



PART A - COVER PAGE

STATE WATER RESOURCES CONTROL BOARD
 SFY 2001 Costa-Machado Water Act of 2000
 Chapter 6, Article 2, Watershed Protection Program

APPLICANT: County of San Diego, Department of Environmental Health

ADDRESS: P.O. Box 129261
San Diego, CA 92112-9261

PROJECT DIRECTOR: Teresa Brownyard

E-MAIL ADDRESS: Tbrowneh@co.san-diego.ca.us **FAX NO.:** 619-338-2174 or 619-338-2848

PHONE NO.: 619-338-2410 **FEDERAL TAX ID. NO.:** 956000934

PROJECT TITLE: San Diego River Watershed Management Plan

PROBLEM(S) BEING ADDRESSED:

Water is a scarce and finite resource in the San Diego Region. Burgeoning economic and population growth has denigrated water quality and placed increasing pressure on supplies. Maintaining water quality is of paramount importance because the Region relies primarily on imported supplies, captures little local runoff due to low precipitation levels, and is subject to periodic drought. Notwithstanding, San Diego is famous for its sunny weather and year-round recreation. Each year more than 25 million people visit San Diego area beaches. Numerous concerns about the pollution of beaches have been raised, threatening a major resource on which the tourism economy is based. The San Diego River is one of the largest and most important sources of urban runoff into the waters off San Diego. Controlling pollution in this watershed is critical to preserving our aquatic resources and the economic basis of this region. The San Diego River Watershed (SDRW) has the largest population in San Diego County and is the second largest hydrologic unit (San Diego Hydrologic Unit 907.00) in this region. The western half of this watershed is highly urbanized, while the eastern half is still primarily natural and undeveloped. Beaches in SDRW have a history of shoreline monitoring exceedances due to sewage spills and nonpoint source urban runoff. The threats to the designated beneficial uses for the SDRW include pathogens, habitat degradation and loss, nutrients/eutrophication, non-native invasive species and trash dumping. Further threats are dissolved oxygen in the surface waters and salinity, nitrates, petroleum, MTBE and solvents in the groundwater. In addition, the lower San Diego River has a history of damaging flood episodes and is considered to be at high risk of major future flooding. The frequency of flooding and the magnitude of damage increase as more urbanization occurs within the SDRW. This project addresses the need for an integrated management plan to guide a multifaceted solution to the degradation of the SDRW. Specific issues to be addressed are: 1) threats to water quality due to sewage and various nonpoint sources of urban runoff that affect natural habitat, wetlands and the health of threatened and endangered species; 2) protection of the Santee-El Monte groundwater recharge aquifers and basins from contamination of urban and industrial runoff; 3) flooding that results in harm to people, property and the natural ecosystem; and 4) watershed, wetland and river restoration.

WATERBODY/WATERSHED: San Diego River Watershed (San Diego Hydrologic Unit 907.00)

FISCAL SUMMARY:

Prop 13 Funds Requested \$197,500 (minimum [\$50,000]/maximum [\$5,000,000])

PROJECT SUMMARY:

We propose to develop and implement a comprehensive and sustainable watershed management plan (WMP) to restore and protect water quality in the SDRW. The WMP will, through a stakeholder process and integration with other watershed activities, provide best management practices, increased monitoring, education of stakeholders and residents, and strategies (structural and non structural solutions) to eliminate and or reduce pollutant levels consistent with the SDRWQCB basin plan. Collaboration with key stakeholders will be a major component so that it will be mutually beneficial and in the public interest. We seek to align interested parties to ensure consistency with local watershed management and regional water quality control plans, while reducing flooding, controlling erosion, improving water quality, enhancing regional water supplies, and supporting aquatic and terrestrial species habitats. This creation of a common vision among the many stakeholders is also crucial to its success. Due to its size and the complexity of the issues, the SDRW will be divided into two major areas, Lower and Upper, so that we can better address areas of concern in the planning process. Specific issues to be addressed in the Lower SDRW include, 1) NPS pollution, 2) coastal water quality, 3) groundwater protection, 3) wetlands protection, 4) flooding, and 5) recreation. Specific issues to be addressed in the Upper SDRW include, 1) protection of surface water supplies, 2) habitat protection, 3) NPS pollution, 3) recreation, 4) flood management warning, agriculture. The framework will identify priorities and strategies for protecting and restoring natural systems of groundwater recharge, native vegetation, water flows, riparian zones, beneficial uses of waters and overall water quality.



PART B - BUDGET SUMMARY SHEET

STATE WATER RESOURCES CONTROL BOARD

APPLICANT: County of San Diego
PROJECT TITLE: San Diego River Watershed Management Plan

	Total Budget	Prop 13 SWRCB Share
1. Personnel Services	\$1,052,700*	\$47,500
2. Operating Expenses	<i>Included in 1. above</i>	-
3. Property Acquisitions	-	-
a. Equipment	In-kind	-
b. Furniture	In-kind	-
c. Portable assets	In-kind	-
d. Electronic data	In-kind	-
e. Processing equipment	In-kind	-
f. Miscellaneous	-	-
g. Real Estate easements	-	-
h. Real Estate	-	-
4. Professional and Consulting Services	\$150,000	\$100,000
5. Construction Expenses	-	-
6. CEQA/NEPA	\$100,000	\$50,000
7. Overhead (%)	<i>Included in 1. above</i>	-
TOTAL BUDGET	\$1,302,700	\$197,500

*BREAKDOWN OF COSTS TO BE INCURRED

<i>Task</i>	<i>Estimate of Cost</i>	<i>Details of Costs</i>
SWRCB Contract for Grant Award	\$ 900	10 staff hours of an EHSIII (\$90/hr loaded)
Phase I: Assemble Project Team	\$ 7,200	80 staff hours of an EHSIII (\$90/hr loaded)
Phase 2: Establish Working Committees	\$ 9,000	100 staff hours of EHS III and other various agencies
Phase 3: Information Gathering	\$ 388,800	3 months, 4 committees w/ 15 members each to meet 36 times for 2 hrs
Phase 4: SDRW Assessment	\$ 86,400	TAC over 8 months, 15 people, approx. 16 meetings @ 4 hr. each
Phase 5: WMP Framework	\$ 90,000	3 workshops at \$1200 ea., 8 more months as above
Phase 6: WMP Development	\$ 64,800	TAC over 6 months, 15 people, approx. 12 meetings @ 4 hr. each
Phase 7: CEQA/NEPA Preparation	\$ 163,500	Cost \$150,000, and 150 staff hours
Phase 8: WMP Adoption	\$ 10,800	120 staff hours of EHS III and other various agencies
Phase 9: WMP Implementation	\$ 225,000	25 stakeholders, 100 hrs each for first month (ONGOING)
Quarterly Reports	\$ 2,700	12 reports at 2.5 hr s each w/ EHSIII (\$90/hr loaded)
Final Report	\$ 3,600	40 hours EHSIII
	\$ 1,052,700**	

**The budget estimate is contingent upon staffing and budget approvals by the participating partners, which currently includes the County of San Diego (Environmental Health & Flood Control), the City of San Diego (Water Department & Stormwater Administrator), the City of Santee, the City of El Cajon, the City of La Mesa, the San Diego County Water Authority, San Diego State University (Department of Geology & Institute for Regional Studies of the Californias), the Ramona Municipal Water District, The Environmental Trust, San Diego Stream Team, and the Iron Mountain Conservancy.



PART C - PROJECT QUESTIONNAIRE

1. **PROJECT TITLE:** San Diego River Watershed Management Plan

2. **LEAD AGENCY:** County of San Diego, Department of Environmental Health

ADDRESS: P.O. Box 129261
San Diego, CA 92112-9261

PROJECT DIRECTOR: Teresa Brownyard

E-MAIL ADDRESS: Tbrownneh@co.san-diego.ca.us **FAX NO.:** 619-338-2174 or 619-338-2848

PHONE NO.: 619-338-2410

3a. **WATERSHED IN WHICH THE PROJECT WILL BE UNDERTAKEN:** San Diego River Watershed (San Diego HU 907.00)

3b. **COUNTY IN WHICH THE PROJECT WILL BE UNDERTAKEN:** San Diego County

3c. **IS THE PROPOSED PROJECT WITHIN THE CALFED SOLUTION AREA?** yes no

3d. **Do you want your project forwarded to CALFED to alert CALFED to your need for funding?** yes no

4. **IDENTIFY THE MAJOR SOURCES OF NPS POLLUTION THAT WILL BE ADDRESSED BY THE PROPOSED PROJECT (CHECK ALL APPROPRIATE SOURCES).**

Agriculture Forestry Urban (Construction, Roads, Septic Systems) Stormwater/Urban Runoff
 Marinas and Boating Activities Hydromodification Resource Extraction Other: _____

5. **PROPOSAL DESCRIPTION**

a. **PROBLEM STATEMENT**

The San Diego River watershed (SDRW) is a long, triangular area that originates in the Cuyamaca Mountains in eastern San Diego County and drains more than 30 miles west to the Pacific Ocean. At 277,543 acres (440 mi²), it is the second largest hydrologic unit (San Diego Hydrologic Unit 907.00) in San Diego County and contains the largest population (~476,000) of all the County's watersheds. It is comprised of four hydrologic areas (Lower San Diego, San Vicente, El Capitan & Boulder Creek) and fifteen hydrologic subareas, each of which is currently experiencing problems typical of increasing urbanization. While much of the upper eastern portion of the SDRW remains vacant or undeveloped (58.4%), a projected population increase of more than 20% over the next 15 years will intensify these pressures. Existing resources within the SDRW are extremely diverse. These include five surface water reservoirs, a large groundwater aquifer, and extensive riparian habitat, coastal wetlands, and coastal tidepools. Land uses are also highly varied, and include residential areas, mining operations, transportation, agriculture, commercial and industrial uses, and recreation. A number of problems associated with increasing urbanization currently impair or threaten these resources and uses. Examples include pathogens, eutrophication, invasion of non-native species, habitat degradation and loss, oxygen depletion, littering, and the introduction of numerous contaminants such as nitrates, petroleum, MTBE, and solvents to surface and groundwater. Additionally, high TDS from imported water increases the salinity of streams and freshwater habitat. The coastal portion of the SDRW also has a history of shoreline monitoring exceedances due to both sewage spills and urban runoff, and flooding is particularly acute during heavy rains due to development of the flood plain. Planning efforts to date have been poorly coordinated, have often failed to address many of these important environmental issues and concerns, and are not currently capable of meeting these increased pressures. This project will focus on the development of a comprehensive Watershed Management Plan (WMP) within which these issues can be more adequately addressed. In doing so, a variety of contaminant sources, resource issues, and potential management options will be explored.

Urbanization

The SDRW is typical of urbanized watersheds. Many common nonpoint source pollutants contaminate the San Diego River and surrounding surface waters. These include pathogens, nutrients, sediment, oxygen-demanding substances, oil/grease, heavy metals, toxic chemicals and floatables. The United States Environmental Protection Agency ranks nonpoint source pollution as the highest ecological risk impacting our region. The SDRW has a high urban runoff potential, with 10.6% of land area above 25% imperviousness. Land uses within the SDRW are moderately diverse, but about one-fourth of the total land area consists of "urban" uses¹ (see Table 1 below). Approximately 78,610 acres (28%) of the SDRW is urbanized, developed with streets, freeways, parking lots, housing, schools, offices, commercial and industrial uses, most of which is concentrated in the lower region. Approximately 476,000 residents live in the SDRW, primarily within these urban land use areas, which is the largest population of all the County's watersheds. Compounding the contamination issues associated with this existing urbanization, a significant portion of the upper, eastern portion of the watershed (58.4%) is still vacant or undeveloped, an important point since growth in the SDRW is projected to increase by more than 20% by 2015. Since contaminant loadings can reasonably be expected to increase with further urbanization of the watershed, this emphasizes the need to better characterize the respective contributions of potential sources and to identify effective management options now. Strides have been made to designate key portions of the watershed (13.3%) for open space and parkland, but there is a great need to implement protection plans and identify other areas needing protection. Additionally, agriculture and mining operations occur in the upper portion of the SDRW, further supporting the need for a comprehensive planning effort.

¹ Source: Watersheds of the San Diego Region (SANDAG, March-April 1998)



TABLE 1: 1995 LAND USES WITHIN THE SAN DIEGO HU

<i>Land Use</i>	<i>Total Acres</i>	<i>% of Total</i>
Residential	41,223	14.9
Commercial / Industrial	11,537	4.2
Schools	1,952	0.7
Commercial Recreation	1,794	0.7
Freeways / Road ROWs	15,301	5.5
Parks / Open Space	36,847	13.3
Agriculture	6,803	2.5
Vacant / Undeveloped	162,084	58.4
Total	277,543	100.0

River, Surface and Coastal Water Quality

The San Diego River discharges to the Pacific Ocean at the northern boundary of the community of Ocean Beach. Discharges from the river mix and move by tidal and current interaction to impact not only Ocean Beach, but also other heavily utilized recreational areas including the Sunset Cliffs shoreline, Pacific Beach, and Mission Beach. Frequently, and especially during winter rains, the river carries coliform bacteria and pathogens from upstream watershed sources, often resulting in beach postings and closures, which more than doubled between 1996 and 1999. Ocean Beach and the surrounding area have a history of shoreline monitoring exceedances due to both sewage spills and urban runoff. In 1999, the community of Ocean Beach was subject to nine postings due to high levels of coliform bacteria, six closures due to sewage spills, and five general rainfall advisories. A priority in the development of this plan will be the management of wastes contributing fecal coliform bacteria to runoff. Examples of sources and issues to be addressed pet waste, nutrients, sediment and bacteria in runoff from upstream equestrian uses. Other important water quality problems have been identified for the watershed. For example, local authorities and the public are concerned with the control of industrial waste in sewage discharges, impacts from sewage flows, excessive dry weather freshwater inflows, and additional contaminant runoff from mining operations, agriculture, and urban development.

Water Supply Reservoirs

Old Mission Dam, built in 1815 on the San Diego River in Mission Gorge, supplied water to the Mission San Diego de Alcala. Now a Historical Landmark, this dam was the first water supply development in California. Today the SDRW is pivotal for current and future water supply for the San Diego region and has statewide significance. There are five major water supply reservoirs in the SDRW. Murray and Jennings Reservoirs store water imported from the Colorado River and Northern California. Cuyamaca Reservoir captures local runoff. The largest reservoirs, San Vicente and El Capitan, both capture local runoff and store imported water. Annual precipitation in the SDRW ranges from less than 10 inches at the coast to about 35 inches near Cuyamaca Reservoir. Local runoff impounded in these five reservoirs represents 5% of regional water needs. The storage of imported water in these reservoirs greatly increases their importance to the regional water supply strategies. Collectively, they supply water to as many as 760,000 residents. Additionally, they represent over 50% of regional emergency storage, and therefore figure prominently in future emergency storage plans. Local agencies working toward statewide water supply goals of balancing environment, conservation, and sustainability look at the SDRW and its reservoirs, as a part of the permanent solution for water supply. Contamination of local watersheds can degrade these supplies. Their protection is essential for meeting current and future water supply for the San Diego region.

Groundwater Resources

Beneath the San Diego River lie the Santee-El Monte and Mission San Diego Groundwater Basins that have the storage capacity of between 70,000 to 100,000 acre-feet. The Santee-El Monte Groundwater Basin provides a cost-effective and reliable water supply to four water districts (Padre Dam Municipal Water District, and Helix, Lakeside and Riverview Water District) and the City of San Diego. Due to conjunctive use, Lakeside residents have the lowest water rates in San Diego County. However, groundwater levels are declining and water supply and quality is declining in this aquifer. Between 1960 and 1990, groundwater levels declined by approximately twenty feet and total dissolved solids (TDS) levels doubled in certain regions in Lakeside (especially near sand mining sites). Near urbanized regions in Santee, TDS levels have tripled making well water unpotable (Groundwater Management Planning Study, Draft Report 1999). In 1999, the Riverview Water District was forced to shut down four wells due to MTBE contamination. Unfortunately, this supports the contention that current land use planning practices and best management practices are not adequately protecting groundwater quality. In addition, the destruction of native riparian habitat, the presence of large stands of arundo donax (an exotic plant which consumes great amount of surface and groundwater), and sand mining operations have also contributed to declining groundwater levels and water quality degradation. In the rapidly urbanizing SDRW, where potable water demand is expected to increase greatly in the coming years, it is essential that a comprehensive planning effort be initiated to examine the potential of using groundwater basins to store water and meet drought year needs. Conjunctive use in the SDRW is one strategy that may minimize dry year water diversions from the Sacramento-San Joaquin Rivers Delta.

Habitat and Wetlands

The SDRW's 277,543 acres are rich in biological resources and diversity, but much of this has been depleted or is currently threatened. Protecting and restoring wetlands in riparian corridors and estuaries is also instrumental in flood control, groundwater recharge and improving river and coastal water quality. More than five aquatic species are known to be at risk in the San Diego River. In addition, NPS pollution poses a significant threat to the biodiversity of wetland areas, especially estuarine ecosystems at or near the mouth of the River. Invasion of species such as arundo donax (giant reed), castor bean, and salt cedar has also created a jumble of native and exotic species which bear little structural similarity to native riparian



plant assemblages, offer little useful cover or nest opportunities for birds, and interfere with flood control. The biological resources along the River, Lake Murray, Kumeyaay Lake, and Santee Lakes are among the most sensitive and adversely affected by water pollution and urban development. Just east of Mission Trails is the Santee Lakes Water Reclamation and Recreation Park, which treats and reclaims one million gallons per day of wastewater, some of which is discharged into the River. Due to its proximity to the River, Santee Lakes has the highest amount of avian biodiversity in San Diego County. East of Santee Lakes are a series of parks along the River that support multiple uses including riparian habitat protection, recreation, residential uses, commercial development, and biking and equestrian trails. Famosa Slough, near the mouth River, also harbors extremely productive wetlands habitat. Unfortunately since the River is channelized, and the lower SDRW areas are paved, the wetland is occasionally blown out to sea and has to rebuild. South of the mouth of the River is Sunset Cliffs, a 68-acre park that stretches along the Pacific coastline. West of this is the Point Loma Ecological Marine Reserve containing fragile tide-pool and kelp forest ecosystems. The north-south flow of the California Current drags sediment and pollutants from the River to the Sunset Cliffs shoreline, resulting in significant adverse effects on the functioning of coastal ecosystems following storm events. Directly upstream from the river mouth is Mission Valley. Ongoing urban development of the River floodplain in this area has resulted in significant increases in flood events, polluted urban runoff, and the destruction of riparian habitat. A number of efforts to acquire, protect, and enhance open space in the SDRW have been initiated. The Mission Valley Preserve, a 51-acre preserve along the River which provides breeding and nesting habitat for migratory and endemic songbirds and waterfowl was created in October 2000. Along the eastern portion of the SDRW, Mission Trails Regional Park covers almost 5,800 acres of coastal mountains, hills, lakes and the Riverbed. This is the largest urban park on the West Coast, and provides riparian, grasslands, coastal sage, scrub chaparral, vernal pool and oak woodland habitat for native species such as the great blue heron, red-tailed hawk, golden eagle, kestrel, migratory song birds, mule deer, bobcat, coyote, and mountain lion. Unfortunately, in spite of these accomplishments, future development of habitat is a critical issue for the SDRW. Much of the river flood plain in Lakeside and other areas is undeveloped and contains considerable riparian habitat that houses key species such as the endangered arroyo toad, least bell's vireo and the southwestern pond turtle. Zoning in many of these areas is currently not protective of sensitive habitat, and often allows industrial and commercial uses such as sand mining.

Flooding

Flooding is a particularly important issue in the SDRW. Because many years usually pass between major flood episodes, development has been allowed to expand into the floodplains. Although El Capitan and San Vicente reservoirs were built to provide more water for the region and to reduce the risk of flooding in the lower valley, significant development has continued throughout the western half of the SDRW. Today, this area is densely urbanized, with a large population at risk of disastrous flooding. In 1980, the situation was so severe that emergency officials who feared a 100-year flood event evacuated the entire Mission Valley region. The damage was substantial. At present, this area is considered to have a high risk of flooding by FEMA, the California State Department of Water Resources and the California-Nevada River Forecast Center (CNRFC). Recognizing this danger, the City of San Diego, the County of San Diego, the U.S. Geological Survey (USGS), the National Weather Service (NWS) and the CNRFC have established a network of automated rain and stream monitoring stations throughout the SDRW. Unfortunately, this flood warning system will not prevent flooding. Other sound watershed management solutions are necessary to further reduce the risk of disastrous floods. The increasing urbanization taking place in the western SDRW makes such planning essential. Flooding risks to the SDRW are also exacerbated by non-native invasive species such as *Arundo*, which not only choke out the native riparian habitat, but also accumulates in large mats of debris during floods, forming dams against bridges and culverts and substantially increasing flood damage. The potential for increased river scour during flooding due to the sand-mining operations taking place is also substantial. This increased scouring often results in severe damage to bridges, natural channels and native habitat. Similarly, sedimentation caused by winter rains falling on areas burned by wildfires can cause significant erosion.

5b. SPECIFIC WATER QUALITY GOALS INVOLVED

We intend to preserve and enhance the environmental quality of the SDRW through the development of an integrated WMP for the SDRW. We will focus on protecting beneficial uses as described in the RWQCB's Water Quality Control Plan for the San Diego Basin (9) (or Basin Plan). Major water quality goals are as follows.

Surface Water Quality: (1) Identify and manage sources of waste contributing to fecal coliform CWA section 303(d) listings; (2) Prioritize and develop management strategies for sources of point source and non-point source pollution to surface waters; and (3) Prevent the degradation of surface water quality during development and urbanization.

Water Supply Reservoirs: (1) Protect surface water reservoirs from urban runoff and sedimentation; and (2) Ensure the ability of water supply reservoirs to meet increasing water storage and supply needs.

Groundwater Resources: (1) Identify and protect groundwater recharge areas, especially in the Santee-El Monte Groundwater Basin; (2) Ensure the ability of groundwater basins to meet water storage and supply needs, especially in drought years; and (3) Prevent the salinization of groundwater from high TDS imported water.

Habitat and Wetlands: (1) Maintain, restore, and enhance wetlands, riparian corridors, and other sensitive habitat; (2) Protect endangered species; (3) Protect the significantly natural and undeveloped eastern half of the SDRW; (4) Protect habitat from urban development, erosion, and water pollution; and (5) Protect and enhance the natural purification functions of wetlands.

Flood Control: (1) Ensure the development and implementation of effective flood management measures; (2) Establish a flood warning system; and (3) Ensure that continued development in the SDRW does not exacerbate existing flooding problems; and (4) Ensure that continued development in the SDRW does not or result in modification of existing stream hydrology in a manner which causes environmental degradation such as scouring and erosion, etc.



The beneficial use problems and threats in the SDRW include pathogens, nutrients/eutrophication, non-native invasive species, habitat degradation and loss, trash, and lowered dissolved oxygen in the surface waters, and salinity, nitrates, petroleum, MTBE, and solvents in the groundwater. Beneficial uses have been identified in the SDRW and are described in Table 2 below. The purpose of the WMP is to prioritize and provide a strategic framework for managing these uses.

TABLE 2: BENEFICIAL USES WITHIN THE SAN DIEGO HU

<i>Beneficial Uses</i>	<i>Inland Surface Waters</i>	<i>Coastal Waters</i>	<i>Reservoirs and Lakes</i>	<i>Groundwater</i>
Municipal and Domestic Supply	X		X	X
Agricultural Supply	X			X
Industrial Service Supply	X		X	X
Industrial Process Supply	X		X	X
Contact Water Recreation	X	X	X	
Non-Contact Water Recreation	X	X	X	
Commercial and Sport Fishing		X		
Warm Freshwater Habitat	X		X	
Cold Freshwater Habitat	X		X	
Estuarine Habitat		X		
Wildlife Habitat	X	X	X	
Rare, Threatened, or Endangered Species		X	X	
Marine Habitat		X		
Migration of Aquatic Organisms		X		
Shellfish Harvesting		X		
Hydropower Generation			X	

We propose to implement management measures to reduce contamination of surface water and groundwater in the SDRW. Priority areas of concern include; 1) urban, 2) wetland, riparian, and vegetated treatment systems, and 3) hydromodification. Specific management measures to address urban sources of NPS pollution include; 1) erosion/sediment and chemical control on construction sites, 2) controls for new and operating on-site disposal systems, 3) requirements for planning, siting, developing, operating and maintaining runoff systems for roads & highways, bridges, 4) watershed protection, controls for site and new development, 5) controls for existing development, and 6) conducting education/outreach activities (pollution prevention, general education. Specific management measures to protect and restore wetland, riparian, and vegetated treatment systems, and vegetated treatment systems include; 1) protection of wetland and riparian areas, 2) restoration of wetland and riparian areas, 3) control NPS pollution through the use of vegetated treatment systems, and, 4) conducting education/outreach activities. Specific management measures to address sources on NPS pollution related to hydromodification activities include; 1) channel evaluation, 2) streambank and shoreline erosion, 3) increases in sediment delivery downstream from dams, and 4) conducting educational programs. Other areas identified to implement additional management measures in the SDRW include; 1) agriculture (erosion and sediment control, confined animal facilities wastewater and runoff, nutrient management, pesticide management, grazing management, irrigation water management, and education /outreach), 2) marinas and recreational boating activities (marina flushing, habitat assessment, stormwater runoff, fueling station designs, waste management, boat cleaning and maintenance, and education/outreach, and 3) forestry (fire management, road construction/reconstruction, site preparation/forest regeneration, revegetation of disturbed areas, wetlands forest and education/outreach).

5c. PROJECT DESCRIPTION

We wish to coordinate the development of an integrated comprehensive and sustainable WMP for the SDRW, to guide a multifaceted solution to its degradation. The WMP will, through a stakeholder process and integration with other watershed activities, provide best management practices, increased monitoring, education of stakeholders and residents, and strategies (structural and non structural solutions) to eliminate and / or reduce pollutants levels consistent with the SDRWQCB basin plan. Collaboration with key stakeholders will be a major component so that it will be mutually beneficial and in the public interest. This creation of a common vision among the many stakeholders is also crucial to its success. A dynamic WMP for the SDRW will ensure consistency with local watershed management and regional water quality control plans. The framework will identify priorities and strategies for restoring natural systems of groundwater recharge, native vegetation, water flows, riparian zones and beneficial uses of waters. The development of one plan involving all interested parties would eliminate the need to initiate multiple and redundant stakeholder input processes, as well as provide a focal point for the information sharing necessary to streamline these efforts. Our watershed approach espouses a broad and interconnected view of natural resources management. Within this perspective, water resources managers, water users, land use planners and other stakeholders will balance competing interests to determine how to satisfy human needs within the limits of water resources available. To accomplish this, we will establish a Watershed Advisory Committee (WAC) and execute a Memorandum of Understanding (MOU) with stakeholders in the watershed. The MOU will provide a binding agreement to be used as a foundation for cost sharing. Members of the WAC may include elected officials, stakeholders, governmental agency officials, tribal leaders and technical advisors. The WAC will establish a Technical Advisory Committee (TAC) to coordinate the development of the plan. Due to its size and the complexity of the issues, the strategic framework for the SDRW plan will be divided into two (2) major planning areas, Lower and Upper, to better address areas of concern in the planning process. Specific issues to be addressed in the Lower SDRW include, 1) NPS pollution, 2) coastal water quality, 3) groundwater protection, 3) wetlands protection, 4) flooding, and 5) recreation. Specific issues to be addressed in the Upper SDRW include, 1) protection of surface water supplies, 2) habitat protection, 3) NPS pollution, 3) recreation, 4) flood management warning, agriculture. The already established hydrologic areas and



subareas will be used as specific areas of consideration within the plan, as needed. Steering Committees (SC) will be established in these two areas that report to the TAC. The chair of each SC will sit as a member of the TAC, along with technical experts by subject matter. The use of physical, geologic and hydrologic boundaries, rather than political boundaries, provides numerous benefits for planning and management of water resources. The underlying scientific and physical facts revealed through a watershed analysis can shed objective light on discussions and make management decisions compatible with the needs of the watershed. Each SC will develop a "White Paper" pertinent to their geographical area and the TAC will assemble these White Papers into a "Stakeholder Input Report" which will provide the framework of the plan. The TAC will ensure the development of the WMP to be conducted in nine (9) Phases as follows.

- | | |
|--|--|
| Phase 1 - Assemble Project Team | Phase 6 - WMP Development |
| Phase 2 - Establish Working Committees | Phase 7 - CEQA/NEPA Compliance and Preparation |
| Phase 3- Information Gathering | Phase 8- WMP Adoption |
| Phase 4- SDRW Assessment | Phase 9- WMP Implementation |
| Phase 5- WMP Framework | |

Certain ongoing projects that will contribute to water quality in the SDRW have been started by other agencies. Goals of those projects include wetlands and watershed protection, flood control, nonpoint source pollution control, water conservation and reduced use of high TDS water in environmentally sensitive areas. The SDRW WAC proposes to participate in those projects in parallel with this overall planning process, in order to coordinate watershed improvement activities and combine resources for more effective implementation. Therefore, individual projects may be planned and implemented before completing the overall planning process when clear benefits from such projects are evident.

5d. WORK TO BE PERFORMED/PROPOSED ACTIONS

i. ITEMIZED TASKS AND MILESTONES

TABLE 3: ITEMIZED TASKS AND MILESTONES

<i>Task</i>	<i>Deliverable(s)</i>	<i>Completion Date</i>
SWRCB Contract for Grant Award	1) Contract	Nov-01
Phase I: Assemble Project Team	1) Assign project manager, 2) RFP to contract with consultant, 3) Invitation to stakeholders and interested parties, 4) Public Notification	Nov-01
Phase 2: Establish Working Committees	1) Establish WAC, TAC, Lower SC & Upper SC, 2) Execute MOU	Dec-01
Phase 3: Information Gathering	1) Lower & 2) Upper SC White Papers, 3) Stakeholder Input Report	Jan-02
Phase 4: SDRW Assessment	1) Monitoring/Reporting Plan, 2) Quality Assurance Plan	Jul-02
Phase 5: WMP Framework	1) Goals/policies for plan, 2) Draft framework, 3) Host 3 Technical Workshops	Jul-03
Phase 6: WMP Development	1) Draft WMP, 2) Develop actions and guidelines for plan	Jan-04
Phase 7: CEQA/NEPA Preparation	CEQA/NEPA & applicable compliance	Jul-04
Phase 8: WMP Adoption	1) Final "dynamic" plan, 2) Documentation of Adoption	Oct-04
Phase 9: WMP Implementation	1) Final "dynamic" plan, 2) Implementation Plan, with schedule & methods, 3) Identify funding opportunities and joint partnerships	Begin Nov-04 (Ongoing)
Quarterly Reports	Four quarterly reports will be completed each year for the SWRCB	Jan/Apr/Jul/Oct
Final Report	Final Report to be completed for SWRCB	Nov-04

Phase 1 - Assemble Project Team: The County of San Diego, Department of Environmental Health will be responsible to assign a project manager, release an RFP to contract with an experienced consultant, and to invite stakeholders and interested parties to participate in the planning process. In addition, formal Public Notification will be conducted.

Phase 2 - Establish Working Committees: Determine stakeholders with interest in the watershed, and the ability to enter into an Memorandum of Understanding (MOU) to provide a binding agreement that provides a foundation for cost sharing. Members will act as the Watershed Advisory Committee (WAC), which will include elected officials, stakeholders, governmental agency officials, tribal leaders and technical advisors. The WAC will establish a Technical Advisory Committee (TAC) consisting of technical experts by subject matter, to coordinate the development of the WMP. The TAC will form 2 Steering Committees (SC), Lower and Upper, with the chair of each a member of the TAC.

Phase 3 - Information Gathering: The Steering Committees will compile an inventory of the physical characteristics, natural resources, boundaries of the watershed, land uses, physiography, climate, land use, population, water resources (coastal, surface, ground, imported surface, reclaimed) and water quality information pertinent to their geographical area, Upper and Lower. Deliverables during this Phase include 1) SCs to complete "White Papers" (Upper & Lower) to identify issues and summarize data collected for each geographical area, and 2) TAC to release "Stakeholder Input Report" which serves to compile the White Papers into one report to the WAC.

Phase 4- SDRW Assessment: The TAC will review available water quality data and results of monitoring in the SDRW to identify the contaminants of concern and the natural and human related sources of contaminants and make recommendations to mitigate current and future impacts. Additionally the TAC will: 1) review "Stakeholder Input Report" and "White Papers", 2) evaluate existing monitoring system points, 3) develop criteria to measure success of monitoring points, 4) recommend new monitoring points, if appropriate, 5) develop draft Monitoring/Reporting Plan and Quality Assurance. The Monitoring system should not only monitor for existing pollutants but also provide information on new pollutants that could impact water quality.



"Watershed-based Program for Identifying and Managing Sources of Recreational Water Impairment" to be conducted in the SDRW, to consist of grab sampling at a number of fixed locations throughout the SDRW during wet and dry weather conditions. Results will be analyzed for total coliform, fecal coliform, and enterococcus, and plotted. Utilizing the combined resources of the County DEH, the San Diego State University (SDSU) Graduate School of Public Health, and the City of San Diego Water Department a baseline ambient assessment of indicator bacteria levels will be conducted through this project. The County DEH and SDSU will focus on monitoring downstream of the reservoirs and in coastal waters, and the San Diego Water Department will conduct the monitoring at the reservoirs and upstream of the reservoirs. The participation of watershed stakeholders will be solicited in designing and carrying out this monitoring program. State-certified environmental laboratories using already established Quality Control/Quality Assurance programs analyze samples for ambient bacterial levels. Results will be used in Phase 3 and 4 of the WMP development (see Table 3).

- i. Citizen monitoring will be used through the San Diego Stream Team volunteers.
- ii. AB411 Recreational Water Quality Monitoring at coastal sites with in the SDRW. Monitoring will be oriented toward ambient water and habitat quality. As well as, to determine the effectiveness of restoration or management measures. The SDST's baseline bioassessment data along with results of ongoing monitoring will provide information regarding the health of a stream, and tools with which to diagnose problems and perhaps establishes sources of problems.

6. SWRCB or RWQCB STAFF CONTACTED REGARDING THIS PROPOSAL:

RWQCB Contact:	<u>Bruce Posthumus & Cynthia Gorham-Test</u>	SWRCB Contact:	<u>Jean Ladyman & Ken Harris</u>
Phone No.:	<u>858-467-2964 & 858-467-4285</u>	Phone No.:	<u>916-341-5475 & 916-341-5500</u>
Dates contacted:	<u>9/7/00, 12/15/00, 1/25/01 & 1/2/01, 1/12/01, 1/17/01</u>	Dates contacted:	<u>Many calls re: general questions</u>

7. COOPERATING AGENCIES:

Agency Name	Role/Contribution to Project	Contact Person	E-mail address	Phone No.
County of San Diego ◆ Environmental Health ◆ Flood Control	Lead Hydrology, flooding issues	Teresa Brownyard Tim Stanton	Tbrowneh@co.san-diego.ca.us Tstantpw@co.san-diego.ca.us	619-338-2203 858-694-3722
City of San Diego ◆ Water Department ◆ Stormwater Administrator	Water supply reliability Jurisdictional partner	Robert Collins Karen Henry	Ewc@sddpc.snet.gov Kgh@street.sanet.gov	619-668-2084 619-525-8644
City of Santee	Jurisdictional partner	Cary Stewart	Cstewart@ci.santee.ca.us	619-258-4100
City of El Cajon	Jurisdictional partner	Dennis Davies	Dd Davies@ci.el-cajon.ca.us	619-441-1661
City of La Mesa	Jurisdictional partner	Dris Elwardi	Delwardi@ci.la-mesa.ca.us	619-667-1152
San Diego County Water Authority	Water supply reliability	Paul Gerbert	Pgerbert@sd cwa.org	619-682-4161
San Diego State University ◆ Department of Geology ◆ Institute for Regional Studies of the Californias	Technical experts GIS & visualization systems Watershed policy & planning	Dr. Richard Wright Dr. Susan M. Michael, Ph.D.	Wright@typhoon.sdsu.edu Smichel61@aol.com	619-594-5466 619-449-4008
Ramona Municipal Water District	Water supply reliability	Kit Kesinger	Kkesi@sfsketema.com	619-441-5489
The Environmental Trust, San Diego Stream Team	Technical expert in bioassessment and monitoring	Neal Biggart	Nbiggart@tet.org	619-461-1833
Iron Mountain Conservancy	Technical expert riparian habitat	Kit Kesinger	Savewilds@aol.com	619-441-5489

Resolutions adopted (attached) in support of this proposal:

- ◆ City of El Cajon (Resolution No. 9-01, adopted January 23, 2001)
- ◆ City of Santee (Resolution No. 12-2001, adopted January 24, 2001)

Letters of supports (attached) for this proposal have been provided by:

- ◆ San Diego County Water Authority (SDCWA)
- ◆ City of San Diego Water Department (CSDWD)
- ◆ City of San Diego, Stormwater Administrator
- ◆ San Diego Stream Team
- ◆ The Environmental Trust
- ◆ SDSU, Department of Geology

Three SDRW planning meetings were held on January 3rd, 17th, & 26th to facilitate writing this proposal. Stakeholders strongly supported this effort and offered active assistance in preparing it. Participants at these meetings, and others who reviewed draft proposals, included Cary Stewart (City of Santee), Robert Zaino (City of Santee), Frank Boydston (City of Santee), Robert Collins (City of San Diego Water Dept.), Jeff Pasek ((City of San Diego Water Dept.), Mark Stone (City of San Diego Water Dept.), Dennis Davies (City of El Cajon), Paul Gerbert (San Diego County Water Authority), Jim Peugh (Friends of Famosa Slough & San Diego Audubon Society), Neal Biggart (Environmental Trust & San Diego Stream Team), Dr. Richard Wright (SDSU), Dr. Suzanne Michel (SDSU), Kit Kesinger (Iron Mountain Conservancy & Ramona Municipal Water District), George Wilkins (County Flood Control), Tracy Cline (County Planning), Teresa Brownyard (County Environmental Health), Jon VanRhyn (County Environmental Health), Mike Porter (County Environmental Health), Donald Steuer (County DCAOs Office), Cynthia Gorham-Test (SDRWQCB), Al



Lau (Padre Dam), Ed Nishikawa (Helix Water District), Robert Hutsel (San Diego River Coalition), Jamal Kanj (Viejas Reservation) and three local consultants working on local planning projects.

8. **ATTACH A MAP (8 ½ X 11 is preferred) DEPICTING THE PROJECT AREA.** Attached.
9. **IS THE PROPOSED PROJECT PART OF AN EXISTING WATERSHED RESTORATION ACTION STRATEGY OR EQUIVALENT DOCUMENT?** Yes. The County of San Diego approved of a Multiple Species Conservation Program (MSCP) on October 22, 1997, which the comprehensive WMP can easily be integrated for the watershed. The MSCP is a comprehensive, long-term habitat conservation plan, which addresses the needs of multiple species and the preservation of natural vegetation communities in San Diego. The MSCP protects 46 sensitive plan species found in these vegetation communities, coastal sage scrub, maritime succulent scrub, chaparral, grassland, freshwater marsh, oak riparian forest, oak woodland, riparian scrub, riparian forest, riparian woodland, and tecate cypress woodland. The MSCP protects 27 birds, 4 invertebrates, 2 amphibians, 3 reptiles and 3 mammals. Large interconnected blocks of habitat provides for preservation of a wide range of species, adequate foraging grounds and diversity within species populations. Additionally, Mission Trails Regional Park, Mission Valley Preserve and Sunset Cliffs are located in the SDRW.
10. **DOES THE PROPOSED PROJECT ADDRESS ANY OF THE WATERBODIES LISTED AS CATEGORY 1 (IMPAIRED) WATERSHEDS IN SECTION _ IN THE ARD?** Yes, 18070304 San Diego (HU 907.00)
11. **WILL THE PROPOSED PROJECT ACHIEVE MEASURABLE WATER QUALITY IMPROVEMENTS?** Yes. The evaluation of the effectiveness of these measures will be supported through the results of public surveys, monitoring data (e.g. number of days SDRW beaches are posted) and ultimately the health of the wetlands, groundwater, and surface water. Existing data within the SDRW will be compiled during Phase 3 of the plan to create a baseline representation of water and habitat quality, including: 1) stream and rain gauge data, 2) dry weather field screening data, 3) coastal water monitoring data, and 4) bioassessment data. Results of ongoing monitoring will provide information regarding the health of a stream, and tools with which to diagnose and establish sources of problems to determine the effectiveness of restoration or management measures. Additionally, we propose to implement applicable management measures to reduce contamination of surface water and ground water in the SDRW, as described in Section 5b. Examples of specific urban runoff management measures include: 1) addressing site development and new development for urban areas, 2) erosion/sediment control and chemical control from construction sites, 3) regulating new systems and operating systems of on-site disposal systems, 4) ensuring controlled planning, siting and maintenance of roads, highways and bridges, and 5) implementing a public education/outreach program to encourage pollution prevention. Foremost, various agencies within the SDRW are working on projects that address a portion of the watershed or to protect a limited aspect of water quality. We propose to participate with those agencies and in those projects to coordinate watershed improvement activities and combine resources for more effective implementation. Greater improvements in water quality should therefore be realized through such coordinated planning and implementation efforts.
12. **LIST ANY PREVIOUS PROP 13 IMPLEMENTATION GRANTS AWARDED FOR WORK IN THIS WATERSHED.** \$5 million was allocated to the City of Santee for Flood Protection for Forester Creek (Chapter 5, Flood Protection Program, Article 2.5, Flood Protection Corridor Program as administered by the Department of Water Resources).
13. **LIST GRANTS FROM OTHER AGENCIES AND OTHER FUNDING SOURCES (SUCH AS CALFED, 319[h], 205[j], PROPOSITION 204) THAT HAVE BEEN USED OR ARE CURRENTLY BEING USED TO SUPPORT WORK IN THIS WATERSHED.** 1) 319(h): application was submitted to implement wetland habitat restoration to restore natural water purification functions in Forester Creek through removal of concrete and other hardscaping and re-establishment of native wetland vegetation. 2) Proposition 12 funding: Acquisition of the Boys and Girls Club Property of Lakeside. 3) The Environmental Trust (TET), La Mesa: San Vicente Ridge Conservation Bank, 4) San Diego County: Acquisitions of the Lakeside Archepeligo under MSCP. 5) Iron Mountain Conservancy-Caltrans Environmental Enhancement and Mitigation (EEMP) Grant: acquisitions in the San Vicente Creek Watershed. 6) San Diego County: Resolution to fund acquisition in the San Vicente Creek Watershed. 7) California Fish and Game: Adoption of acquisition plan for the San Vicente Creek Watershed.
14. **SUMMARIZE ACTIONS THAT HAVE BEEN ACCOMPLISHED TO DATE TO ADDRESS THE PROBLEM(S)**
There has been tremendous activity in the SDRW to address the problems; highlights are as follows,
 - ◆ The City of SD and the County of SD both adopted MSCP to preserve several acres of high quality wildlife habitat.
 - ◆ Groundwater Management Planning Study, El Monte/Basin, sponsored by SDSU and SDCWA. Report to be released in 2001.
 - ◆ The San Diego River Mission Creek Development Reclamation Plan revegetated the river in Santee with native habitat that has allowed endangered species to return to the area.
 - ◆ The City of San Diego Water Department and the Helix Water District completed a Watershed Sanitary Survey in 1996 that identified existing and potential sources of contamination that will be updated in 2001.
 - ◆ Conceptual Area Acquisition Plan (CAAP) was adopted for the Iron Mountain Ridge and Canada de San Vicente Preserves by California Fish and Game, County of SD and Iron Mountain Conservancy.
 - ◆ The Upper San Diego River Plan for the Lakeside involves a variety of land uses and modification to the river channel to create a more confined but naturalized condition, which has been in process over 20 years.



- ◆ Mission Valley Preserve, Mission Trails Regional Park, Santee Lakes, Famosa Slough, and Mast Park in Santee, for preservation
- ◆ Drop structures were installed along the River to reduce flow velocity and storm drain stenciling is conducted regularly throughout SDRW
- ◆ General Plan 2020 may add support to modify land use designations
- ◆ San Diego County Water Authority is conducting a study of utilizing the groundwater basin for storage purposes
- ◆ RCP Sand Mining Reclamation Plan creates new riparian woodland, freshwater marsh habitat and revegetating islands, but relies on WMP
- ◆ Riverview Water District MTBE clean up
- ◆ Lakeside Community Planning Group, California Department of Fish and Game, Lakeside Water District, local businesses and a resident coalition are working to protect the River and the Santee-EI Monte Groundwater Basin.
- ◆ In 1998, Santee voters rejected development of the Fanita Ranch parcel to seek funding and consensus based development options to protect wetlands areas, improve water quality in the San Diego River and decrease habitat fragmentation.

15. **DESCRIBE HOW THE PROJECT WILL RESULT IN ONGOING OR WIDESPREAD IMPLEMENTATION THROUGHOUT THE PROJECT AREA, REGION, OR STATE.** Several factors will help to ensure the ongoing implementation of this WMP after the requested Proposition 13 funds are expended. First, a major objective of the effort is to develop agency and stakeholder commitment to the funding and implementation of project recommendations and deliverables. It is not intended that the requested Proposition 13 monies will be used to fund specific implementation elements, but rather to establish a framework for the coordination of efforts. The project team and stakeholders are committed to continuing to identify and obtain additional funding to sustain this and other related efforts into the future. Second, the October 2000 initiation of Project Clean Water by the County of San Diego will provide a forum for assembling the people, resources, and information necessary to cooperatively create a regional commitment to water quality management efforts. This complements and provides a context for the proposed project. More importantly, it leverages the resources available for project planning and implementation in this and other watersheds. Third, the commitment of the County of San Diego to manage the project will ensure the ongoing availability of the technical and regulatory staff resources that will be needed throughout the remaining development and implementation phases. The collective experience and expertise contained within the County Departments of Environmental Health, Planning and Land Use, Public Works, and Parks and Recreation is extensive and will provide significant ongoing resources for the project. It is also anticipated that a revised Municipal Stormwater permit will be issued for the SDHR that requires the implementation of urban runoff management activities on a watershed basis. Although these requirements will apply only to stormwater runoff management, the development and application of these programs will require similar stakeholder input and implementation processes. This again will result in the availability of additional resources to support this project.
16. **DESCRIBE HOW THE PROJECT WILL DEMONSTRATE A CAPABILITY OF SUSTAINING WATER QUALITY BENEFITS FOR A PERIOD OF 20 YEARS AS REQUIRED BY PROP 13 (79080(d)(2)).** Once completed, this WMP will serve as an umbrella over existing and future projects and planning efforts in the SDRW. By providing a framework for increased coordination between efforts, which are currently initiated and conducted independently, our overall ability to address water quality issues will be significantly enhanced. In essence, this will provide the opportunity to institutionalize water quality issues as a component of all planning efforts within the SDRW, to provide a forum for their continued discussion, and to integrate the management of surface water, groundwater, habitat, and flooding issues into a common planning framework. While the long-term sustenance of water quality cannot be guaranteed through planning efforts alone, the likelihood of achieving this end increases proportionally to the degree of communication and coordination between participants. The execution of a MOU and the planned establishment of a WAC which includes elected officials, stakeholders, governmental agency officials, and technical advisors likewise supports this objective by providing a strong commitment and foundation for change. Additionally, the WMP will have a menu of options from which to select to carry out the actions necessary to reach plan goals and objectives. It is anticipated that the actions identified in the plan will occur over time and that monitoring will continue at the coast as required by AB411. Three technical workshops will be conducted which will provide a forum for public involvement in the planning process that is vital in ensuring success.
17. **IF THERE IS AN NPDES PERMIT REQUIRED FOR THIS PROJECT AREA (CHECK WITH YOUR RWQCB), DESCRIBE THE RELATIONSHIP OF THE PROJECT TO THE PERMIT.** There are three NPDES general stormwater permits applicable to the project area; (1) municipal, (2) industrial, and (3) construction. The municipal permit requires that copermittees identify and implement BMPs to reduce or eliminate contaminants in urban runoff to the maximum extent practicable. The proposed planning effort is not required by, but complements, the objectives of this permit. There are seven additional NPDES permits in the San Diego HU (one major and six minor). The relevance of these, as well as the industrial and construction permits, to the proposed project is minor, but they will be considered in the development of the WMP. Additionally, the development of a future TMDL for coliform bacteria in the SDRW is scheduled for completion by 2006. The attainment of water quality standards will likely involve both watershed management planning and the enforcement of increased requirements under municipal stormwater NPDES permits. These efforts will require greater coordination in the future.
18. **FOR PROP 13 PROJECTS, IDENTIFY THE NPS MANAGEMENT MEASURE(S) THAT THE PROPOSED PROJECT WILL IMPLEMENT AND DESCRIBE HOW YOU WILL BE ABLE TO TRACK OR ACCOUNT FOR THE IMPLEMENTATION OF THESE MEASURES.** As described in section 5.b., we propose to implement applicable management measures to address following priority areas of concern: 1) urban, 2) wetland, riparian, and vegetated treatment systems, and 3) hydromodification. Specific management measures to address urban sources of NPS pollution include; 1) erosion/sediment and chemical control on construction sites, 2) controls for new and operating on-site disposal systems, 3) requirements for planning, siting, and developing



transportation, and operating and maintaining runoff systems for roads & highways, bridges, 4) watershed protection, controls for site and new development, 5) controls for existing development, and 6) conducting education/outreach activities (pollution prevention, general education. Specific management measures to protect and restore wetland, riparian, and vegetated treatment systems, and vegetated treatment systems include; 1) protection of wetland and riparian areas, 2) restoration of wetland and riparian areas, 3) control NPS pollution through the use of vegetated treatment systems, and, 4) conducting education/outreach activities. Specific management measures to address sources on NPS pollution related to hydromodification activities include; 1) channel evaluation, 2) streambank and shoreline erosion, 3) increases in sediment delivery downstream from dams, and 4) conducting educational programs. Other areas identified for the implementation of management measures includes; 1) agriculture, 2) marinas and recreational boating activities, and 3) forestry. Additional NPS management measures and strategies for their implementation will be identified throughout the project duration. A specific deliverable of the planning process will be the development of measures of program implementation and success. The tracking and long-term assessment of these measures will be a formal and required outcome of the final WMP.

19. WHAT CAPABILITY OR COMMITMENTS DOES THE APPLICANT HAVE TO ENSURE THAT THE PROJECT WILL BE COMPLETED?

A highly qualified and committed team has been assembled to develop this WMP. The County of San Diego and other participating agencies and stakeholders are committed to completing the project and following through with the application of recommended management actions within the SDRW. As demonstrated by the participation of 26 agencies and stakeholder representatives at planning meetings to date, extensive support already exists for the project. Collectively, these parties provide significant resources, knowledge, and expertise in many key areas relevant to the SDRW. Additionally, the large number of independently initiated stakeholder efforts already in progress for the SDRW demonstrates a high level of commitment to the watershed and the objectives of the project. This effort also anticipates and expands on future requirements for watershed management planning under the draft municipal NPDES stormwater permit (Tentative Order No. 2001-01). Development of the proposed WMP is not required by this permit, but would complement and support many of the objectives likely to be established under it. For example, while the stormwater permit would require that urban runoff issues be addressed on a watershed basis, a more comprehensive approach that includes numerous other issues and considers their interrelationship can be pursued under this effort. As such, common efforts and economies of scale can be pursued. Similarly, the recent initiation by the County of Project Clean Water also provides important support by providing additional expertise and a conduit to a broader audience outside of the SDRW that will increase the quality and transferability of project results.

20. DESCRIBE ANTICIPATED FUTURE WORK.

Upon completion, the WMP will identify recommended actions to ensure the long-term protection of resources and beneficial uses within the SDRW. Per these recommendations, the project team will seek funding and continue to develop commitment for other priority projects identified for implementation (e.g., land acquisition, monitoring, modeling, etc.). We will also work with stakeholders to integrate these efforts with other related planning and implementation projects within the SDRW and the region. For example, the project team will endeavor to integrate this effort with the County's ongoing Project Clean Water. The County and other partners will also continue their efforts to maintain open space within the SDRW through the acquisition and restoration of habitat, especially through the MSCP. A separate Proposition 13 application has also been submitted for a project entitled "A Watershed-Based Program for Identifying and Managing Sources of Recreational Water Impairment", to focus specifically on the identification and management of sources of fecal contamination within the SDRW. If funded, it will be closely coordinated with this proposal. Because of the extensive size of the SDRW, it is envisioned that other more detailed management plans will eventually be developed for specific sub-basins, and issues and problems within the watershed. These plans and the projects conducted pursuant to them will be pursued within the framework established by this project. Measures must also be established to evaluate the long-term success of the program. To this end, an ambient monitoring program will be developed and conducted, and a process for continued discussion with watershed stakeholders initiated, to measure progress and identify additional changes needed over time.

Land acquisition will be pursued to protect key land from development, including but not limited to, 1) properties that border the San Diego River, particularly where it is especially narrow, to allow the river to be widened to ensure river flows without risk of flooding or the need to channelize it; 2) non-habitat land for retention ponds to provide both water quality improvement and buffering to reduce peak runoff velocity and volume; 3) land in Iron Mountain Ridge-Cañada De San Vicente and Lakeside Archipelago to protect from development and to preserve important habitats and native vegetation; 4) land and river restoration of Los Coches Creek and other creeks that drain into Lindo Lake Park; 5) land and river restoration in the Upper San Diego River to restore riparian habitat and improve groundwater quality in the Santee-El Monte Groundwater Basin; and 6) land in north Santee (Fanita Ranch parcel), to protect riparian and bird habitat of Sycamore Creek and Santee Lakes. A few other project ideas in the SDRW include: 1) planning, design and construction of flood control facilities to alleviate flooding and restore flood protection; 2) restore Los Coches Creek to reduce damage from bank and watershed instability and floods, restoring the ecosystem and aesthetic values; 3) an outreach campaign to promote abandoned well destruction in the rural areas, 4) utilizing BMPs to reduce nutrients, sediment and bacteria in runoff from horse communities.

21. INDICATE IF THIS PROJECT IS IMPLEMENTING A TMDL. No. However, the development of a future TMDL for coliform bacteria in the SDRW is scheduled for completion by 2006, which will impact the San Diego River, Pacific Ocean shoreline, San Diego HU, and San Diego River mouth (Ocean Beach).

PLEASE LIST ANY SUGGESTIONS YOU HAVE TO IMPROVE NEXT YEAR'S RFP. It would be more efficient to combine the applications for all three subaccounts that you administer. Instead of three separate applications have one where you provide a box for the applicant to check that specifies which subaccount that funds are requested from. Allow applicants to check more than one box, as applicable.