

Memorandum

March 8, 2012

Prepared for:	Peter Grenell, General Manager, San Mateo County Harbor District				
Prepared by:	Chelsea Phlegar, Planner				
Reviewed by:	David D. Davis, AICP				
	Craig Lewis, S.E.				
Subject:	West Trail Repairs Permit Strategy	Job No.:	1044912005		

1 Project History and Description

West Trail begins at a public parking area off West Point Avenue and extends approximately 2,300 feet south along the edge of the harbor shoreline, ending at the beginning of the western outer harbor breakwater. The repair project site begins 500 feet south of the parking lot, near where the path first comes to the water's edge. The area of repair continues for 700 feet, ending at a bench along the trail.

The path is an unpaved, densely compacted dirt pathway cleared of all vegetation, varying in width from 8 to 18 feet. The edges of the path are generally well-defined by vegetation, although there are some areas where the pathway bleeds directly onto adjacent rocky or sandy areas. Within the project area, the path is generally at or near the harbor's edge, varying in elevation from 5 to 10 feet above mean higher high water.

The harborside (east) of the trail is seeing ongoing erosion from wave action. In a few areas, the erosion has begun to encroach directly onto the trail and a 30-foot section of 14-inch outer diameter pipe is exposed in the eroded portion of the drop-off. Erosion is also occurring at the location of two existing stacked culverts. The void missing from the trail is 3-feet wide, with a 3.5-foot drop-off (to the bottom of the top culvert). The upper culvert is a 12-inch corrugated metal pipe (CMP). The lower culvert is an 18-inch inner diameter, 23-inch outer diameter concrete pipe that is broken into many segments. Both culverts are clogged with debris; it is assumed that they are not functioning. The bench at this location is undermined and is unsafe.

On the landside (west) adjacent to the path, the land slopes immediately upwards to over 100 feet in elevation above the trail. This slope is varied in its vegetated cover, including a heavily wooded portion with many dense cypress trees, a mostly bare unvegetated portion, and a portion lightly vegetated with grasses. The steepest portions of the hillside above the project site are sloped up to 1.5H:1V. At the end of the repair section, across the trail from the labyrinth, the unvegetated portion of the slope has been eroding on to the pathway.



The Pillar Point Air Force Station is located on the top of the hillside. Storm water runoff from that site, combined with the lack of vegetation and underlying geotechnical conditions, may be contributing the erosion of the hillside. The U.S. Air Force completed an environmental assessment under the National Environmental Policy Act in 2010 which evaluated a Low Impact Development retrofit project for the stormwater conveyance system on the station. Although focused on federal requirements, this memorandum will draw from the findings of that document in determining what resource permits may be required for the West Trail Repair Project.

2 Summary of Findings

This technical memorandum (TM) describes the resource permitting processes for the Pillar Point West Trail Repairs Project (Project). This TM is based on a field visits conducted on October 25, 2011 and March 5, 2012, anecdotal information provided by the San Mateo County Harbor District (District), and the conceptual repair alternatives developed by GHD. The format of each discussion describes the environmental compliance or permitting activity, followed by any potential fees and schedule for that activity, and agency contact information, as applicable.



3 Permits Required

Table 1: Permit Summary

Agency	Permit/Approval	Fee
U.S. Army Corps of Engineers	Section 404/Section 10 Nationwide Permit	None ⁽¹⁾
U.S. Fish & Wildlife/National Marine Fisheries Service ⁽²⁾	Section 7 Consultation	None ⁽¹⁾
State Historic Preservation Office	Section 106 Consultation	None ⁽¹⁾
San Francisco Regional Water Quality Control Board	Section 401 Water Quality Certification/Waste Discharge Requirements	\$944 base ⁽³⁾
State Water Resources Control Board	General Construction Permit & Stormwater Pollution Prevention Plan	Varies
California Department of Fish & Game	Section 2081 Consultation / Management Authorization	None ⁽¹⁾
California Coastal Commission	Coastal Development Permit	Varies

⁽¹⁾ Although there is no application fee, the Applicant is expected to have sufficient funds to create and adequately maintain its mitigation commitments.

3.1 U.S. Army Corps of Engineers (Army Corps) - Section 404/Section 10 Nationwide Permit

Under the Federal Clean Water Act, a Section 404 Permit is needed for the permanent disposal of fill into jurisdictional waters (i.e. Waters of the U.S.). Under the Rivers and Harbors Act, a Section 10 permit is required for work or structures in, under, or over navigable waters of the U.S., or which affects the course, location, condition or capacity of such waters. Since the Project involves the placement of rock slope protection or other bank stabilization fill material below the mean high tide line, an Army Corps permit will be required.

⁽²⁾ The submittals for this agency will be included in the Nationwide Permit Application to the U.S. Army Corps of Engineers who will consult with this agency.

⁽³⁾ The fee shown here is base fee only and does not include additional fees that would depend on the level of impact, construction costs, or staff time for review. For additional fees to be paid see the fee discussion under each permit description.



It is anticipated that the Project will qualify for Nationwide Permit 13 – Bank Stabilization (NWP 13). NWPs are authorized under the Army Corps' Section 404/Section 10 general permit and include categories of activities termed the Nationwide Permit Program. While NWP 13 is written to address streambank stabilization, the activities involved with the West Trail repair (i.e., shore stabilization) is very similar in nature. The NWP can apply to stabilization projects up to 500 linear feet along the shore and up to 1.0 cubic yard of fill per running foot. As currently proposed, the actual project repairs will extend approximately 290 feet.

The NWP application would include, but not be limited to: project location and description; identification of waters of the U.S. at the project site; potential effects to listed species or designated critical habitat; and, potential effects to historic properties. A pre-construction notification (PCN) may be required for NWP 13 if the repair project would affect more than 300 feet of shore, remove more than 0.1 acre of wetland vegetation, and/or affect a special aquatic site. Such sites could include known eel grass beds and essential fish habitat, as designated by the Pacific Fishery Management Council. Based on the Project length, it is assumed that a PCN would not be required. However, this determine will be based on the findings of the biological resources report currently underway. Finally, it should also be noted that it has been GHD's experience that Army Corps staff has the latitude to choose a different NWP for project coverage than that proposed by the Applicant. This typically happens in situations where a project and its Applicant might benefit from such a change.

The current NWP program is due to expire on March 18, 2012. The Army Corps has issued its Proposal to Reissue and Modify Nationwide Permits. This set of NWPs will go into effect on March 19, 2012. Since the Project's permit application will be submitted after that date, the Project will be subject to the reissued and modified NWPs. Based on the Army Corps' proposal, it appears that there are no changes to NWP 13 that are applicable to the Project. However, this should be confirmed when the new NWPs are published.

The Army Corps will not issue a permit until a Water Quality Certification is granted from the San Francisco Regional Water Quality Control Board pursuant to its authority under Section 401 of the federal Clean Water Act. In addition, as part of the Section 404/Section 10 process, the Army Corps must consult with the agencies below for concurrence with its decision to issue a permit.

3.1.1 U.S. Fish & Wildlife Service (USFWS)/National Marine Fisheries Service (NMFS) – Section 7 Consultation

If a project may affect species or migratory fish listed under the Federal Endangered Species Act, then the Army Corps will initiate consultation with the USFWS and/or NMFS under Section 7 of the Endangered Species Act (ESA). The USFWS and NMFS share responsibility for administering the ESA; the USFWS has primary responsibility for terrestrial and freshwater species, while NMFS is mainly responsible for marine species.

Section 7 consultations are based on a Biological Assessment (BA), which provides necessary information on any listed species and/or critical habitat present in the project area (also called the Action



Area) and the Project's potential to adversely affect the species and critical habitat. The BA then evaluates the potential impacts to any known protected species and proposes mitigation to reduce any potential impacts to those species.

Section 7 consultations can be "informal" or "formal". Informal consultation determines the likelihood of adverse effects on a listed species or critical habitat and identifies and establishes mitigation measures or project modifications to reduce or avoid adverse effects on these species and habitats. If the federal agency (in this case, the Army Corps), determines that the Project is "not likely to adversely affect" (or "may affect, but is not likely to adversely affect") listed species or critical habitat, the USFWS and/or NMFS will issue a letter of concurrence (i.e., letter of no effect) and consultation is concluded.

If, even after going through the informal consultation process, the Project may still affect listed species or designated critical habitat, then formal consultation is required and the USFWS and/or NMFS will issue a Biological Opinion. A Biological Opinion will contain resource-specific mitigation and restoration requirements that will avoid take and adverse effects to the special-status species.

It is unknown at this time if the Project will potentially affect a federally-listed threatened or endangered species. Based on agency site visits and the characteristics of the general area, resource agency staff has suggested that a survey for eel grass and native oysters be conducted prior to the consultation process. A biological resources report is currently being prepared to determine the presence or absence of such species. This report is intended to serve as the project's BA and will provide information regarding the potential presence or absence of eel grass and/or native oysters in the harbor.

3.1.2 State Historic Preservation Office (SHPO)

Consultation with SHPO is required as part of the Section 404/Section 10 permitting process if cultural resources are known to exist within the project construction zone (also called the Area of Potential Effect or APE). The reason for defining an APE is to determine the area in which cultural resources must be identified, so that effects to any identified resources can, in turn, be assessed. Consultation with SHPO can require extensive coordination activities and can take up to a year. The Army Corps will ask SHPO to concur with its decision to issue its permit.

The construction date of West Trail is currently unknown. A cultural resources survey will be conducted as part of any environmental analysis conducted for this project. The survey will indicate if the trail qualifies for coverage under the National Historic Preservation Act (NHPA), the driver for Army Corps' consultation and SHPO jurisdiction.

3.1.3 California Coastal Commission (Coastal Commission) Federal Consistency Concurrence

In 2007, the Coastal Commission determined that the Army Corps' NWP program was not consistent with the wetland fill policy of Section 30233 of the California Coastal Act, an enforceable policy of the California Coastal Management Program. Therefore, NWPs are not valid until the Coastal Commission concurs with a consistency certification, or waives the requirement. See 3.5.2 for more information.



<u>Fees</u>: As this is a government-sponsored project, there are no fees associated with any of the federal submittals.

<u>Schedule</u>: Once a NWP application has been submitted, the Army Corps has 30 days to determine if the application is complete. The Army Corps will notify the applicant within 45 days of receipt of a complete application if Section 7 consultation and/or Section 106 consultation is required.

<u>Contact Information</u>: The Army Corps San Francisco District can be reached at 415-503-6773. Information on the Army Corps' regulatory policies can be found at: http://www.spl.usace.army.mil/regulatory/.

3.2 San Francisco Bay Regional Water Quality Control Board (RWQCB) – Section 401 Water Quality Certification/Waste Discharge Requirements (WDR)

Under Section 401 of the Federal Clean Water Act, the State must certify that any activity subject to a permit issued by a federal agency, such as the Army Corps, meets all State water quality standards. In California, the State water quality standards are codified in the Porter-Cologne Water Quality Control Act. The State Water Resources Control Board (SWRCB) and the nine Regional Boards are responsible for taking certification actions for activities subject to any permit issued by the Army Corps pursuant to Section 404 and/or Section 10. The resulting approval is referred to as a Water Quality Certification. A Water Quality Certification is required for all Army Corps' nationwide permits, whether or not the nationwide permit has a pre-construction notification requirement. The San Francisco Regional Water Quality Control Board (RWQCB) is the applicable certifying agency for the Project.

If any type of discharge of waste into waters of the State is proposed as part of the Project, the RWQCB may also need to issue Waste Discharge Requirements (WDRs). Both of the terms "discharge of waste" and "waters of the State" are broadly defined in the Federal Clean Water Act to mean that discharges of waste include fill, any material resulting from human activity, or any other "discharge" that may directly or indirectly impact "waters of the State." This can be done through the same application process as the Water Quality Certification, and the RWQCB will determine if WDRs also need to be issued for the Project.

<u>Fees</u>: As shown in Table 2, fees associated with the Section 401 Water Quality Certification application for channel and shoreline discharges, including bank stabilization and revetment will be assessed under the Fill and Excavation or Channel and Shoreline fee schedules, whichever results in the higher fee. The Fill and Excavation fee schedule includes a \$944 base fee plus \$4,059 multiplied by the discharge area in acres. The Channel and Shoreline fee schedule includes \$944 base fee plus \$9.44 multiplied by the discharge length. Total fee is limited to a maximum of \$59,000.



Table 2 - Section 401 Water Quality Certification Costs

Table 2 Cooken 40 Water Quanty Columbation Costs							
Fill and Excavation	Base	Length of Discharge (Linear Feet)	Multiplier	LF Certification Fee	Final Certification Fee		
Channel and Shoreline	Fee	Discharge Area (Acres)		Acres Certification Fee			
	\$944	50 feet	\$9.44	\$1,416	\$1,416		
		0.01 acre	\$4,059	\$985			
	\$944	100 feet	\$9.44	\$1,888	\$1,888		
		0.02 acre	\$4,059	\$1,025			
Evamples	\$944	200 feet	\$9.44	\$2,832	\$2,832		
Examples		0.05 acre	\$4,059	\$1,147			
	\$944	500 feet	\$9.44	\$5,664	\$5,664		
		0.11 acre	\$4,059	\$1,390			
	\$944	1,000 feet	\$9.44	\$10,384			
		0.23 acre	\$4,059	\$1,878	\$10,384		

<u>Schedule:</u> Once the RWQCB has received a complete application for 401 certification/WDRs, the State must act upon the application within 60 days, although it may request additional time to act from the Army Corps, up to one year.

<u>Contact Information</u>: The RWQCB – San Francisco Bay Region can be reached at 510-622-2426. Information on the RWQCB's policies can be found at: http://www.swrcb.ca.gov/rwqcb2/certs.shtml.

3.3 State Water Resources Control Board (SWRCB) – Construction Stormwater General Permit and Stormwater Pollution Prevention Plan

If a project disturbs 1.0 acre of land or more, including in-water disturbance, a project will require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the National Pollutant Discharge Elimination System (NPDES) Stormwater General Permit for construction activities (2009-0009-DWQ Construction General Permit [Construction General Permit]). The SWRCB issues the Construction General Permit, but the local RWQCB enforces the permit. The SWPPP will need to be completed prior to the submittal of the Notice of Intent which needs to be filed with the SWRCB a



minimum of 30 days prior to the start of construction. The SWPPP is not required to be submitted to the SWRCB; however, they may ask for a copy.

For new projects the applicant must electronically submit Permit Registration Documents (PRDs) prior to commencement of construction activities in the Storm water Multi- Application Report Tracking System (SMARTS). PRDs consist of the Notice of Intent, Risk Assessment, Post-Construction Calculations, a Site Map, the SWPPP, a signed certification statement by the LRP, and the first annual fee. Continued reporting may be required during the construction period. A Notice of Termination (NOT) must be filed when construction is complete and final stabilization has been reached.

The proposed Project will not disturb greater than 1.0 acre of land.

<u>Fees</u>: The permit fee structure is based on the acreage of the project area. There is an annual fee of \$321 plus \$32 per acre, rounded to the nearest whole acre and dollar amount, with a maximum fee of \$3,529. The fee is paid when the Notice of Intent is filed and annually thereafter when Annual Compliance Certification is filed throughout the duration of construction and submittal of the Notice of Termination.

<u>Schedule:</u> PRDs need to be submitted a minimum of 30 days prior to the start of construction. Upon receipt of a complete PRD submittal, the State Water Board will process the application package in the order received and assign a WDID (facility identification) number.

<u>Contact Information</u>: The SWRCB's stormwater program can be reached at 866-563-3107. Information on the SWRCB's construction stormwater program can be found at:

http://www.swrcb.ca.gov/water_issues/programs/stormwater/construction.shtml.

3.4 California Department of Fish & Game (CDFG) Marine Region – Section 2081 Incidental Take

CDFG must be consulted pursuant to the California Endangered Species Act (CESA), Sections 2081(b) and (c). CESA states that all native plant and wildlife species threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. However, CESA also allows for "take" incidental to otherwise lawful development projects.

CDFG consultation for this Project will begin with their review of the Project BA. The BA should be tailored to CDFG, and include a conclusion of whether or not the Project will result in "take" of listed species, as defined in Section 86 of the CDFG Code¹. The same State-listed species identified in the BA prepared for the Army Corps Section 404/Section 10 process will apply for this consultation.

¹ "Take" is defined in Section 86 of CDFG Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."



Based on agency site visits and the characteristics of the general area, resource agency staff has suggested that a survey for eel grass and native oysters be conducted prior to the consultation process. Agency staff will also look for discussion of potential impacts to the nearby sanctuary and construction best management practices in the Project BA. Upon review of the BA, agency staff could request additional project measures to further reduce impacts to ensure that there will be no "take" of listed species. A biological resources report is currently being prepared to determine the presence or absence of eel grass, native oysters and other listed species and habitat. This report is intended to serve as the project's BA and will provide information regarding the potential presence or absence of eel grass and/or native oysters in the harbor, potential impacts to the nearby sanctuary and provide recommended best management practices to reduce or avoid adverse impacts.

If CDFG agrees that there will be no "take" of listed species, CDFG will issue a letter stating their agreement and consultation will be concluded. If CDFG determines that there will be "take" of a listed species and the concern cannot be resolved by revising the Project, then an incidental take permit process will be initiated. The following criteria must be met for the "take" to become authorized through the permit:

- The take is incidental to an otherwise lawful activity;
- The impacts of the take are minimized and fully mitigated;
- The measures required to minimize and fully mitigate the impacts of the take:
 - o are roughly proportional in extent to the impact of the taking on the species,
 - o maintain the applicant's objectives to the greatest extent possible, and
 - are capable of successful implementation;
- Adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with and the effectiveness of the measures; and
- Issuance of the permit will not jeopardize the continued existence of a State-listed species.

At this time, it is not known if the Project will result in "take" of State-listed plant or wildlife species.

<u>Fees</u>: No fees are required for the initial consultation and/or permit application. However, the CDFG requires that adequate funding by the applicant be available to implement mitigation measures, as outlined above.

Schedule: CDFG is required to complete an initial review of an incidental take permit application within 30 days of receipt. If the application is incomplete or improperly executed CDFG will return the application to the applicant with a description of the deficiency. The applicant will then have 30 days from receipt of the returned application to correct the deficiency and re-submit the application. Once an application is determined complete, CDFG has 90 days to approve and issue a permit. If CDFG takes no action within 30 days of receipt, the application will be deemed complete.



Contact Information: The Department of Fish and Game – Marine Region Monterey Office can be reached at (831) 649-2813. Information can be found at: http://www.dfg.ca.gov/habcon/envirRevPermit/.

3.5 California Coastal Commission (Coastal Commission) North Central District— Coastal Development Permit (CDP) & Consistency Certification

3.5.1 Coastal Development Permit

The Coastal Commission, in partnership with coastal cities and counties, regulates the use of land and water in the coastal zone. Development activities, which are broadly defined by the Coastal Act to include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a coastal development permit (CDP) from either the Coastal Commission or the local government.

Having an approved Local Coastal Plan (LCP) in place which includes Pillar Point Harbor, San Mateo County has coastal development jurisdiction from the mean high tide landward to the inner coastal zone boundary. However, the shoreline stabilization needed for this Project will extend seaward beyond the mean high tide, which is within the jurisdiction of the Coastal Commission. Therefore, the Coastal Commission will review and issue the CDP for this Project.

Section 30610 of the Coastal Act exempts certain repair or maintenance activities that do not result in an expansion. However, if the Coastal Commission determines that the methods of repair and maintenance could result in an adverse environmental impact, a CDP will be required. For this Project, the Coastal Commission will issue a CDP to ensure that any existing resources (including potential habitat) on-site or nearby are not adversely affected by Project construction methods.

<u>Fees</u>: Application fees are determined based on the gross square footage or development cost, whichever is greater (Table 3). Total fee is not to exceed \$250,000 for all types of development, excluding residential. The Coastal Commission may also require the applicant to reimburse any additional reasonable expenses incurred in its consideration of the CDP application, including the costs of providing public notice.

<u>Schedule</u>: Once a CDP application is "filed" (i.e. determined complete), the Coastal Commission has 180 days to take it to hearing. A one-time extension of 90 days could occur, for a maximum timeline of 270 days. Small project CDPs have the potential to be processed through the Commission consent calendar, in which a public hearing would not be required. The timeline is the same for projects that are approved through the Commission's consent calendar.

<u>Contact Information</u>: The California Coastal Commission – North Central District can be reached at 415-904-5260. Information can be found at: http://www.dfg.ca.gov/habcon/envirRevPermit/.



Table 3 - Coastal Development Permit Costs

Examples	Criteria	Fee
	1,000 square feet (gross) or less	\$5,000
	1,001 to 10,000 square feet	\$10,000
Gross Square Footage	10,001 to 25,000 square feet (gross)	\$15,000
	25,001 to 50,000 square feet (gross)	\$20,000
	100,001 or more square feet (gross)	\$30,000
	Development cost up to and including \$100,000	\$3,000
	\$100,001 to \$500,000	\$6,000
	\$500,001 to \$2,000,000	\$10,000
	\$2,000,001 to \$5,000,000	\$20,000
Development Cost	\$5,000,001 to \$10,000,000	\$25,000
	\$10,000,001 to \$25,000,000	\$30,000
	\$25,000,001 to \$50,000,000	\$50,000
	\$50,000,001 to \$100,000,000	\$100,000
	\$100,000,001 or more	\$250,000

3.5.2 Federal Consistency Certification

The Federal Consistency Unit of the Coastal Commission implements the federal Coastal Zone Management Act (CZMA) of 1972 as it applies to federal activities. Upon certification of a state's coastal management program, a federal agency must conduct its activities in a manner consistent with the state's certified program. The process established to implement this requirement is called a consistency determination for federal activities and development projects, or a consistency certification for federal permits and licenses and federal support to state and local agencies. An example is an Army Corps Section 404/Section 10 NWP, which is anticipated for this Project.

As discussed in section 3.1.3, the Coastal Commission objected to the Army Corps' NWP program consistency determination in 2007. As a result, Army Corps' NWPs are not valid until the applicant receives Coastal Commission concurrence – either a federal consistency concurrence or waiver.



For this Project, it is assumed that the Army Corps' NWP application and the Coastal Commission CDP application will be submitted concurrently. Once the Coastal Commission issues the CDP, the permit automatically satisfies federal consistency. Therefore, a separate submittal for federal consistency concurrence would not be required.

<u>Fees</u>: Because federal consistency will be satisfied through issuance of the Coastal Commission CDP, no additional fee will be required.

<u>Schedule</u>: Because federal consistency will be satisfied through issuance of the Coastal Commission CDP process, the schedule for obtaining consistency concurrence will mirror the CDP schedule.

<u>Contact Information</u>: The federal consistency coordinator is Larry Simon, <u>Isimon@coastal.ca.gov</u>, 415-904-5288. Information can be found at: http://www.coastal.ca.gov/fedcd/fedcndx.html

4 Team Responsibilities and Key Completion Dates

GHD would complete the above-referenced permit application packages, facilitate agency site visits, and submit completed application packages to the District. Once applications are submitted, GHD would track permit progress and respond to any requests for additional information. District responsibility would include providing information as needed for application packages, attendance at site meetings and the submittal of permit application packages. The District would also be responsible for permit application fees.

The Project design schedule has not been developed as yet. When the schedule is developed, GHD will provide input regarding key agency review and approval milestones.



5 References

- California Coastal Commission (CCC). 2007. Consistency Determination CD-013-07 (Nationwide Permit Program).
- CCC. 2008. Article 4, Schedule of Filing Fees for Processing Permit Applications and Other Filings. March 17.
- CCC. 2011. Frequently Asked Questions about the Federal Consistency Program. Accessed online at: http://www.coastal.ca.gov/fedcd/faq-fc.html
- California Code of Regulations. 14 CA ADC §7.835 Incidental Take Permit Process.
- California Department of Fish & Game (CDFG). nd. Sections 2081(b) and (c) Incidental Take Permit Process. Accessed online at: http://www.dfg.ca.gov/habcon/cesa/incidental/incid_perm_proced.html
- Dreher, Nicholas. 2012. California Coastal Commission. Personal Communication, February 10.
- Frey, Vicki. 2012. California Department of Fish and Game. Personal Communication. March 5.
- Pham, Danny. 2012. San Francisco Bay Regional Water Quality Control Board, Stormwater General Permit Unit, Watershed Management Division. Email Communication, February 14.
- Regional Water Quality Control Board (RWQCB). Dredge and Fill Fee Calculator, v9 9/21/2011.
- RWQCB. Water Quality Certification. Accessed online at http://www.swrcb.ca.gov/rwqcb2/certs.shtml.
- State of California, 2010. Public Resources Code. Division 20, California Coastal Act. Accessed online at: http://www.coastal.ca.gov/coastact.pdf
- State Water Resources Control Board (SWRCB). Storm Water Program, 2009-0009-DWQ Construction General Permit. Accessed online at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/qen_const_faq.shtml
- SWRCB. 2011-12 Fee Schedules. Accessed online at: http://www.waterboards.ca.gov/resources/fees/docs/fy1112fee schdl.pdf
- U.S. Army Corps of Engineers. 2007. Nationwide Permit Summary, 3.Maintenance. December.
- Wilkins, Eric. 2012. California Department of Fish and Game. Personal Communication. February 22 and March 5.