1.0 INTRODUCTION

1.1 BACKGROUND ON SAMP PROGRAM/WSAA PROCESS

The Special Area Management Plan (SAMP) for the San Diego Creek Watershed (Watershed) and Watershed Streambed Alteration Agreement Process (WSAA Process) is a comprehensive plan for protecting and enhancing aquatic resources in the Watershed while providing for the permitting of reasonable economic development and public infrastructure/maintenance activities in accordance with local land use plans and the regional Natural Community Conservation Plan/Habitat Conservation Plan for Central/Coastal Orange County (NCCP/HCP). The SAMP/WSAA Process presents an innovative regulatory tool developed by U.S. Army Corps of Engineers Los Angeles District Regulatory Division (Corps) and the California Department of Fish and Game South Coast Region Habitat Conservation Planning (Department) to integrate a watershed approach to address anticipated regulated activities and aquatic resource conservation needs.

The San Diego Creek Watershed SAMP formulation process was initiated in 1998 with state and federal agencies, in coordination with local land owners/managers with known and future regulated activities in the Watershed. The result of the SAMP formulation process is a plan, which includes the following four elements:

- SAMP Analytical Framework;
- Watershed-specific regulatory modifications to the Corps' Clean Water Act (CWA) Section 404 permitting processes and California Fish and Game Code (FGC) Section 1600 *et seq.* Streambed Alteration Agreement process and a corresponding mitigation framework for the Watershed;
- SAMP Strategic Mitigation Plan; and
- Mitigation Coordination Program.

The first component of this SAMP is an analytical framework, which is based on technical, environmental information about the aquatic resources, primarily the riparian ecosystem, in the Watershed. The Corps, with the Department, developed the Analytical Framework as a decision making tool for evaluating regulated activities that would affect aquatic resources.

The second element of the SAMP entails modifications to permitting procedures in a manner to provide the Corps and the Department with watershed- and resource-based permitting protocols. This regulatory component of the SAMP also includes a Mitigation Framework. Related is the third element of the SAMP, a Strategic Mitigation Plan, based on a riparian ecosystem restoration plan for the Watershed, and the fourth element, the Mitigation Coordination Program. Together, the Strategic Mitigation Plan and Mitigation Coordination Program support implementation of the mitigation framework and foster a coordinated approach among landowners/managers and stakeholders to long-term aquatic resource management within the Watershed.

The SAMP, comprised of these four elements, are detailed in the Corps report entitled *Special Area Management Plan for the San Diego Creek Watershed* (Corps, 2008), referred herein as the Corps' SAMP document. These SAMP elements are the proposed project for this Program EIS/EIR and are discussed in detail in Section 2.

Figure 1-1a shows the Watershed boundary within the County of Orange. Figure 1-1b is a baseline map of the Watershed showing details such as major streams and drainages as well as municipalities within the Watershed boundaries.

1.2 PURPOSE AND NEED

1.2.1 Project Need

Under the conventional regulatory framework, proposed activities that would affect aquatic resources are reviewed by the Corps and the Department on a case-by-case basis, without a strategic assessment of the overall aquatic environment within the Watershed. This case-by-case approach does not facilitate comprehensive conservation of aquatic resources and complicates the evaluation and mitigation of cumulative impacts. Consequently, there is a need to develop a comprehensive and coordinated approach to aquatic resource protection to ensure that the functional integrity of aquatic resources throughout the Watershed is maintained. In addition, there is a continuing need to enhance degraded aquatic resources and to restore or replace such resources to offset impacts of regulated activities in the Watershed. The SAMP has provided a way to address long-term aquatic resource conservation and cumulative impact assessment more effectively than the traditional case-by-case review. The Department has participated in the formulation of the SAMP and developed a regulatory component known as the WSAA Process (formerly a Master Streambed Aleration Agreement (MSAA)) concurrently with the Corps' permitting procedures to address these issues from the perspective of the state of California.

Furthermore, the SAMP responds to the needs of potential applicants for increased transparency and predictability in the Corps and Department's evaluations of regulated activities for authorization. Since the SAMP is customized for the Watershed, it provides the Corps and Department with a common Analytical Framework and regulatory approach specific for evaluating activities that would affect aquatic resources within the Watershed.

Figure 1-1a. San Diego Creek Watershed Boundary Baseline Map

Figure 1-1b. San Diego Creek Watershed Boundary

1.2.2 Project Purpose

The primary purpose of the SAMP is to improve the Corps and Department's capacity for making permitting decisions in the Watershed using an approach that balances aquatic resource protection with reasonable economic development and infrastructure needs. The underlying goal of the SAMP is to support riparian ecosystem conservation and management by comprehensively assessing the Watershed's aquatic resources and developing a strategic and coordinated regulatory approach (permitting and mitigation). This approach prioritizes avoidance of impacts to higher integrity aquatic resources and envisions targeted enhancement and restoration activities related to regulatory actions that will maintain and improve the Watershed's aquatic resource functions and values over the long term. It is believed that these goals can be achieved through the cooperative efforts on the part of the Corps, the Department, local government, state and federal resource agencies, local landowners, and other stakeholders, including the interested public.

1.2.2.1 Objectives

The purpose of the SAMP is furthered by the following dual objectives:

- To establish a Watershed-specific permitting framework to allow the agencies to more appropriately evaluate potential impacts associated with reasonable economic development and infrastructure maintenance; and
- To develop a Strategic Mitigation Plan and coordinated mitigation program to support long-term conservation (i.e., protection and restoration) of the functions and integrity of identified aquatic resources, particularly riparian ecosystems, located within the Watershed.

The tasks identified and performed in furtherance of these SAMP objectives are examined below:

- To identify and characterize aquatic resources, in particular riparian ecosystems, located in the Watershed;
- To identify aquatic resources possessing high resource value at the watershed scale, whereby such resources are of high to medium integrity for water quality, habitat, or hydrology and they provide a suite of ecosystem functions and values such that permanent impacts to these aquatic resources may result in substantial degradation to aquatic resources in the Watershed;
- To establish an analytical framework for informing the Corps and the Department's decision-making process for evaluating potential regulated activities and projects that would affect aquatic resources in the Watershed;
- To inform the regulated community about the geographic location and characterization of areas in the Watershed with aquatic resources of moderate to high integrity and to provide context for the Corps and the Department's Analytical Framework and resulting regulatory procedures;
- To establish an alternate permitting process that reflects the Watershed-based and resource-based Analytical Framework;
- To develop scientifically based criteria for riparian ecosystem restoration efforts and prepare a Strategic Mitigation Plan for prioritizing permit-related compensatory mitigation projects that can inform other riparian ecosystem restoration efforts; and
- To prepare and recommend an implementation plan for establishing a Mitigation Coordination Program for aquatic resources in the key Watershed integrity areas that involves management

practices, conservation polices, and considers ongoing Watershed efforts to incorporate stewardship, advocacy, and stakeholder coordination.

1.2.3 EIS/EIR Purpose

This Program EIS/EIR is intended to serve as the analysis of alternatives to the issuance of the Corps' Letter of Permission (LOP) and Regional General Permit (RGP) required under the CWA Section 404(b)(1) Guidelines and the environmental review required under National Environmental Policy Act (NEPA) as well as the environmental review for the WSAA Process required under California Environmental Quality Act (CEQA). This document discusses the factors considered by the Corps during the issuance process for the proposed LOP and RGP. This document contains the following evaluations:

1 public interest review required by Corps regulations at 33 Code of Federal Regulations (CFR) 320.4(a)(1);
2 discussion of the environmental considerations necessary to comply with NEPA; and
3 impact analysis specified in Subparts C through F of the 404(b)(1) Guidelines (40 CFR Part 230).

This evaluation for the proposed RGP and LOP includes a discussion of compliance with applicable laws, consideration of public comments, an alternatives analysis, and a general assessment of individual and cumulative impacts, including the general potential effects on each of the public interest factors specified at 33 CFR 320.4(a). This EIS/EIR also provides the required environmental documentation under CEQA for issuance of Streambed Alternation Agreements under the WSAA Process as required under Section 1600 *et seq*. of the FGC. Finally, the EIS/EIR provides a platform for the tiering of future NEPA and CEQA compliance on specific actions affecting aquatic resources within the Watershed.

1.3 ORGANIZATION OF THE EIS/EIR

This EIS/EIR is organized as follows:

Section 1.0, Introduction, provides a background on the SAMP/WSAA Process; specifies the purpose and need of the SAMP/WSAA Process; provides an overview of the contents of this Draft EIS/EIR; presents the regulatory basis for the SAMP/WSAA Process; describes the joint environmental review process; and provides a list of the involved agencies and Participating Applicants.

Section 2.0, Proposed SAMP/WSAA Process and Alternatives, introduces details of the SAMP/WSAA Process including the objectives and planning principles and a summary of activities that would be regulated under the SAMP/WSAA Process. The section then describes development of the SAMP/WSAA Process, followed by details of the SAMP/WSAA Process elements including the SAMP Analytical Framework, Watershed-specific permit programs and mitigation framework, Strategic Mitigation Plan, and Mitigation Coordination Program. Alternatives to the SAMP/WSAA Process are also presented.

Section 3.0, Baseline Conditions, presents the existing conditions in the Watershed for each environmental topic area.

Section 4.0, is the Programmatic Impact Assessment of SAMP/WSAA Process and Regulated Activities. This section contains an environmental impact analysis of regulated activities at a programmatic level, and covers environmental topic areas listed below.

- Aquatic, Wetland and Riparian Habitats
- Biological Resources including Threatened and Endangered Species
- Hydrology, Erosion and Sedimentation
- Water Quality
- Agricultural Resources
- Air Quality
- Cultural Resources
- Floodplain Values
- Geology/Soils including Mineral Resources
- Land Use
- Noise
- Public Health and Safety
- Recreation
- Socioeconomics
- Transportation/Circulation
- Visual Resources
- Water Supply and Conservation

Section 5.0, is the Evaluation of Alternatives. This section begins with NEPA and CEQA requirements for selecting and analyzing alternatives, followed by a programmatic environmental assessment of the four proposed SAMP/WSAA Process alternatives. The section also includes a comparison of the alternatives.

Section 6.0 Cumulative Effects provides a programmatic analysis of the cumulative effects of regulated permitted under the proposed SAMP/WSAA Process, along with full build-out of the Watershed under the local general plans.

Section 7.0 Growth Inducing Impacts provides a discussion of potential growth-inducing effects of the proposed SAMP/WSAA Process in the Watershed.

Section 8.0, Other Federal and State Impact Considerations, includes NEPA and/or CEQA requirements that address short-term uses versus long-term productivity and irreversible or irretrievable commitment of resources of the proposed SAMP/WSAA Process, potential environmental justice impacts, and compliance with Floodplain Executive Order (EO), Wetland EO, and Invasive Species EO. Also, this section discusses the effects of SAMP coordinated permitting procedures on future applicants.

Section 9.0, Consistency with Federal and State Laws and Regulations, discusses the SAMP/WSAA Process' consistency with the Endangered Species Act, CWA, Rivers and Harbors Act, Clean Air Act, National Historic Preservation Act, Coastal Zone Management Act (CZMA), Mangunson-Stevens Fishery Conservation and Management Act, California Water Code, FGC, California Coastal Act, and other state policies.

Section 10.0, Consistency with Regional and Local Plans, discusses the SAMP/WSAA Process' consistency with the Orange County Central-Coastal NCCP/HCP, General Plans of local municipalities in the Watershed, the County of Orange Drainage Area Management Plan (DAMP), University of California, Irvine Long Range Development Plan, and Newport Bay Watershed Management Plan.

Sections 11.0, 12.0, 13.0 and 14.0 include list of the EIS/EIR preparers; agencies and persons contacted in the preparation of this EIS/EIR; acronyms, abbreviations and a glossary of terms used in this EIS/EIR; and references cited in this EIS/EIR, respectively.

1.4 AUTHORITY FOR FEDERAL AND STATE LEAD AGENCIES

1.4.1 Corps Authority

The Corps' mandate under the CWA is to maintain and restore the physical, chemical and biological integrity of the nation's waters. To this end, the Corps is responsible for ensuring full compliance with its own implementing regulations as well as the 404(b)(1) Guidelines (40 CFR 230] for all applicable Department of the Army Section 404 of the CWA permits. Under Section 404 of the CWA, the Corps is responsible for regulating the discharge of dredge or fill material into waters of the U.S.[33 United States Code (U.S.C.) 1344]. These discharges include return water from dredge material disposed of on the upland and generally any fill material (e.g., rock, sand, dirt) needed for land development, roadways, erosion protection, etc. The basic forms of authorization available for use by the Corps are the individual permit, letters of permission (LOPs), and nationwide general permits (NWPs). The project review and permitting associated with these regulatory functions most often occurs on a project-by-project basis.

However, recognizing the need for more comprehensive planning in Orange County to balance aquatic resource protection with economic development, in 1998 the United States House of Representatives' Committee on Public Works authorized federal monies for the Corps' Los Angeles District (LAD), Regulatory Division to initiate a SAMP in the Watershed.

The SAMP is defined by the CZMA Amendments of 1980 [16 USC 1453(17)] as a comprehensive plan to provide for natural resources protection and reasonable economic growth within the coastal zone that contains detailed and comprehensive statements of policies, standards and mechanisms to implement the SAMP. The Corps Regulatory Guidance Letter (RGL 86-10) directed the Corps to participate in the collaborative interagency planning within geographic areas of special sensitivity in coastal and non-coastal areas.

1.4.2 Department Authority

Under FGC Section 1600 *et seq.*, the Department is responsible for regulating activities that will affect any river, stream, or lake in the state and any associated riparian habitat. Specifically, FGC Section 1602 requires any person, state or local governmental agency, or public utility to notify the Department and, if necessary, obtain a SAA, before doing one or more of the following:

- substantially divert or obstruct the natural flow of any river, stream, or lake;
- substantially change the bed, channel, or bank of any river, stream, or lake;
- use any materials from the bed, channel, or bank of any river, stream, or lake; and/or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

If the Department determines the activity as described in the notification could substantially adversely affect an existing fish or wildlife resource, a SAA is required. The SAA will include measures necessary to protect the fish and wildlife resources the activity could adversely affect. The Department has developed a WSAA Process for the Watershed to coordinate with the Corps' SAMP process and establish protective features for fish and wildlife on a Watershed basis.

"The issuance of a SAA under the WSAA Process, or in general, does not authorize the take of any species protected under the Fish and Game Code, including fully protected species (FGC Sections 3511, 4700, 5050, 5515) and species listed as threatened or endangered under the California Endangered Species Act (CESA) (FGC Section 2050 *et seq.*).

1.4.3 Joint Environmental Review Process

This document has been prepared as a joint EIS/EIR due to the proposed federal and state permit actions resulting from the SAMP/WSAA Process. Under NEPA, all federal agencies must conduct NEPA review for "major federal actions significantly affecting the quality of the human environment" (42 USC Section 4332). Each federal agency has its own NEPA implementation rules that conform to 40 CFR. Under CEQA, state and local agencies must analyze the potential environmental impacts of projects that require discretionary approvals from state or local agencies. The Corps is the lead agency for the SAMP under NEPA for permit compliance under CWA Section 404 and the Department is the lead agency under the CEQA for issuance of a SAA under the FGC Section 1600 *et seq.* The Corps and the Department have worked cooperatively to prepare this joint Program EIS/EIR under NEPA and CEQA for the actions described in the SAMP/WSAA Process. The Corps and the Department have also coordinated the public noticing and hearing processes under state and federal law as discussed below.

This EIS/EIR is intended to provide decision makers, and responsible agencies with enough information on the potential range of environmental impacts to make decisions on the proposed SAMP Program/WSAA Process and the various alternatives. NEPA and CEQA require that the significant environmental impacts of a project be identified and considered in project approval, and that feasible methods or alternatives to avoid, eliminate, or reduce the identified significant adverse impacts be considered.

The NEPA scope of the EIS/EIR impact analysis follows the directives in 33 CFR 325 that require the scope of an EIS to be limited to the impacts of the specific activities requiring a 404 permit and only those portions of the project outside of waters of the U.S. over which the Corps has sufficient control and responsibility to warrant federal review. The Department's jurisdiction pursuant to FGC Section 1600 *et seq.* for the WSAA Process generally coincides with Corps jurisdiction (i.e., streams and associated riparian resources).

The draft EIS/EIR for the SAMP/WSAA Process is a program-level document that is defined in the CEQA Guidelines (Section 15168) as:

> *" … an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either geographically; as logical parts in the chain of contemplated actions; in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways."*

The Program EIS/EIR can be used effectively to evaluate a Major Federal Action by an agency subject to NEPA who is "actively preparing to make a decision on one or more alternative means of accomplishing [a] goal and the effects can be meaningfully evaluated" (40 CFR Section 1500). The subject of the Corps proposal is the SAMP, the goals of which are described above (Section 1.2.2), and the Corps considers it a Federal action to adopt the SAMP as a formal plan to guide or prescribe future agency evaluation of permit or other regulatory decisions within the Watershed subject to the Corps authorization. Further, the SAMP includes the adoption of programs, such as the Strategic Mitigation Plan and Mitigation Coordination Program as a "group of concerted actions to implement a specific policy or plan" (40 CFR 1508.18). This Program EIS/EIR evaluates the proposed LOP procedures and RGP that will allow the Corps to approve of specific projects, such as construction or maintenance activities located within the Watershed that are consistent with the SAMP. Moreover, the Program EIS/EIR enables agencies to examine the overall effects of the proposed course of action (e.g. establishment of the SAMP/WSAA Process Watershed-specific permitting programs and associated Strategic Mitigation Plan and Mitigation Coordination Program), and to take steps to avoid unnecessary adverse environmental effects.

Once this Program EIS/EIR is certified and the LOP, RGP, and WSAA Process elements (i.e., Levels 1 - 3 SAA templates and Master Streambed Condition List) have been issued, the Corps and the Department will review applications for subsequent activities in light of the SAMP/WSAA Process and the Program EIS/EIR to determine if additional environmental documentation is required. Project proponents and local lead CEQA agencies will be encouraged to consult the Corps SAMP document (2008) and to use the Final Program EIS/EIR in determining whether a specific project properly avoids or mitigates impacts to aquatic resources.

Scoping Process

Throughout the EIS/EIR development process, the Corps and the Department encouraged active participation by potential applicants including the County of Orange, other local governments and agencies and landowners. The Corps has also actively informed interested citizens about the progress of the SAMP/WSAA Process via special public meetings held July 17, 2002, July 29, 2004, and January 12, 2005 as well as during some of the regularly scheduled meetings of the Newport Bay Watershed Committee. Additionally, information about the SAMP/WSAA Process has been posted on the Corps website (http://www.spl.usace.army.mil/samp/sandiegocreeksamp.htm) since 2001.

Issues raised by agencies and the public were identified through the EIS/EIR scoping process. The purpose of scoping is to identify potential environmental issues and concerns regarding the project. The scoping process for this EIS/EIR included public notification via the *Federal Register*, a newspaper ad, direct mail, and a public meeting. The Corps and the Department considered comments received during the scoping process in determining the scope of issues to be evaluated in the EIS/EIR.

In accordance with NEPA requirements, a Notice of Intent (NOI) to prepare a joint EIS/EIR was published in the *Federal Register* on July 31, 2001 Vol. 66, No. 147 (66FR39500) and was mailed directly to regulatory agencies, local jurisdictions, elected officials, public service providers, organizations, and special interest members of the public. A copy of the NOI appears in Appendix A-1 of this document.

In accordance with requirements under CEQA, a Notice of Preparation (NOP) to prepare a joint EIS/EIR was distributed on August 1, 2001 to responsible agencies, elected officials, public service providers, organizations, and other members of the public. A copy of the NOP appears in Appendix A-2 of this document.

As part of this EIS/EIR scoping process, the Corps and the Department held a public meeting on August 14, 2001. The EIS/EIR scoping process ended on August 31, 2001. The Corps and the Department received 14 letters of comment from public agencies and four letters from environmental and community groups. One comment card and an email were received from the general public. The following areas of concern were raised in the scoping meetings and NOI/NOP response letters and considered during the SAMP formulation process: potential conflicts with other Watershed studies, especially the Corps Management Feasibility Study for San Diego Creek Watershed that was being prepared in collaboration with the County of Orange (Corps, 2004)**;** potential effect of SAMP on implementation of existing master plans, or flood control, maintenance, and planned capital improvement projects; effects on and importance of federally and state-listed species; hydrologic effects of development; Southern California Association of Governments (SCAG) projections and policies; infrastructure needs and utility functions of reservoirs, basins, and pipelines; wetland and riparian restoration, conservation, monitoring, and adaptive management, especially for wildlife habitat; expanded study area to include Newport Bay; broadened scope of analysis beyond the regulatory purview of the Department and the Corps (i.e., the aquatic environment) to include other public interest factors such as growth-related activities applicable to regional and land use planning for development activities; cumulative impacts of past Section 404 permits on the aquatic environment; protections for special aquatic sites; water quality effects and requirements of other regulatory programs.

1.4.4 Involved Agencies and Participating Applicants

The Corps and the Department coordinated with other resource agencies to develop a cohesive, Watershed-specific plan to address anticipated permitting needs and compensatory mitigation, including long-term management of aquatic resources within the Watershed. Participation in the SAMP/WSAA Process was also undertaken in coordination with several applicants throughout an intensive pre-application procedure and in consideration of public comments. The following state and federal resource agencies have been involved in development of the SAMP/WSAA Process:

- Corps;
- Department's South Coast Region Habitat Conservation Planning Unit;
- RWQCB, Santa Ana Region;
- U.S Fish and Wildlife Service (USFWS); and
- U.S. Environmental Protection Agency (U.S. EPA), Region IX.

On several occasions in 2001 and 2002, the Corps contacted public and private entities (potential applicants) with known development projects and infrastructure/maintenance activities within the Watershed to seek their participation in the SAMP/WSAA Process. The Irvine Company, Irvine Ranch Water District (IRWD), the County of Orange Resources Development and Management Department (RDMD), Orange County Flood Control District (OCFCD), and the City of Irvine chose to participate in the SAMP/WSAA Process for future projects and activities subject to permitting under Section 404 of the federal CWA and Section 1600 *et seq.* of the FGC. These entities are referred to as the Participating Applicants.

This EIS/EIR does not evaluate specific projects of Participating Applicants that may be permitted under the SAMP Permitting Program/WSAA Process because some of these projects have been permitted under the existing Corps and Department permit programs, and others are or will be undergoing a separate environmental review and permit processes by the local lead agencies. Nonetheless, this EIS/EIR programmatically evaluates seven categories of regulated activities that could be permitted under the SAMP and WSAA Process, which includes regulated activities for which the Participating Applicants may seek Corps/Department permit approval.

1.5 REGULATORY FRAMEWORK

This section provides a summary of aquatic resource-related state and federal regulations that are applicable to the types of activities anticipated to be covered by the SAMP/WSAA Process.

1.5.1 Clean Water Act

Background – Federal Jurisdiction. The CWA is the principal federal law that addresses aquatic resources and water quality. The primary objectives of the CWA are to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters," and to make all surface waters "fishable" and "swimable."

Waters of the U.S. Under Section 404 of the CWA, the Corps regulates discharges of dredged or fill material into "Waters of the United States," including wetlands. The term "Waters of the United States" is defined in 33 CFR 328.3 as:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce…;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams)....the use, degradation or destruction of which could affect interstate or foreign commerce...;
- All impoundment of waters otherwise defined as waters of the U.S. under the definition; and
- Tributaries of waters defined in the bullets above.

The Corps typically regulates as waters of the U.S. any body of water displaying an "ordinary high water mark" (OHWM). Corps jurisdiction over non-tidal waters of the U.S. extends laterally to the OHWM or beyond the OHWM to the limit of any adjacent wetlands, if they are present (33 CFR 328.4). The OHWM is defined as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area" (33 CFR 328.3). Jurisdiction typically extends upstream to the point where the OHWM is no longer perceptible.

The Corps and the U.S. EPA define wetlands as follows: "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions." In order to be considered a "jurisdictional wetland" under Section 404, an area must possess three wetland characteristics: hydrophytic *vegetation*, hydric *soils*, and wetland *hydrology*. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met. Several parameters may be analyzed to determine whether the criteria are satisfied (Environmental Laboratory 1987).

Although "wetlands" are waters of the U.S., throughout this document the common convention of distinguishing between wetlands and non-wetland waters of the U.S. has been followed. The term "wetland" will refer to regulated waters of the U.S. that meet the hydrologic, hydrophytic vegetation, and hydric soils criteria outlined in the Corps' Wetlands Delineation Manual (Environmental Laboratory 1987). The term non-wetland waters of the U.S. refer to non-wetland waters regulated under Section 404 of the CWA.

***Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC).** The Supreme Court, in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (January 21, 2001), determined that the CWA did not extend to isolated waters/wetlands that were determined jurisdictional solely on the basis of the "Migratory Bird Rule" of 1986. The Court ruled that merely providing habitat for migratory birds was not a sufficient connection to interstate commerce for inclusion under the CWA. Thus, some isolated wetlands, especially vernal pools, may not be regulated by the Corps. Geographical jurisdictional determinations are made by the Corps on a case-by-case basis for wetlands in which adjacency or proximity to navigable waters is in question.

Solid Waste Agency of Northern Cook County Case

In January 2001, the U.S. Supreme Court ruled (in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers; "SWANCC"*) that the "migratory bird rule" was not valid, and that Corps jurisdiction does not extend to previously regulated isolated waters, including but not limited to isolated ponds, reservoirs, and wetlands. The Court ruled that merely providing habitat for migratory birds was not a sufficient connection to interstate commerce for inclusion under the CWA. Thus, some isolated wetlands, especially vernal pools, may not be regulated by the Corps. Geographical jurisdictional determinations are made by the Corps on a case-by-case basis for wetlands in which adjacency or proximity to navigable waters is in question. Examples of isolated waters that are affected by this ruling include: vernal pools; stock ponds, lakes (without outlets); playa lakes; and desert washes that are not tributary to navigable or interstate waters or to other jurisdictional waters.

Rapanos Case

On June 19, 2006, the U.S. Supreme Court issued the complex "Rapanos" decision, a consolidation of two cases: *John A. Rapanos, et ux., et al., Petitioners 04-1034 v. United States*; and *June Carabell et al., Petitioners 04-1384 v. United States Army Corps of Engineers et al.* This consolidated case brought into question the Corps' jurisdiction over intermittent and ephemeral streams and their adjacent wetlands. The complex ruling stated that, in order to assert jurisdiction over certain waters, the Corps would need to provide evidence of a "significant nexus" between a given wetland and/or an associated tributary to a navigable water. The Justices issued five separate opinions with no single opinion commanding a majority of the Court. The judgments in the original two cases were vacated and remanded to the 6th Circuit for further proceedings consistent with the *Rapanos* decision.

On June 5, 2007 the Corps and the USEPA issued joint guidance to their field offices about how to determine CWA jurisdiction in waters of the U.S. In addition, the Corps issued an "Instructional Guidebook" to guide practitioners in the completion of Jurisdictional Determinations. In accordance with the Rapanos guidance, the agencies will continue to assert jurisdiction over traditional navigable waters (TNWs) and all wetlands adjacent to TNWs. Jurisdiction may be asserted over waters of the U.S., including wetlands, which are not a TNW by meeting either of the following two standards: (1) classification as a relatively permanent water (RPW) (e.g. flows seasonally, for 3 months or more), or (2) a "significant nexus" finding. The classes of water body that are subject to CWA jurisdiction only if a significant nexus is demonstrated include: non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally; wetlands adjacent to such tributaries; and wetlands adjacent to but do not directly abut a relatively permanent, non-navigable tributary (RPW). A significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or an insubstantial effect on the chemical, physical, and/or biological, integrity of a TNW.

Permitting. The current Section 404 program handles permits on a case-by-case and site-by-site basis. There is no coordinated process seeking to plan impacts and mitigation using methods designed to improve the integrity of the Watershed. The current program allows applicants to receive approvals through the NWP process, which does not allow for public review or agency coordination (except for projects that may affect threatened and endangered species). Many different types of activities may be authorized under the NWP process. Project locations may be located within the Watershed's highest quality habitat, and off-site alternatives are rarely practicable. Even with the Corps' Mitigation Guidelines (April 19, 2004) and the Corps Los Angeles District (LAD) Regional Conditions, mitigation sites are located in a rather random manner, and protection relies on the establishment of conservation easements.

Compliance with Section 404(b)(1) Guidelines

The Corps is required to comply with the Section 404(b)(1) Guidelines for any discharge of dredged or fill materials into waters of the U.S. The Section 404(b)(1) Guidelines apply to all actions related to discharge of fill materials into waters of the U.S. ranging from individual actions with small impacts to the aquatic environment to large actions such as a SAMP. Per the 404(b)(1) Guidelines (40 CFR Section 230), a permit may be issued for the Least Environmentally Damaging Practicable Alternative (LEDPA).

There are several components involved in compliance with the Section 404(b)(1) Guidelines, which involve:

- Adequate analysis of alternatives (40 CFR 230.10(a));
- Prohibitions for discharge (40 CFR 230.10(b));
- Findings of significant degradation (40 CFR 230.10(c)); and
- Minimization of potential adverse impacts (40 CFR 230.10(d)).

The Section 404(b)(1) Guidelines apply solely to Corps' operating procedures and are not applicable to the Department's regulations

Compliance with Water Quality Standards. The CWA also requires states to adopt water quality standards for water bodies subject to review and approval by the U.S. EPA. In California, the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs) set water quality standards in California, via the California Porter-Cologne Water Quality Act (see also Section 1.5.2 following). Water quality standards consist of designated beneficial uses for a particular water body, along with water quality criteria necessary to support these uses (40 CFR §131.3[i]). Designated beneficial uses describe the appropriate uses of that water body, such as water contact recreation, commercial or sport fishing, wildlife habitat, agricultural supply, groundwater recharge, and municipal water supply. Water quality criteria are established for in-stream conditions expressed either as numeric limits or as narrative statements, and represent the quality of water that support a particular use. The water quality standards for the Watershed are established by the Santa Ana RWQCB and are documented in the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan).

National Pollutant Discharge Elimination System (NPDES). Direct discharges of pollutants from point sources into waters of the U.S. are not allowed, except in accordance with the permitting program of the CWA, NPDES (33 U.S.C. §1342. (p)). The SWRCB and RWQCBs implement and administer the NPDES program in the California. Pursuant to the NPDES program, permits have been issued that apply to storm water discharges from large municipal separate storm sewer systems (MS4), specific industrial activities, and construction activities of one acre or greater. Such discharges are viewed as point source discharges. The Santa Ana RWQCB has issued an NPDES permit to the County of Orange and the cities within the northern and central portion of Orange County (includes the Watershed) regulating discharges from their MS4s. Permitting of storm water discharges under NPDES is discussed in greater detail in Section 3.4, Water Quality.

NPDES permits require water quality-based limitations for pollutants that may cause or contribute to an exceedance of a state water quality standard (40 CFR § 122.44). NPDES permits may establish enforceable effluent limitations on discharges, require monitoring of discharges, designate reporting requirements, or require the discharger to implement best management practices (BMPs). BMPs are activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the U.S. BMPs may be used in addition to numeric effluent limitations, or, in some cases, in lieu of numeric effluent limitations (40 CFR § 122.44(k).

CWA Section 303(d). Where water quality standards are not being achieved, Section 303(d) of the CWA requires identifying and listing that water body as "impaired." A water body can be listed for one or more impairments. Once a water body has been included on a 303(d) list of impaired water bodies, a

Total Maximum Daily Load (TMDL) for the pollutant causing the impairment must be developed for that water body. A TMDL is the allowable amount of a pollutant (total pollutant load) that can be discharged from all sources, both point and non-point, and still ensure that water quality standards are achieved (e.g., water quality objectives are met and beneficial uses are protected). The TMDL must also include a margin of safety. TMDLs are established by RWQCBs under the Porter-Cologne Act (Cal. Water Code §§ 13000 et seq.) when they are amended to the Basin Plans. Once established, the TMDL is allocated among current and future dischargers into the water body. The TMDL is allocated as "waste load allocations" to point source dischargers and as "load allocations" to non-point source dischargers. Established TMDLs applicable to the Watershed are discussed in Section 3.4, Water Quality.

CWA Section 401. In accordance with Section 401 of the CWA, an applicant for a Section 404 permit to discharge dredged or fill material into waters of the U.S. must obtain certification from the RWQCB (or in certain instances from the SWRCB) stating that the proposed fill would not violate water quality standards and criteria specified in the Basin Plan. A request for certification of Waste Discharge Requirements (WDRs) is submitted to the RWQCB at the same time that an application for a Section 404 permit is filed with the Corps. The RWQCB has 60 days to review the application and act on it. Because no Corps permit is valid under the CWA unless "certified" by the state, the RWQCB may effectively veto or add conditions to any Corps permit through the 401 certification process.

In cases where a 401 certification does not apply (e.g., when activities are not subject to a Section 404 permit because the discharge of dredged or fill material does not occur within waters of the U.S. [1]), the Porter-Cologne Water Quality Control Act requirements for waste discharges to waters of the State[2] must still be satisfied. Previously, the RWQCB could issue waivers of WDRs for discharges outside of Corps jurisdiction. However, these waivers expired January 1, 2003. In May 2004, the SWRCB issued Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdictions (Order No. 2004-0004-DWQ) to regulate some activities for which WDRs were previously waived (in particular non-federal waters, per the "SWANCC" decision by the U.S. Supreme Court[3]). Activities eligible for these General WDRs include actions not subject to a 404 permit and 401 water quality certification, and based on the following size criteria applied to either temporary or permanent impacts to waters of the State:

- Excavation and/or fill activities that impact less than 0.2 acres of waters of the State;
- Linear excavation and/or fill affecting drainage features and shorelines cannot impact more than 400 linear feet of waters of the State; and
- Dredging activities that do not exceed 50 cubic yards within waters of the State.

[1] Waters of the U.S. refers to federally regulated rivers, creeks, streams and lakes, bordered by an ordinary high water mark, and extending to the headwaters. Also, includes adjacent wetlands (See 33 CFR § 328.3(b); 40 CFR § 230.3(s)). Waters of the U.S. are regulated by the Corps.

[2] Waters of the State includes any surface or groundwater, including saline waters, within the boundaries of the state (California Water Code § 13050(e)). This is a broad definition used by the RWQCB and includes drainage features outside the Corps and Department jurisdiction. The Department regulates impacts to the bed, channel, or bank of any river, stream, or lake; any such river stream or lake would be a waters of the State (See FGC Section 1600 *et seq.*), but a subset under the broader definition used by the RWQCB.

The size criteria apply to complete projects and cannot be used to authorize "piecemealing" of larger discharges. In regulating recurring discharges (e.g., routine maintenance of sedimentation basins, forebays or similar waters), these criteria apply for each discharge episode. Based on these size criteria and several other eligibility requirements, the discharges that may be covered under these General WDRs would generally include those for bridge construction, land development, detention basins, disposal of dredge material, bank stabilization, revetment, channelization and other similar activities.

For compliance under these General WDRs, the discharger must submit and implement a mitigation plan that demonstrates the discharge will sequentially avoid, minimize and compensate for adverse impacts to the beneficial uses of affected water bodies. Compensatory mitigation for unavoidable permanent impacts to wetlands or headwaters must ensure "no net loss" of area (acreage), functions and beneficial use values by providing appropriate compensatory mitigation including creation, restoration or (in exceptional cases) preservation.

1.5.2 California Porter-Cologne Water Quality Act

California's Porter-Cologne Water Quality Control Act established the SWRCB and the nine RWQCBs. Each RWQCB is required to adopt a Basin Plan that describes the existing water quality conditions and problems in the region, establishes beneficial uses of the surface waters and groundwaters in the region (Receiving Waters) along with water quality objectives to protect the beneficial uses of the Receiving Waters. The Watershed is within the jurisdiction of the Santa Ana RWQCB and is subject to the provisions of the Santa Ana RWQCB's Basin Plan, which identifies water quality objectives and beneficial uses for waters within the RWQCB's jurisdiction. The water quality objectives and beneficial uses for surface waters and groundwater of the Watershed as specified in the Basin Plan are discussed in Section 3.4, Water Quality.

1.5.3 California Fish and Game Code

"***Streambed Alteration Agreements.*** As described in Section 1.4.2, under FGC Section 1600 *et seq*., the Department has jurisdiction over (i.e., regulates) activities that will affect the natural flow of, or the bed, channel, or bank of a river, stream, or lake in the state, including perennial, intermittent, and ephemeral rivers and streams. Hence, FGC Section 1602 requires any person, state or local governmental agency, or public utility to notify the Department before conducting such an activity and requires the Department to issue a SAA for the activity if the Department determines the activity could substantially adversely affect an existing fish and wildlife resource. "Fish and wildlife resources" include wild fish, mollusks, crustaceans, invertebrates, or amphibians, including any part, spawn, or ova thereof (FGC Section 45); birds, mammals and reptiles not raised in captivity (FGC Section 1800); and habitat necessary for biologically sustainable populations of those species (FGC Section 1802).

"***Wetlands Protection.*** The Department does not have direct regulatory authority over activities that could affect wetlands. However, if an activity is subject to FGC Section 1600 *et seq.* or CESA could have an adverse impact on a wetland, the measures the Department includes in a SAA (under FGC Section 1600 *et seq.*) or permit (under CESA) generally will serve to protect the wetland or compensate

[3] 531 U.S. 159 (2001). The Court found that the Corps could not rely on the presence of migratory birds to find a federal connection to an otherwise isolated, non-navigable water, and therefore, limited the Corps jurisdiction over

for any loss. Also, as the trustee agency for the state's fish and wildlife resources, the Department consults with lead and responsible agencies under CEQA and NEPA and comments on projects that could affect wetlands consistent with the California Wetlands Conservation Policy described below

1.5.4 California Wetlands Conservation Policy

The California Wetlands Conservation Policy of 1993 created an interagency task force headed by the State Resources Agency and California Environmental Protection Agency (Cal-EPA) to: (1) ensure no overall net loss, and a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values; (2) reduce procedural complexity in the administration of state and federal wetlands conservation programs; and (3) encourage partnerships that make restoration, landowner incentives, and cooperative planning the primary focus of wetlands conservation. This resolution directed the Department to prepare and submit to the legislature a plan identifying means to protect existing wetlands and restore former wetlands. This includes identification of sufficient potential wetlands sites to increase the amount of wetlands in California, and a program for the public and private acquisition of such lands. While the resolution does not have the force and effect of law, the Department and other California state agencies frequently point to it as an expression of state policy.

1.5.5 Federal Endangered Species Act (ESA)

The federal ESA of 1973 (16 USC 1531 *et seq.)* is administered by the USFWS, and by the National Marine Fisheries Service (NMFS) in areas where marine habitats exist. Section 7 of the ESA requires federal agencies to use their authorities to conserve threatened and endangered species. It also directs federal agencies to consult with USFWS (and/or NMFS) if any action they authorize, fund, or carry out "may affect" in either a beneficial or adverse manner, any species that is listed or proposed for listing, or any designated or proposed critical habitat. For example, if the issuance of a CWA Section 404 permit by the Corps for a private development project may affect any listed species, the Corps must consult with USFWS on the effects of the issuance of that permit. Species that are candidates for listing by the USFWS may also be addressed during federal interagency coordination. Section 7 also provides a mechanism for 'incidental take,' for actions that may affect a listed species, but which do not jeopardize its continued existence or destroy or adversely modify critical habitat.

Section 9 of the ESA prohibits 'take' (i.e., harassment, harm, pursuit, hunting, shooting, wounding, killing, trapping, capture, or collecting, or the attempt to engage in any such conduct) of threatened and endangered species. "Harm" is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering.

Under Section 10 of the ESA, non-federal entities can apply for a permit excepting them from the "take" prohibition for scientific purposes to aid the species recovery, or for "incidental take," when the project or activity does not involve a federal action and the take is incidental to, and not the purpose of, an otherwise lawful activity.

non-navigable, isolated waters.

1.5.6 California Endangered Species Act (CESA)

The CESA (FGC Sections 2050, *et seq*.) is administered by the Department, and generally parallels the federal ESA. CESA prohibits the "taking" of listed species, except as otherwise provided in State law. Unlike its federal counterpart, CESA applies the take prohibitions to species petitioned for listing (state candidates) during the one-year listing review period. "Take" is defined as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" a protected species. Under Section 2081 of the FGC, the Department may authorize the take of a State endangered, threatened, or candidate species if the take is incidental to an otherwise lawful activity and any impacts to the species are minimized and fully mitigated.

A State lead agency (the agency that has principal responsibility for carrying out or approving a project) is required to consult with the Department to ensure that any action it undertakes is not likely to jeopardize the continued existence of any State endangered, threatened, or candidate species or result in adverse modification of essential habitat. A lead agency may also determine that species listed or proposed as threatened or endangered under the federal ESA warrant special review and consideration in CEQA documents. CEQA Guidelines Section 15380(d) allows a lead agency to consider a species as a "de-facto" threatened or endangered species if information can be presented showing the species would qualify for listing. This can apply to proposed, candidate, or any other species not actually listed by the Department or USFWS as rare, threatened, or endangered.

The Natural Community Conservation Planning Act was added to CESA in 1991 (FGC Sections 2800-2840), and provides for voluntary cooperation among the Department, landowners, and other interested parties to develop natural community conservation plans which provide for early coordination of efforts to protect listed species or species that are not yet listed. The primary purpose of the Act is to preserve species and their habitats, while allowing reasonable and appropriate development to occur on affected lands.