safer, our neighborhoods will be nicer places to live, our air and water will be less polluted, and our parks, farms and open space will be protected. Smart growth more closely links jobs and housing, provides more urban public facilities such as parks and police stations, makes our neighborhoods more walkable, and places more jobs and housing near transit (LGC 2004). In addition, smart growth reduces land consumption in our rural and agricultural areas, and spurs reinvestment in our existing communities. Research shows that in compact neighborhoods, people are more likely to walk, bicycle and ride transit. Compact neighborhoods contribute to active community environments where people can live, work, shop and play. Smart growth includes:

- Enacting growth boundaries, parks and open space protections - like those in Oregon, Tennessee and Colorado - which allow growth without creating sprawl.

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- Planning pedestrian-friendly development where people have transportation choices, such as commuter trains and bus service.
- Directing new highway transportation dollars to existing communities to improve safety for walkers, bicyclists and drivers, and to promote public transportation choices.
- Reversing government programs and tax policies that help create sprawl. The U.S. EPA practiced smart growth by denying permits for the proposed Legacy Highway near Salt Lake City - a highway that would destroy wetlands, increase air pollution and promote sprawl.
- Saving taxpayers money by having developers pay impact fees to cover the costs of new roads, schools, water and sewer lines, and requiring property tax impact studies on new developments.
- Advocating for revitalization of already developed areas through measures such as attracting new businesses, reducing crime and improving schools.
- Preventing new development in floodplains, coastal areas and other disaster-prone areas. (Sierra Club 2006).

The picture below shows the contrast between green development (left) and traditional development (right). The traditional development has many opportunities to implement green development principles during a facility redevelopment project.



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Activities, stakeholder roles, and cost estimate for the action are described below.

Activities	Stakeholder (Role)	Frequency	Cost Estimate
Promote green building and low impact development	J (L), C (P), B (P)	Ongoing	\$
Participate in smart and compact growth	J (L), C (P), B (P)	Ongoing	\$
Require new development to landscape with drought tolerant native landscaping	J (L), B (P)	Ongoing	\$
Give cash rebates to home owners who convert their landscaping to water efficient plants	J (L)	Annual	\$\$\$\$
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			

Note: Jurisdictions = All cities and county within watershed in coordination with local schools

Type of Action: Land Use Development.

Goal(s) Addressed by Action

- Promote low impact and green development and compact growth communities.

Objective(s) Addressed by Action

- Reduce storm water runoff
- Conservation of natural resources
- Creating pedestrian-friendly communities
- Support home owners that use water efficient plants

Benefit(s) of Action

Some benefits of encouraging compact communities and “green” building include:

- Preserving open space, farm land and agriculture
- Supporting economic vitality
- Providing housing choices
- Supporting better air quality
- Supporting alternative transit and transportation methods
- Creating more walkable communities
- Reducing water use
- Supporting natural resources

Cost Considerations

- Cost to create, enforce and maintain development plans.
- Cost to study tax implications

Potential Source(s) of Funds

- Reallocation of budget.
- Grants

Time Frame Considerations

- Implement in 2 - 5 years.

Monitoring Considerations

The effectiveness of LID requirements could be tracked through landscape conversion rebates, municipal inventories of LID projects, and awards for environmental design excellence.

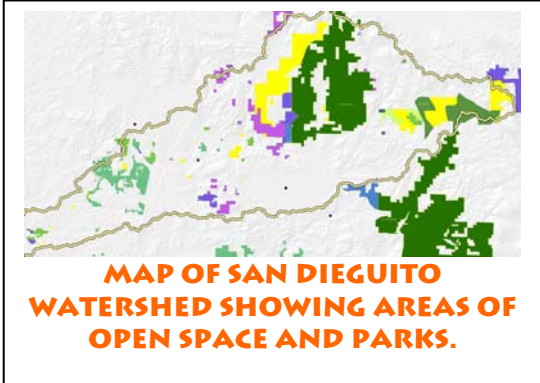
4.6.2.3 Support Existing Action to Preserve Cultural and Natural Areas

Issue

It is necessary to know where sensitive lands exist so they can be managed and preserved. There needs to be an inventory of prime agricultural lands, open space, and cultural areas and a plan to preserve and protect these areas.

Action

A major task of the inventory process involves updating and integrating the resource inventories into a San Dieguito Watershed GIS database. The linking of spatial data through GIS allows different resources to be compared and areas of convergence identified. Potentially vulnerable resources include natural and man-made resources, which contribute to the overall open space character of the watershed.



SANDAG and the MSCP currently identify lands to be preserved and the San Dieguito River Valley Conservancy has a GIS database that is used to aid their planning efforts of land acquisition. These tools should be further developed to better inventory natural and cultural features. This information could be made available to the public on an interactive web-based GIS database and current technologies can support it.

Once sensitive lands are identified, it is necessary to have a plan to protect these open space and cultural areas. The San Pasqual Valley Plan and the San Pasqual Vision Plan are two plans that propose policies to preserve resources by limiting development within the San Dieguito Watershed. It is important to prohibit any future development in order to prevent the loss of open space areas, as well as to support education and outreach activities to ensure the long-term protection of natural resources within the watershed.

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Activities, stakeholder roles, and cost estimate for the action are described below.

Activities	Stakeholder (Role)	Frequency	Cost Estimate
Inventory agricultural lands, open space and cultural areas.	J (L), V (P)	Once	\$\$
Develop an interactive web-based San Dieguito Watershed GIS database.	J (L), C (P), V (P), A (P)	Ongoing	\$\$\$\$
Prohibit further development into sensitive land areas.	J (L), A (P)	Ongoing	\$
Allow limited access into preserved areas.	J (L), A (P)	Ongoing	\$
Support education and outreach activities to ensure long-term protection of natural resources.	J (L), A (P), S (P), V (P), O (P)	Ongoing	\$
Coordinate among cities, environmental organizations, and industry to obtain partners and sponsors to assist with funding the action.	J (L), C (P), B (P), A (P)	Once	\$
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			

Note: Jurisdictions = All cities and county within watershed

Type of Action: Land Use Planning

Goal(s) Addressed by Action

- Preservation of sensitive lands and open space

Objective(s) Addressed by Action

- Identify potentially vulnerable natural and man-made resources
- Inventory agricultural lands, open space and cultural areas
- Develop an interactive web-based San Dieguito Watershed GIS database
- Prohibit further development into sensitive land areas
- Allow limited access into preserved areas
- Support increased awareness to ensure long-term protection of natural resources

Benefit(s) of Action

Some benefits of preserving sensitive lands include:

- Protecting agricultural lands, open space and cultural areas
- Supporting natural resources
- Reducing degradation
- Increasing aesthetic values of land
- Increasing economic values of land

Cost Considerations

Initial cost of identifying sensitive areas and developing, implementing, and maintaining a GIS database.

Potential Source of Funds

- Reallocation of budget
- Grants

Time Frame Considerations

- Implement in < 2 years.

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4.6.2.4 Regional Coordination of Land Use Planning Between Jurisdictions

Issue

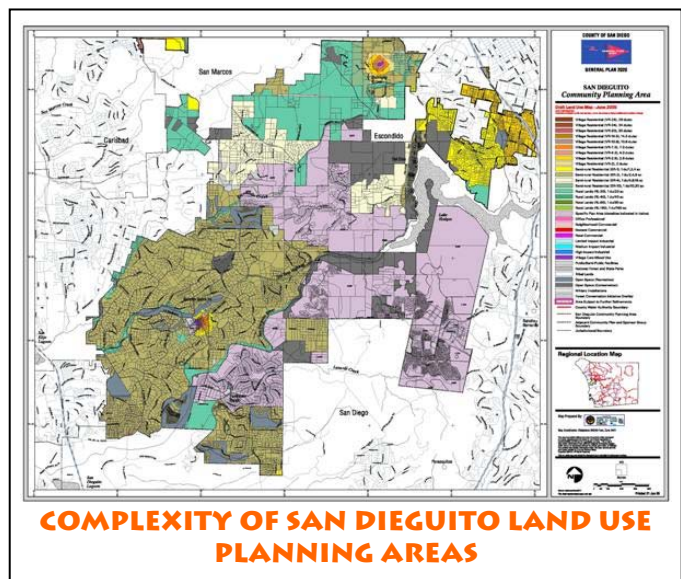
Many different agencies are involved in land use planning. In order to be most effective, planning efforts need to be coordinated between jurisdictions.

Action

Agencies involved in land use planning include those that own significant or sensitive land in the watershed, namely, the cities of San Diego, Del Mar, Escondido and Poway, the State Department of Fish and Game, the County of San Diego, the U.S. Forest Service, the San Dieguito River Park, and the Indian tribes of Mesa Grande and Santa Isabel. In addition, there are governmental agencies with regulatory authority over land owners, such as the California Department of Fish and Game, California Coastal Commission, and the U.S. Fish and Wildlife Service. There are also regional agencies, such as the San Dieguito River Park, which encompass a broad area of public and privately-owned land and which have established goals and objectives relating to water quality protection and improvement, as well as recreational trails, habitat preservation and restoration, and watershed protection.

For the betterment of the watershed and to implement this watershed plan, it is imperative that these agencies cooperate in land use planning decisions that affect the San Dieguito River watershed. This includes state and federal lands. The coordination should be on-going and take place under the leadership of the Watershed Council that will be developed as part of this WMP.

Coordinated, watershed-based planning and zoning can become the foundation of a land use planning process using subwatershed boundaries as the basis for future land use decisions. Watershed-based zoning involves defining watershed conditions, measuring current and potential future impervious cover, classifying subwatersheds based on the amount of future imperviousness, and most importantly, modifying master plans and zoning to shift the location and density of future development to the appropriate subwatershed management categories. It is recommended that agencies and property owners that own sizable parcels of natural open space should prepare management plans for those areas in coordination with other stakeholders. The management plans should be completed within two years of purchase and should address implementation of the watershed protection measures incorporated in the WMP.



WURMP and JURMP should work together with the coordinated regional plan in mind as part of an iterative process. The Regional Comprehensive Plan (RCP) is the strategic planning framework for the San Diego region. The RCP was crafted by citizens and representatives from

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the region's 18 cities and county government, working together as the SANDAG. The RCP was not designed as a regulatory plan, but rather as a guidance plan. As such, the preferred implementation approach is that local and regional agencies incorporate the recommended policy objectives and actions into their local and regional plans as they update those plans. Updates to local and general plans will then be reflected in SANDAG's regional growth forecast, the Regional Comprehensive Plan, and the Regional Transportation Plan. In other words, the implementation of the RCP will be a dynamic and iterative process.



Activities, stakeholder roles, and cost estimate for the action are described below.

Activities	Stakeholder (Role)	Frequency	Cost Estimate
Define current watershed conditions	J (L), A (P)	Once	\$\$\$
Identify current and future impervious cover	J (L), C (P), A (P), V(P)	Once	\$\$
Coordinate among jurisdictions in order to develop effective planning efforts	J (L), A (P)	Once	\$
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			

Note: Jurisdictions = All cities and county within watershed

Type of Action: Jurisdictional Land Use Planning

Goal(s) Addressed by Action

- Coordinated watershed-based planning and zoning

Objective(s) Addressed by Action

- Define current watershed conditions
- Identify current and future impervious cover
- Organize future development to the appropriate subwatershed management categories

Benefit(s) of Action

Some benefits of establishing watershed based planning and zoning include:

- Enhances/restores habitat
- Increases economic value of land
- Increases aesthetic values of land
- Decreases urban sprawl

Cost Considerations

- Participation in local and regional planning meetings, field reconnaissance, reporting, and input of watershed conditions into GIS database.
- Updates to general plans and community meetings.

Potential Source of Funds

- Grant funding
- Reallocation of budget

Time Frame Considerations

- Implement in < 2 years

4.6.3 Actions to preserve agricultural land and encourage sustainable farming

Statement of Problem

Many factors, such as soil characteristics and climatic conditions, make some lands more valuable for agricultural, grazing and farming purposes. Agricultural land is being converted to residential, commercial, and industrial land uses at an increasing rate. The disappearance of agricultural lands translates to an economic loss and a degraded quality of life at the local level. Prime agricultural land needs to be preserved. Similarly, preserved farmland needs to be sustainable to prevent topsoil depletion, groundwater contamination, the decline of family farms, and the disintegration of economic and social conditions in rural communities.

Existing Actions

The City of San Diego has set aside extensive portions of San Pasqual Valley as agricultural or open space preserves over the last 40 years.

Issue

Current zoning in rural areas of the unincorporated County call for sizable lots. However, proposals to amend the County General Plan lot size and density requirements have been discussed. These changes to the General Plan would inherently support development of the land in certain areas which may encroach upon existing or prime agricultural land.

Purpose

Maintaining agricultural land for the purpose of agriculture, grazing, and farming will ensure a stable and possibly growing yield of agricultural produce and farming products in the San Dieguito Watershed. Grazing is an important agricultural land use which has a much lower impact on the land than crop farming and offers many economic benefits. Advance planning, along with establishing a goal to maintain sustainable agricultural lands, will not only support an important economic market sector but will also preserve pervious land in the watershed. Sustainable farming will maintain the current character of the watershed and provide an example of environmental stewardship as farmers begin utilizing reclaimed water and reducing their impact on the environment through further implementation of best management practices. Agriculture is a sustainable land use that, when well managed, offers an environmentally friendly renewable resource.

Actions

In order to preserve agricultural land and encourage sustainable farming, three actions are proposed: implement agricultural BMPs, implement incentives to encourage sustainable agriculture, and preserve agricultural land.

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4.6.3.1 Implement Agricultural BMPs

Issue

Much of the San Dieguito Watershed is still zoned for agricultural use. These lands offer an extensive opportunity to educate and encourage farmers in the use of agricultural BMPs. This type of educational assistance is one of many services offered by the San Diego County Farm Bureau.

Actions

Implement BMPs for container growing operations. Growing plants in containers is a production system that has unique benefits compared to growing plants in field soil. Container plants are grown in substrates that confine roots to a limited volume, thereby requiring a relatively limited amount of water and nutrients. Thus, the opportunity exists to make sure the best possible management strategies are used, recognizing the site-specific nature of nursery production facilities. BMPs for container growing operations would include operating procedures and practices to control excessive site runoff containing nutrients and other pollutants (SNAP 1997).

Activities, stakeholder roles, and cost estimate for the action are described below.

Activities	Stakeholder (Role)	Frequency	Cost Estimate
Inventory container growing operations	J (L), A (P), B (P)	Ongoing	\$
Assess site conditions and implement BMP's	J (L), B (P), C (P)	Ongoing	\$-\$\$\$
Total Estimated Cost			\$-\$\$\$ per project
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			

Note: Jurisdictions = All cities and county within watershed

Type of Action: Inventory agricultural and farming operations and Implement BMPs.

Goal(s) Addressed by Action

- Implement Agricultural BMPs

Objective(s) Addressed by Action

- Grow plants in containers
- Implement BMPs to control/reduce runoff

Benefit(s) of Action

Some benefits of implementing agricultural BMPs include:

- Reduce pollutant concentration
- Reduce nutrients
- Reduce erosion/sedimentation
- Reduce degradation
- Reduce water use

Cost Considerations

- Design plans required
- Construction and maintenance
- Monitoring required to determine effectiveness

Potential Source(s) of Funds

- Reallocate Existing Resources
- Grant Funds

Time Frame Considerations

- Implement in 2-5 years.
- Near- and long-term benefits.

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4.6.3.2 Implement Incentives to Encourage Sustainable Agriculture

Issue

Rising values of land in San Diego County has presented farmers and landowners with significant land equity. Agricultural land is being lost to development because farming is not seen as economically valuable when compared with other land uses.

Actions

More tax breaks and/or incentives are needed for preserving agricultural land. Farmers across California are cashing out of agriculture tax incentives that are failing to offset sharp increases in land values.

Special incentives should be given for organic farming operations. Organic farming might save smaller family farms by offering lower startup costs and encouraging potential young farmers to stay in farming.

Assess the viability of recycled water and reclaiming onsite irrigation runoff for beneficial reuse. Identify grant opportunities for recycled water infrastructure improvements. Some recycled water plans have already been studied and are discussed in the *Southern California Comprehensive Water Reclamation and Reuse Study* by the Bureau of Reclamation. In this study, a project in San Pasqual Valley is proposed and would provide 8200 acre feet per year to agricultural irrigation users as well and for groundwater recharge. New pipeline and pumping infrastructure would need to be constructed.

Activities, stakeholder roles, and cost estimate for the action are described below.

Activities	Stakeholder (Role)	Frequency	Cost Estimate
Allow tax breaks for preserving agricultural land	J (L), A (P)	Ongoing	\$
Implement special incentives for organic farming	J (L), A (P)	Ongoing	\$\$\$
Install reclaimed water infrastructure	J (L), A (P)	Ongoing	\$\$\$\$
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			

Note: Jurisdictions = All cities and county within watershed

Type of Action: Financial incentives and infrastructure improvements

Goal(s) Addressed by Action

- Encourage sustainable agriculture
- Increase use of reclaimed water

Objective(s) Addressed by Action

- Provide tax incentives for preserving agricultural land
- Promote economically valuable land
- Support organic farming
- Encourage recycled water for agricultural uses

Benefit(s) of Action

Some benefits of encouraging sustainable agriculture include:

- Increases economic value of land
- Reduces erosion/sedimentation
- Increases water reuse
- Reduces degradation

Cost Considerations

- Reduction of taxes received by jurisdiction, state, and federal government
- Cost for providing tax incentives
- Capital improvement costs for infrastructure

Potential Source of Funds

- Existing water purveyor fees
- Grant funding
- Bonds

Time Frame Considerations

- Implement in 2-5 years
- Long-term benefits

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4.6.3.3 Preserve Agricultural Land

Issue

If agricultural land is to remain a part of the character of the watershed, it will need to compete against the other possible uses of the land. With the population in San Diego County rapidly growing, preserving agricultural land will be difficult.

Actions

There is a need to establish key agricultural preserves. The San Diego County General Plan 2020 emphasizes greater protection of open space, rural and agricultural lands allowing for continued utilization of the land for livestock grazing and resource conservation. The San Pasqual Vision Plan, proposed by San Diego City Councilman Brian Maienschein, is an example of a preservation plan that intends to preserve agricultural and open space land and limit commercialization of the valley. The Plan should be supported and key agricultural and open space parcels should be prioritized for preservation.

Another option to preserve agricultural land is to purchase the development rights. Under a purchase of development rights arrangement, a farmland owner voluntarily sells the development rights to a government agency or private land trust and receives compensation for the restrictions placed on the land. The farmer retains title to the land and can sell or pass along the farm, although the use of the land is limited to farming and open space. An easement is placed on the landowner’s deed that prohibits residential development except for the owner.

Activities, stakeholder roles, and cost estimate for the action are described below.

Activities	Stakeholder (Role)	Frequency	Cost Estimate
Limit commercialization of the Valley	J (L), A (P),	Ongoing	\$\$
Prioritize open space parcels for preservation	J (L), A (P)	Ongoing	\$\$
Purchase development rights of land	J (L), A (P), O (P)	Ongoing	\$\$\$\$
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			

Note: Jurisdictions = All cities and county within watershed

Type of Action:

- General plan land use amendments
- Dedicate easements and restrictions

Goal(s) Addressed by Action

- Preserve agricultural land

Objective(s) Addressed by Action

- Prioritize open space parcels for preservation
- Limit commercialization of the valley
- Purchase development rights of land

Benefit(s) of Action

Some benefits of preserving agricultural land include:

- Increases economic value of land
- Protects habitat
- Regional and/or watershed benefits
- Local benefits
- Increases aesthetic values of land
- Preserve agricultural farmland zoning

Cost Considerations

- General Plan amendments
- Land purchase may be required

Potential Source of Funds

- Bonds
- Grants
- Private investment

Time Frame Considerations

- 5 years
- Long-term Benefits

4.6.4 Actions to promote Stewardship of the San Dieguito Watershed

Statement of Problem

The primary reasons for the perpetuation of environmental problems are a lack of understanding of the connections between behaviors and water quality issues, public indifference, and/or lack of concern and coordination.

Existing Actions

Municipalities and organizations have been reaching out and educating citizens and businesses for many years with topics related to promoting conservation and watershed protection. These topics include the “No Dumping” signage on storm drain catch basins and entrances to waterways, outreach brochures and fact sheets addressing pollution reduction around homes, radio outreach carrying the “no dumping to storm drain” message, participation in local environmental and street fairs, and education and outreach to local schools. The Municipal Storm Water Program Education Technical Advisory Committee (TAC) coordinates activities between non-profit organizations, private institutions, and governmental agencies in order to provide environmental and water quality education. The TAC works closely with the Copermitttee Management Committee to support regional environmental outreach efforts.

Issue

The TAC coordinates development and implementation of public education and outreach activities that are pertinent to protect water resources. Targeted education and outreach are needed to increase public awareness and understanding of issues and actions that would integrate protection, preservation, restoration and enhancement across multiple watershed functions within the San Dieguito Watershed. Municipalities and agencies coordinate to conduct individual watershed function education, such as water quality (urban runoff/clean beaches); or water supply (water conservation). However, these education programs have not been integrated.

Purpose

Coordination with non-profit organizations, private institutions, governmental agencies and the general public is recommended to develop and/or adapt outreach and education materials to promote public awareness and stewardship of the San Dieguito Watershed and all of its functions, collectively.

Actions

The following actions are recommended to promote stewardship within the San Dieguito watershed:

- Create a Watershed Council
- Develop curricula materials specific to the San Dieguito Watershed to provide to local schools
- Install informational kiosks and interpretive centers
- Promote outreach to tribal governments
- Seek funding sources to implement watershed projects

4.6.4.1 Create a Watershed CouncilIssue

An organization is needed to implement many policy level action items of the plan and to amend the plan as necessary to reflect the changing watershed conditions. The exact role and authority of the Watershed Council has not been determined.

Action

The formation of a Watershed Council or similar organization is needed to implement watershed plans and policies and to carry watershed stewardship forward. Considering all other agencies and efforts in the watershed, it would be most beneficial for the watershed council to leverage existing agency efforts and to fulfill other responsibilities necessary to implement the WMP. It is possible that existing agencies may acquire additional responsibilities and relinquish some responsibilities as the WMP is implemented. Whatever the circumstances, answers to the following questions will help provide guidance in shaping the responsibilities of the Watershed Council:

- What actual authority would the proposed Watershed Council have in setting priorities and implementing actions that address water quality problems identified during monitoring activities? This would include hiring consultants and/or contractors to conduct activities.
- How would the need for establishing and enforcing land use policies and creating ordinances to address watershed issues be achieved?
- How would the Watershed Council operate and what stakeholder notification process would be required to ensure continued involvement of watershed stakeholder in the decisions made by the Watershed Council?

The leadership for the council should be established by existing organizations that have multi-faceted concerns throughout the river valley, such as the San Dieguito River Park JPA, which includes all of the local jurisdictions in the watershed, and the San Dieguito River Valley Conservancy, which is a non-profit citizen-based organization. The San Dieguito River Park JPA and the San Dieguito River Valley Conservancy currently work closely together in accomplishing their objectives, including seeking grant funds. The council should include multi-jurisdictional involvement to coordinate policy level actions. In addition, the council should have participation from the County of San Diego and the cities that make up the watershed (San Diego, Del Mar, Solana Beach, Poway, and Escondido), as well as other stakeholder interests.

One of the first functions of the Watershed Council would be to present the WMP before the various stakeholders to get support. The Council will then need to implement the WMP recommendations and update and maintain the WMP on a long-term basis. In addition, funding will be necessary for the agency that takes the lead on implementing the WMP. Although there is no funding currently available, there are Grant funds available which could be used for and by the Watershed Council.

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Activities, stakeholder roles, and cost estimate for the action are described below.

Activities	Stakeholder (Role)	Frequency	Cost Estimate
Form a Watershed Council	J (L)	Once, update as needed	\$
Coordinate policy level actions	J (L), A (P)	Ongoing	\$
Present the Plan to stakeholders	J (L)	Ongoing	\$
Implement watershed plans and policies	J (L)	Ongoing	\$\$
Total Estimated Cost			\$-\$ per year
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			

Note: Jurisdictions = All cities and county within watershed

Type of Action: Watershed Stewardship.

Goal(s) Addressed by Action

- Implement watershed plans and policies.

Objective(s) Addressed by Action

- Create a Watershed Council.
- Coordinate policy level actions.
- Promote and protect beneficial uses and eliminate further degradation of the watershed.
- Raise public awareness and increase personal stewardship of the watershed.
- Implement watershed plans and policies.

Benefit(s) of Action

Creating a Watershed Council will help to coordinate watershed policies and will increase personal stewardship and involvement in watershed protection.

Cost Considerations

- Staff reassignment and/or retraining required.
- New staff may be required.

Potential Source of Funds

- Reallocation of budget.
- Grants.

Time Frame Considerations

- Implement in < 2 years.

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4.6.4.2 Develop Curricula Materials Specific to the San Dieguito Watershed and Provide them to Local Schools

Issue

Targeted outreach is needed to increase public awareness and stewardship and thereby reduce impairments and issues of concern specific to the San Dieguito Watershed.

Action

This action involves modifying existing curricula materials for education and outreach specific to the San Dieguito Watershed. The curricula would focus on increasing awareness of the beneficial uses of the San Dieguito Watershed, its current water quality issues, and how individual behavior impacts watershed health. The curricula would be tailored to reflect the character of the San Dieguito Watershed.



**TARGETED EDUCATIONAL
OUTREACH**

Several existing educational resources are available that could be reviewed and tailored to include specific information on the San Dieguito Watershed. It is envisioned that the curricula would include a combination of classroom education and field trips. Recommended field trips include locations associated with water supply and treatment (San Diego County Water Authority), recycling, and water bodies and natural areas within the watershed (e.g., beaches, San Dieguito River Valley, San Pasqual Valley). Field trips would be encouraged through coordination between municipal and private enterprises and school districts.

Example resources for educational curricula.

- <http://www.creec.org>
- <http://www.calepa.ca.gov/education/>
- <http://aquarium.ucsd.edu/learning/>
- <http://www.ilacsd.org/education/>
- <http://www.sdcwa.org/education/>
- <http://www.epa.gov/OWOW/NPS/kids>
- <http://www.sdcwa.org/education/teachers.phtml>

The California Regional Environmental Education Community (CREEC) has a local San Diego education program, SanD-CREEC, which is a project of the California Department of Education. This program provides access to a local coordinator who acts as a “conduit of information” to help teachers by linking them with effective curriculum, speakers, workshops, outings, etc. The CREEC local coordinator for San Diego County can be reached at <http://www.creec.org/region9>. CREEC also provides links to funding opportunities, ranging from awards to educational grant programs. The action includes coordination with the local CREEC representative to broaden resource assistance opportunities in developing curricula materials.

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Activities, stakeholder roles, and cost estimate for the action are described below.

Activities	Stakeholder (Role)	Frequency	Cost Estimate
Coordinate with educational representatives from local school districts to develop curriculum materials to support a public awareness campaign on beneficial uses, current water quality issues, and how individual behavior affects environmental health of the San Dieguito Watershed.	J (L), S (P)	Quarterly during curricula development, then annual	\$
Coordinate with SanD-CREEC for resource assistance support in developing curricula materials.	S (L), J (P)	As needed	\$
Coordinate between municipal and private enterprises and school districts to encourage field trips that increase watershed awareness.	S (L), J (P)	Annual	\$
Apply for educational grants to assist with funding.	J (L), S (P)	Annual	\$
Total Estimated Cost			\$-\$\$\$ per year
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			

Note: Jurisdictions = All cities and county within watershed in coordination with local schools

Type of Action: Public education and outreach.

Goal(s) Addressed by Action

- Promote public awareness and involvement in watershed issues.

Objective(s) Addressed by Action

- Promote and protect beneficial uses and eliminate further degradation of the watershed.
- Raise public awareness and increase personal stewardship of the watershed.
- Involve and encourage public participation in management and protection of watershed resources.

Benefit(s) of Action

Increasing school age children’s, teachers’, and administrators’ awareness of beneficial uses and impairments within the San Dieguito Watershed will contribute to increased awareness and stewardship by their families, and will instill attitudes and behaviors in children that contribute to their development of personal environmental stewardship.

Cost Considerations

The following factors have the potential to affect the cost of the project:

- Staff reassignment and/or retraining required.
- New staff required.

Potential Source(s) of Funds

Several sources of funds may exist, including:

- Reallocation of budget.
- Grants (California Department of Education Environmental Education, USEPA Environmental Education Program, San Diego County Office of Education).

Time Frame Considerations

- Implement in 2 - 5 years.

Potential Project Location(s)

- San Diego, Del Mar, Escondido, Poway and Solana Beach School Districts.

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4.6.4.3 Install Informational Kiosks and Interpretive Centers

Issue

Local parks and recreational areas provide an opportunity for public education regarding watershed issues, including urban runoff, water quality, and biologically sensitive resource areas.

Action

This action involves construction of kiosks, development of watershed educational materials, and installation of kiosks at public use areas. It is recommended that the signage include educational information on beneficial uses, including biological resources, as well as watershed-based messages (similar to information provided in public outreach materials). Development of concepts for watershed signage and/or outreach materials could be coordinated with the public as an outreach activity (e.g. inclusion of public awareness messages generated by local schools). Public education kiosks may range from single-panel design with a public education message to a more elaborate three-panel design at key focal public use areas.

Activities, stakeholder roles, and cost estimate for the action are described below.

Activities	Stakeholder (Role)	Frequency	Cost Estimate
Finalize locations for kiosks.	J (L)	Once	\$
Develop design(s) for kiosks.	J (L) B (P)	Once	\$
Coordinate with local schools to provide outreach messages, drawings, and/or other materials to include in kiosks.	J (L), S (P)	Annual	\$
Construct and install kiosks.	J (L)	Once	\$/unit
Develop and maintain information materials at kiosks.	J (L), S (P), B (P)	Quarterly	\$
Total Estimated Cost			\$/area
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			

Note: Jurisdictions = City or county within which park occurs will take the lead on the design of kiosks in their jurisdiction

Type of Action: Public education and outreach.

Goal(s) Addressed by Action

- Promote public awareness and involvement in watershed issues.

Objective(s) Addressed by Action

- Promote and protect beneficial uses and eliminate further degradation of the watershed.
- Raise public awareness and increase personal stewardship of the watershed.
- Involve and encourage public participation in management and protection of watershed resources.

Benefit(s) of Action

Public education signage will increase public awareness and stewardship of the watershed and minimize or reduce impacts by park goers and facility users.

Cost Considerations

- Design plans required
- Staff reassignment and/or retraining required
- Equipment purchase required

Potential Source(s) of Funds

- Reallocation of budget
- Partnerships and/or sponsorships
- Fundraisers
- Grants

Time Frame Considerations

Implement in < 2 years.

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4.6.4.4 Promote Outreach to Tribal Governments

Issue

Tribal lands comprise a portion of the San Dieguito Watershed. Therefore, the tribal community should play a participatory role in implementing this WMP. To date, representatives from the tribal community have been unable to attend the Watershed planning meetings. Tribal communities conduct many similar activities that have potential to impact the watershed, such as agricultural operations.

Action

This action will involve an extensive outreach to tribal governments. The end result of this action must be a partnership between the County of San Diego, municipalities in the San Dieguito Watershed, and tribal governments with lands in the San Dieguito Watershed. This action will utilize every available avenue to secure partnership with tribal governments. This action will further recognize the important role Native Americans have played in the development of the San Dieguito Watershed and their continuing efforts to preserve and improve native habitats in the watershed.

Coordination with Other Actions

All actions suggested in Section 4.5.6 *Actions for Public Outreach and Education* have the potential to coordinate together and should be conducted in a manner that creates a synergistic effect. It is realized that funding will be the limiting factor in which outreach and education activities are conducted.

Activities, stakeholder roles, and cost estimate for the action are described below.

Activities	Stakeholder (Role)	Frequency	Cost Estimate
Watershed council will conduct outreach to tribal governments until successful.	W (L); J (P)	Once	\$
Maintaining of tribal relationship	W (L); J (P)	Ongoing	\$
Total Estimated Cost			\$ per year
Stakeholders: A = resource/regulatory agencies, B = businesses, C = contractor/consultant, J = jurisdiction, O = other S = schools/universities, V = volunteers, W = watershed council 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			

Note: Jurisdictions = All cities, county, and tribal governments within watershed; the County to take the lead in documentation activities

Agencies = SDRWQCB, SWRCB, CDFG, USACE, Caltrans, San Diego County Department Planning and Land Use.

Type of Action: Public Outreach and Education.

Goal(s) Addressed by Action

- Protect, enhance, and restore natural habitats and biological resources.
- Protect and enhance water quality.

Objective(s) Addressed by Action

- Increase the viability, diversity, health, and function of ecological systems of the watershed.
- Promote and protect beneficial uses and eliminate further degradation of the watershed.

Benefits of Action

Tribal lands play a key role in the San Dieguito Watershed. Having the assistance of tribal governments in protecting and preserving the San Dieguito Watershed is critical and greatly increases the chances for success of this action plan.

Cost Consideration(s)

The following factors have the potential to affect the cost of the action:

- Staff reassignment and/or retraining required.
- Requires cooperation of tribal governments.

Potential Source(s) of Funds

Several sources of funds may exist, including:

- Reallocation of budget.
- Partnerships and/or sponsorships.

Time Frame Consideration

- Implement in ≤ 3 years.
- Near- and long-term benefits.

4.6.4.5 Seek Funding Sources to Implement Watershed ProjectsIssue

Opportunities exist to obtain funds from a variety of different sources to implement watershed based programs and projects. Local jurisdictional funding may not be available or the best choice to implement some of the actions described in this Action Plan. Some projects involve enhancement and/or restoration of native habitats while others focus on improving water quality. Implementation of some of these types of projects may be possible as part of mitigation for new developments. Other projects will require separate funding sources to implement. Many projects are appropriate for funding through federal, state, and local grants. Often information about each grant is published and available to the public to help guide the grant writing process.

Action

This action involves obtaining grant funding to implement watershed management actions. Because of uncertainties and/or limitations associated with any one source of funds, a strategy that includes a mix of public funding, federal and state grants, and self-generating funds are recommended to obtain the needed funds for implementing watershed programs and projects. Generally, obtaining funds is a competitive process involving preparation of an application which is reviewed by the funding agency. Contact would be made with the agency grant coordinator to verify applicability of the grant for the proposed project and to obtain assistance with the grant application, as necessary. The application process includes a description of the action, the issue that it addresses, and benefit(s) of the action. The grant application process will also consider the potential for public involvement and the development of partnerships with other stakeholders to implement the project, if possible. Grants can be more successful if there are multiple stakeholders involved in the project implementation. The grant application shall be submitted to the appropriate agency, and follow up shall be conducted to ascertain the status and success of the application, as appropriate.

Funding programs are available from the California EPA through the Division of Financial Assistance (DFA). The DFA is responsible for implementing the SWRCBs financial assistance programs. Some of these programs include loan and grant funding for construction of municipal sewage and water recycling facilities, watershed protection projects, and non-point source pollution control projects. Some sources of available funding opportunities can be found on the SWRCB's website (http://www.waterboards.ca.gov/funding/index.html#funding_programs) and the project clean water's website (<http://www.projectcleanwater.org/html/grants.html>).

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Activities, stakeholder roles, and cost estimate for the action are described below.

Activities	Stakeholder (Role)	Frequency	Cost Estimate
Obtain grant information	J (L)	Annual	\$
Consider collaboration and define agreements with other stakeholders	J (L), B (P), O (P)	Once, then update every five years, as needed	\$
Obtain grant Request for Proposal (RFP)	J (L)	As Available	\$
Attend Grant Workshops	J (L), C (P)	As Available	\$
Apply for grant funding	J (L), C (P)	As prepared	
Total Estimated Cost			\$-\$\$ per year
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			

Note: Jurisdictions = All cities and county within watershed

Type of Action: Management Planning.

Goal(s) Addressed by Action

- Implement stewardship of the watershed in balance with economic and environmental impacts.

Objective(s) Addressed by Action

- Obtain grant funds to implement watershed improvement projects.
- Develop an effective approach to meeting water quality regulations for the watershed.
- Promote and protect beneficial uses and eliminate further degradation of the watershed.

Benefit(s) of Action

Obtaining grant funding will help to implement projects that contribute to substantial environmental benefits in balance with economic impacts.

Cost Considerations

- Grant application required.
- Staff reassignment and/or retraining required.

Potential Source(s) of Funds

- Reallocation of budget.

Time Frame Considerations

Implement in < 2 years.