

INFORMATION HANDOUT

WATER QUALITY

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION 401 CERTIFICATION**

PERMITS

**UNITED STATES ARMY CORPS OF ENGINEERS NON-REPORTING NATIONWIDE 404
PERMIT**

MARIN COUNTY COASTAL DEVELOPMENT PERMIT

PERMIT NO. 2011-0329

AGREEMENTS

CALIFORNIA DEPARTMENT OF FISH AND GAME

NOTIFICATION NO. 1600-2011-0371-R3



California Regional Water Quality Control Board

San Francisco Bay Region



Matthew Rodriguez
Secretary for Environmental
Protection

1515 Clay Street, Suite 1400, Oakland, California 94612
(510) 622-2300 • Fax (510) 622-2460
<http://www.waterboards.ca.gov/sanfranciscobay>

Edmund G. Brown, Jr.
Governor

March 1, 2012
CIWQS Place No. 726204
401 Database No.: 02-21-C0813

Sent via electronic mail; no hard-copy to follow

California Department of Transportation
Attn: Mr. Humberto Almaguer
Humberto_Almaguer@dot.ca.gov
2015 E. Shields, Suite 100
Fresno, CA 93726

Subject: Clean Water Act Section 401 Water Quality Certification for Webb Creek State Route One Culvert Outlet Stabilization Project, Stinson Beach, Marin County

Department Project No.: EA 04-4S5300

Dear Mr. Almaguer:

We have reviewed and hereby issue Clean Water Act Section 401 water quality certification (certification) to the California Department of Transportation (Department) for the Webb Creek State Route One Culvert Outlet Stabilization Project (Project). The Department has received Project coverage under U.S. Army Corps of Engineers (Corps) Nationwide Permit No. 3, *Maintenance*, pursuant to Section 404 of the Clean Water Act (33 U.S.C. § 1344). As such, the Department has applied to the San Francisco Bay Regional Water Quality Control Board (Water Board) for certification that the Project will not violate State water quality standards.

Project: The Department is proposing to place rock slope protection at the outlet of an existing cross-culvert on Webb Creek at State Route One (SR 1), Post Mile 11.1. The Department is also proposing to stabilize the embankment fill area surrounding the outlet using soil nails and wire mesh.

The creek is currently channeled through an 11-foot diameter culvert that was installed in 2007 to replace a deteriorated and undersized 5-foot culvert. The slope surrounding and supporting SR 1 at the culvert outfall is comprised of fill material and is currently sloughing off on both sides. The sloughing is in part a result of the new hydraulic conditions at the outfall associated with the 2007 culvert installation. Because the culvert was installed at a higher elevation than the previous culvert and the riprap energy dissipation was undersized and washed downstream, the creek has adjusted to a lower creek bed elevation and undermined the outfall fill material. The proposed Project is intended to stabilize the outlet and protect SR 1.

The Department proposes to use one-ton riprap to transition between the outfall invert and the native creek bed at a distance approximately fifty feet downstream. Soil nails and wire mesh will be placed around the existing culvert outlet to stabilize the eroding sections of the SR 1 foundation. A debris rack may be placed at the inlet to the SR 1 culvert in the future to prevent debris from obstructing the inlet.

Impacts: Project implementation would result in placement of one ton riprap within the Webb Creek channel, permanently impacting 50 linear feet (0.02 acres) of jurisdictional waters. The Project would also result in permanent impacts to two California laurel and two red alder.

Mitigation: To mitigate for impacts to Webb Creek, the Department shall plant seven red alders, four coast live oak, four California bay-laurel, and twelve arroyo willows adjacent Webb Creek. The alder, oak, and bay-laurel will be planted on the southeast bank of Webb Creek and the willows will be planted within the interstices of the one-ton riprap on the northwest side of the channel.

CEQA Compliance: In March 2011, the Department found that the project was categorically exempt from CEQA pursuant to 14 CCR § 15301, existing facilities.

California Wetlands Portal: The Water Board tracks routine riparian repair and creek maintenance projects in an effort to detect potential systemic instabilities and document project performance in the creeks of the Bay Area. As such, the Department is required to submit a Riparian Repair and Maintenance California Wetlands short form describing Project size, type, and performance measures. An electronic copy of the short form and instructions can be downloaded at: <http://www.waterboards.ca.gov/sanfranciscobay/certs.shtml>. Project information will be made available at the web link: <http://www.californiawetlands.net>

Certification: I hereby issue an order certifying that any discharge from the referenced project will comply with the applicable provisions of sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 – DWQ, “General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification” which requires compliance with all conditions of this Water Quality Certification. The following conditions are associated with this certification:

1. Work within Webb Creek shall be allowed only between June 15 and October 15;
2. If water is present in Webb Creek during construction, all pools shall be surveyed for fish. All fish shall be relocated upstream or downstream;

3. If diversion of Webb Creek is necessary during construction, the Department shall install a diversion system consistent with the temporary creek diversion system plan included in Attachment A of this certification. Deviation from this plan shall be subject to the acceptance of Water Board staff. The gravel used in the gravel-filled bags shall consist only of clean river-run gravel. The diversion system shall be designed to prevent creek bed and bank erosion and scour at the diversion outlet;
4. To mitigate for impacts to Webb Creek, the Department shall plant seven red alders, four coast live oak, four California bay-laurel, and twelve arroyo willows adjacent Webb Creek. The alder, oak, and bay-laurel shall be planted on the southeast bank of Webb Creek and the willows shall be planted within the interstices of the one-ton riprap on northwest side of the channel.

Mitigation and monitoring reports shall be submitted at years 0, 1, 3, and 5. The year 0 report shall include photo-documentation points that will be used in subsequent monitoring events. The Department shall ensure establishment of four of the seven alders, five of the eight oak and bay-laurel, and eight of the twelve willows. Water Board staff may accept a lower survival rate for the willow if the surviving willow have a percent cover greater than 75% within the planted willow area. No individual tree may be considered successful until supplemental watering has been ceased for two or more growing seasons;

5. The Department is required to use the Riparian Repair and Maintenance California Wetlands short form to provide Project information within 14 days from the date of this certification. The completed short form and map showing the project boundaries shall be submitted electronically to habitatdata@waterboards.ca.gov or shall be submitted as a hard copy to both: 1) The Water Board, 1515 Clay St., Suite 1400, Oakland, CA 94612, to the attention of Wetland Tracker; and 2) The San Francisco Estuary Institute, 4911 Central Avenue, Richmond, CA 94804, to the attention of Mike May;
6. Excavation equipment shall only be operated from either the top of banks of Webb Creek, SR 1, or the excavated bench above the existing culvert;
7. The one-ton riprap shall not be placed by dumping. Each piece of one-ton riprap shall be placed individually;
8. The Department shall adhere to the special, standard and regional conditions imposed by Nationwide Permit No. 3, issued to the Department by the Corps (File Number 2012-00050N), and the Streambed and Alteration Agreement, signed by the California Department of Fish and Game;
9. The Project shall be constructed in conformance with the Project Description described in this certification and certification application materials. Any change in the Project may require

modification to the certification and shall be reported to the Water Board before they are implemented;

10. Regardless of the date, erosion control measures shall be utilized throughout all phases of construction where sediment-laden runoff from disturbed areas threatens to enter waters of the State;
11. No equipment shall be operated in areas of flowing or standing water; no fueling, cleaning or maintenance of vehicles or equipment shall take place within jurisdictional waters or within any areas where an accidental discharge to waters of the State may occur;
12. The discharge, or creation of the potential for discharge, to waters of the State of any construction wastes and/or soil materials including cement, fresh concrete, or washings thereof, silts, clay, sand, oil or petroleum products and other organic materials to waters of the State is prohibited;
13. This certification does not allow for the take, or incidental take, of any special status species. The Department shall use the appropriate protocols, as approved by the California Department of Fish and Game and the U.S. Fish and Wildlife Service, to ensure that Project activities do not impact the Beneficial Use of the Preservation of Rare and Endangered Species;
14. The Department shall maintain a copy of this water quality certification at the Project site so as to be available at all times to site operating personnel. It is the responsibility of the Department to assure that all personnel (employees, contractors, and subcontractors) are adequately informed and trained regarding the conditions of this certification;
15. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section 13330 of the California Water Code (CWC) and Section 3867 of Title 23 of the California Code of Regulations (23 CCR);
16. This certification action does not apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license, unless the pertinent certification application was filed pursuant to California Code of Regulations (CCR) Title 23, Subsection 3855(b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought; and
17. Certification is conditioned upon total payment of the full fee required in State regulations (23 CCR Section 3833). Water Board staff received full payment of \$1280.00 on October 19, 2011.

We anticipate your cooperation in implementing these conditions. However, please be advised that any violation of water quality certification conditions is a violation of State law and subject to administrative civil liability pursuant to California Water Code (CWC) section 13350. Failure to respond, inadequate response, late response, or failure to meet any condition of this certification may subject you to civil liability imposed by the Water Board to a maximum of \$5,000 per day per violation or \$10 for each gallon of waste discharged in violation of this certification.

Conditions 3-5 are requirements for information and reports. Any requirement for information and reports made as a condition to this action is a formal requirement pursuant to CWC section 13267, and failure or refusal to provide, or falsification of such required report is subject to civil liability as described in CWC section 13268.

We anticipate no further action on this request. Should new information come to our attention that indicates a water quality problem with this project, the Water Board may issue Waste Discharge Requirements pursuant to 23 CCR Section 3857.

If you have any questions, please contact Brendan Thompson of my staff at (510) 622-2506, or via e-mail to BThompson@waterboards.ca.gov.

Sincerely,

Bruce H. Wolfe
Executive Officer

cc (via e-mail):	Mr. Bill Orme SWRCB-DWQ	Mr. Dale Bowyer, Water Board
	Ms. Paula Gill, USACE	Mr. Cyrus Vafai, Caltrans
	Ms. Jane Hicks, Regulatory Branch, USACE	Mr. Hardeep Takhar, Caltrans
	Mr. Frank Meraz, Caltrans	Mr. Jason Brush, USEPA
	Ms. Laurie Monarres, USACE	Mr. Tim Dodson, CDFG

Attachment: Temporary Creek Diversion Plan

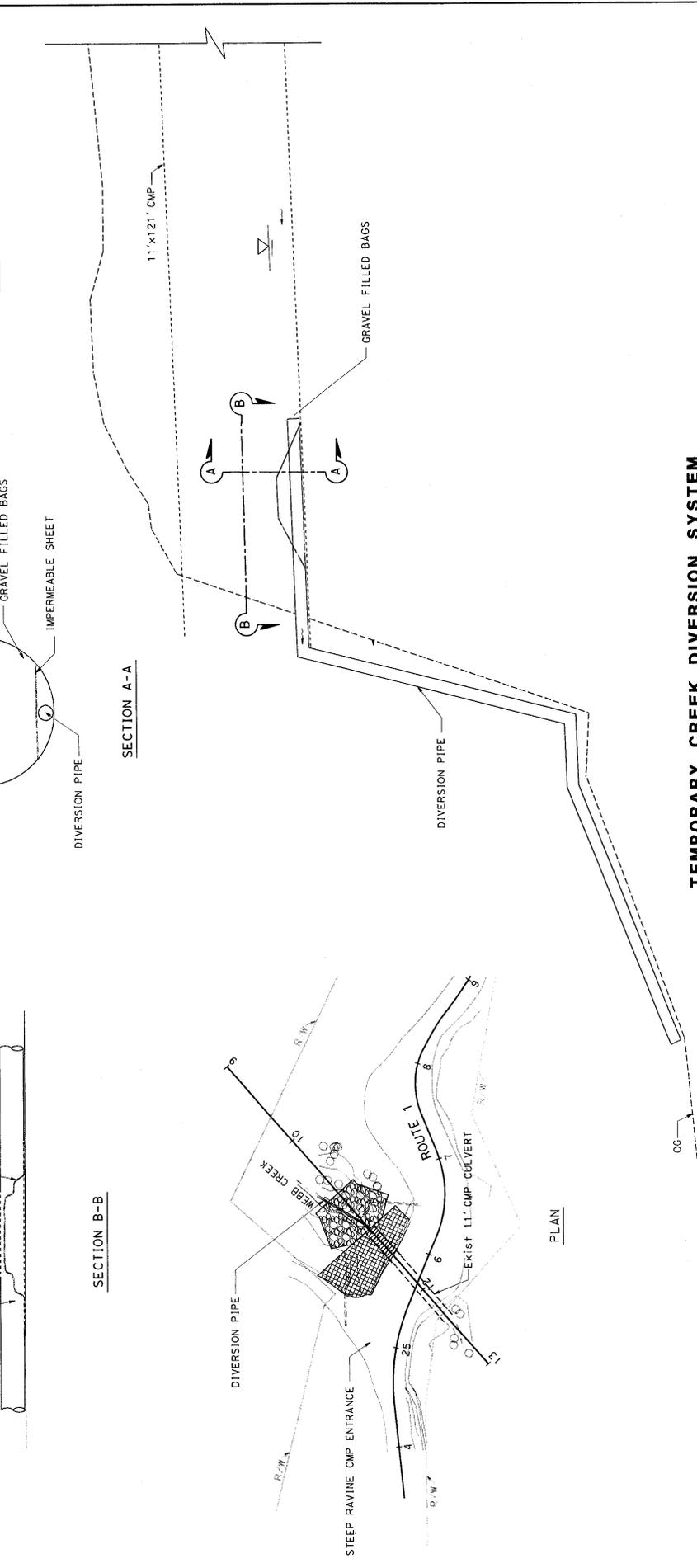
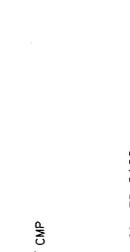
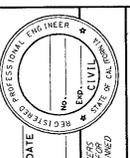
Attachment A

Temporary Creek Diversion Plan

DISK#	COUNTY	ROUTE	POST MILES	SHEET NO.	TOTAL SHEETS
04	Mcn	1	11.1		

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

THE STATE OF CALIFORNIA DOES NOT GUARANTEE OR WARRANT THE ACCURACY OF THIS PLAN SHEET. THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE DATA AND CONDITIONS OF THIS PLAN SHEET.



TEMPORARY CREEK DIVERSION SYSTEM

**WATER POLLUTION CONTROL PLAN
(CONCEPT PLAN)**

NO SCALE **WPC- 1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	THANH NGUYEN	CHECKED BY	ROLANDO MUMI	DATE REVISED
	DESIGNED BY	GEORGE PANOS	REVISOR		



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
1455 MARKET STREET, 16TH FLOOR
SAN FRANCISCO, CALIFORNIA 94103-1398

FEB - 9 2012

Regulatory Division

SUBJECT: File Number 2012-00050N

Mr. Humberto Almaguer
2015 E. Shields, Suite 100
Fresno, California 93726

Dear Mr. Almaguer:

This correspondence is in reference to your submittal of October 17, 2011, concerning Department of the Army authorization to stabilize the slope immediately downstream a culvert that conveys Webb Creek under Highway 1 in Marin County, California. Work within U.S. Army Corps of Engineers' (Corps) jurisdiction will include the installation of soil nails and rock slope protection downstream of the existing culvert. Work will require placement of 650 cubic yards of fill within 0.07 acre of Webb Creek.

Section 404 of the Clean Water Act generally regulates the discharge of dredged or fill material below the plane of ordinary high water in non-tidal waters of the United States, below the high tide line in tidal waters of the United States, and within the lateral extent of wetlands adjacent to these waters. Section 10 of the Rivers and Harbors Act generally regulates construction of structures and work, including excavation, dredging, and discharges of dredged or fill material, occurring below the plane of mean high water in tidal waters of the United States; in former diked baylands currently below mean high water; outside the limits of mean high water but affecting the navigable capacity of tidal waters; or below the plane of ordinary high water in non-tidal waters designated as navigable waters of the United States. Navigable waters of the United States generally include all waters subject to the ebb and flow of the tide; and/or all waters presently used, or have been used in the past, or may be susceptible for future use to transport interstate or foreign commerce. A Preliminary JD has been completed for your site. The basis for this preliminary jurisdictional determination is fully explained in the enclosed *Preliminary Jurisdictional Determination Form*. You are requested to sign and date this form and return it to this office within two (2) weeks of receipt. Preliminary JDs are written indications that there may be waters of the U.S. on a parcel or indications of the approximate location(s) of waters of the U.S. on a parcel. Preliminary JDs are advisory in nature and may not be appealed. Please see the enclosed PJD map titled, "*Webb Creek Hwy 1 PM 11.1*" and dated "*February 6, 2012*" (enclosure 1).

Based on a review of the information in your submittal, the project qualifies for authorization under Department of the Army Nationwide Permit (NWP) 3 for Maintenance (72 Fed. Reg. 11092, March 12, 2007) (enclosure 2), pursuant to Section 404 of the Clean Water Act (CWA) of 1972, as amended (33 U.S.C. § 1344 *et seq.*). The project must be in compliance with the terms of the NWP, the general conditions of the Nationwide Permit Program, and the San

Francisco District regional conditions cited in enclosure 2. You must also be in compliance with any special conditions specified in this letter for the NWP authorization to remain valid. Non-compliance with any term or condition could result in the revocation of the NWP authorization for your project, thereby requiring you to obtain an Individual Permit from the Corps. This NWP authorization does not obviate the need to obtain other State or local approvals required by law. All work shall be completed in accordance with the plans and drawings titled "*USACE File #2012-00050N, Webb Creek Hwy 1 PM 11.1, February 6, 2012, Figures 1 to 8*" provided as enclosure 3.

This verification is valid until the NWP is modified, reissued, or revoked. All of the existing NWPs are scheduled to be modified, reissued, or revoked prior to March 18, 2012. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a public notice when the NWPs are reissued. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant NWP is modified or revoked, you will have twelve months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP. Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance, enclosure 4, verifying that you have complied with the terms and conditions of the permit.

This authorization will not be effective until you have obtained a Section 401 water quality certification from the San Francisco Bay Region, Regional Water Quality Control Board. If the RWQCB fails to act on a valid request for certification within two (2) months after receipt of a complete application, the Corps will presume a waiver of water quality certification has been obtained. You shall submit a copy of the certification to the Corps prior to the commencement of work.

This authorization will not be effective until you have obtained a concurrence from the California Coastal Commission that your project will comply with California's Coastal Zone Management Act. If the Commission fails to act on a valid request for concurrence with your certification within six (6) months after receipt, the Corps will presume a concurrence has been obtained. You shall submit a copy of the concurrence to the Corps prior to the commencement of work.

In order to ensure compliance with this NWP authorization, the following special conditions shall be implemented:

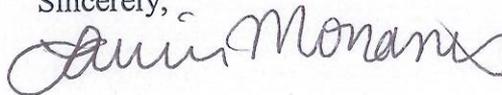
1. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

2. To the extent practicable, excavation equipment shall work from an upland site (e.g., from the top of the bank, the road bed of the bridge, or culverted road crossing) to minimize adding fill into waters of the U.S.
3. The permittee shall notify the Corps in writing of the anticipated start and stop dates of construction, at least 5 days prior to the initiation of construction.
4. All work occurring below the plane of ordinary high water shall be confined to the low-flow period, during summer months to avoid excessive sedimentation of creek waters.
5. On-site mitigation will be achieved through re-vegetation in accordance with plans and drawings titled "*USACE File #2012-00050N, Webb Creek Hwy 1 PM 11.1, February 6, 2012, Figures 7 to 8*" (provided in enclosure 3) and monitoring of the project area. A 5-year monitoring program will be implemented as outlined in the pre-construction notification.

You may refer any questions on this matter to Paula Gill of my Regulatory staff by telephone at 415-503-6776 or by e-mail at Paula.C.Gill@usace.army.mil. All correspondence should be addressed to the Regulatory Division, North Branch, referencing the file number at the head of this letter.

The San Francisco District is committed to improving service to our customers. My Regulatory staff seeks to achieve the goals of the Regulatory Program in an efficient and cooperative manner, while preserving and protecting our nation's aquatic resources. If you would like to provide comments on our Regulatory Program, please complete the Customer Service Survey Form available on our website: <http://www.spn.usace.army.mil/regulatory/>.

Sincerely,



 Jane M. Hicks
Chief, Regulatory Division

Enclosures

Copy Furnished (w/ encl 1 only):
CA RWQCB, Oakland, CA

Copies Furnished (w/o encls):

U.S. EPA, San Francisco, CA
CA SWRCB, Sacramento, CA

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

San Francisco District

This Preliminary Jurisdictional Determination finds that there "may be" waters of the United States in the subject review area and identifies all such aquatic features, based on the following information:

Regulatory Division: North Branch File Number: 2012-00050NSelect PJD Completion Date: 02-06-2012

Review Area Location

City/County: Marin County State: California
 Nearest Named Waterbody: Webb Creek
 Approximate Center Coordinates of Review Area
 Latitude (degree decimal format): 37.88671°Select
 Longitude (degree decimal format): -122.62665°Select
 Approximate Total Acreage of Review Area: 0.07 acre

File Name: Webb Creek HWY 1 PM 11.1

Applicant or Requestor Information

Name: Mr. Frank Meraz
 Company Name: Caltrans
 Street/P.O. Box: 855 M Street, Suite 200
 City/State/Zip Code: Fresno, Ca 93721

Estimated Total Amount of Waters in Review Area

Non-Wetland Waters: 50 lineal feet feet wide and/or
 0.07 acre(s) Flow Regime: Select

Wetlands: lineal feet feet wide and/or
 acre(s) Cowardin Class: Select

Name of Section 10 Waters Occurring in Review Area

Tidal:
 Non-Tidal:

- Office (Desk) Determination
 Field Determination:
 Date(s) of Site Visit(s): MM-DD-YYYY

SUPPORTING DATA: Data reviewed for Preliminary JD (check all that apply – checked items should be included in case file and, where checked and requested, appropriately reference sources below)

Maps. Plans, plots or plat submitted by or on behalf of applicant/requestor (specify):

Data sheets submitted by or on behalf of applicant/requestor (specify):

- Corps concurs with data sheets/delineation report.
 Corps does not concur with data sheets/delineation report.

Data sheets prepared by the Corps.

Corps navigable waters' study (specify):

U.S. Geological Survey Hydrologic Atlas:

USGS NHD data.

USGS HUC maps.

U.S. Geological Survey map(s) (cite quad name/scale):

USDA Natural Resources Conservation Service Soil Survey.

National wetlands inventory map(s) (specify):

State/Local wetland inventory map(s) (specify):

FEMA/FIRM maps.

100-year Floodplain Elevation (specify, if known):

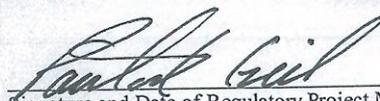
Photographs: Aerial (specify name and date):

Other (specify name and date):

Previous JD determination(s) (specify File No. and date of response letter):

Other information (specify):

IMPORTANT NOTE: If the information recorded on this form has not been verified by the Corps, the form should not be relied upon for later jurisdictional determinations.

 2/6/12
 Signature and Date of Regulatory Project Manager
 (REQUIRED)

 Signature and Date of Person Requesting Preliminary JD
 (REQUIRED, unless obtaining the signature is impracticable)

Impact Areas
04-4S530
MRN 1 PM 11.1

**Webb Creek HWY 1 PM 11.1**
Marin County, California

U.S. Army Corps
of Engineers
San Francisco District
Regulatory Division

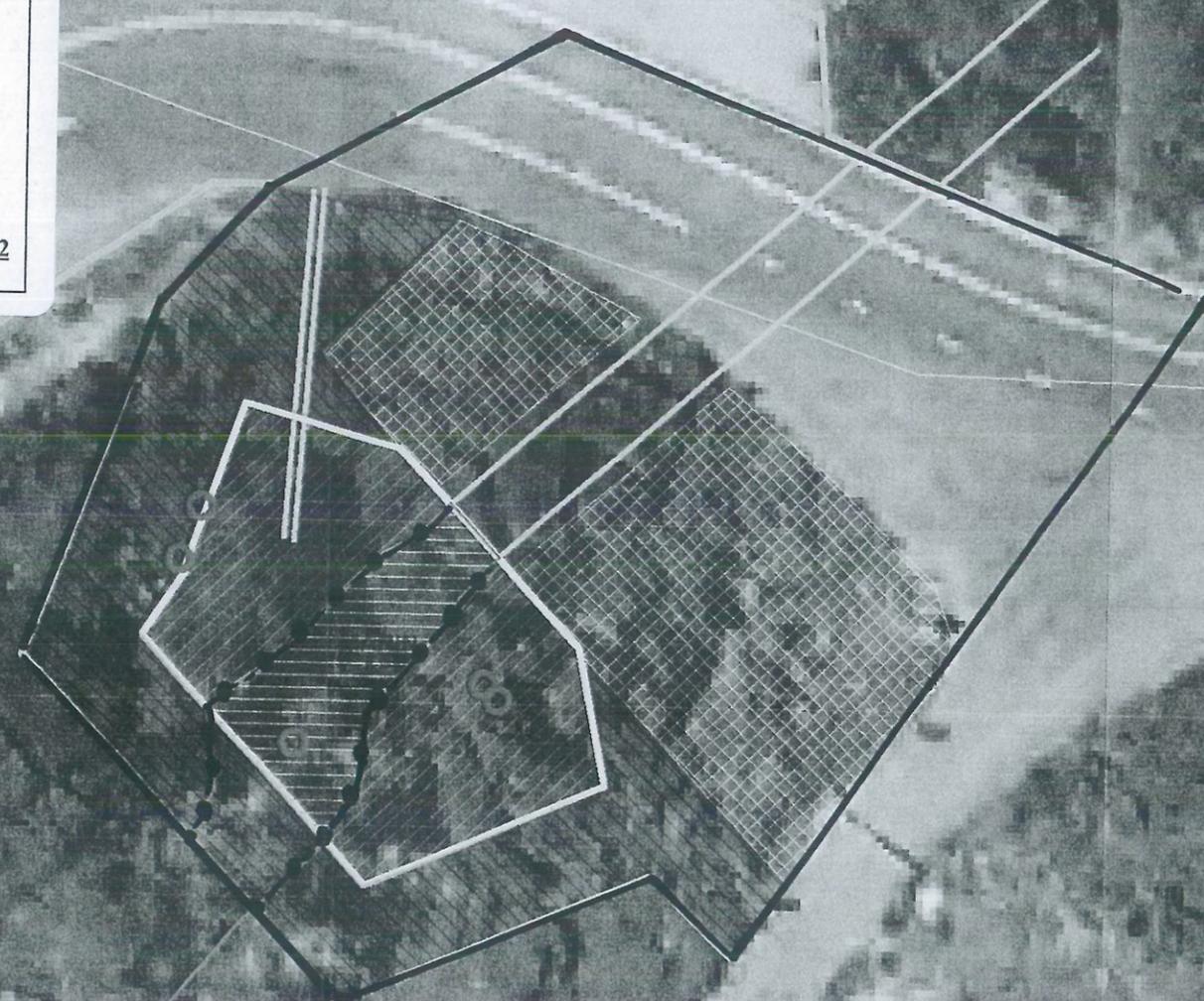
Preliminary Jurisdictional Determination
Pursuant to Section 404 of Clean Water Act

— Project Boundary
●●● Other Waters of the U.S.

FILE NUMBER : 2012-00050N DATE: 2/6/2012

Legend

- ESA Fence
-  Temporary Impacts 0.08 ac
-  Impacted Trees
-  Riparian Impacts 0.05 ac
-  Impacts to WOUS 0.02
-  Energy Dis
- Culverts
-  Wire Mesh



Enclosure 2:

Nationwide Permit 3 - Maintenance

(a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable, structure, or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(b) This NWP also authorizes the removal of accumulated sediments and debris in the vicinity of and within existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.) and the placement of new or additional riprap to protect the structure. The removal of sediment is limited to the minimum necessary to restore the waterway in the immediate vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend further than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an upland area unless otherwise specifically approved by the district engineer under separate authorization. The placement of riprap must be the minimum necessary to protect the structure or to ensure the safety of the structure. Any bank stabilization measures not directly associated with the structure will require a separate authorization from the district engineer.

(c) This NWP also authorizes temporary structures, fills, and work necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to preconstruction elevations. The areas affected by temporary fills must be revegetated, as appropriate. (d) This NWP does not authorize maintenance dredging for the primary purpose of navigation or beach restoration. This NWP does not authorize new stream channelization or stream relocation projects. *Notification:* For activities authorized by paragraph (b) of this NWP, the permittee must submit a preconstruction notification to the district engineer prior to commencing the activity (see general condition 27). Where maintenance dredging is proposed, the pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Sections 10 and 404)

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance.

Federal Register / Vol. 72, No. 47 / Monday, March 12, 2007 / Notices 11191

12. *Soil Erosion and Sediment Controls.* Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.
13. *Removal of Temporary Fills.* Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
14. *Proper Maintenance.* Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.
15. *Wild and Scenic Rivers.* No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
16. *Tribal Rights.* No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
17. *Endangered Species.* (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed. (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. (c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species specific regional endangered species conditions to the NWPs. (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at <http://www.fws.gov/> and <http://www.noaa.gov/fisheries.html> respectively.
18. *Historic Properties.* (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied. (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the preconstruction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the

open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses. (g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan. (h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. *Water Quality.* Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

22. *Coastal Zone Management.* In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

23. *Regional and Case-By-Case Conditions.* The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

24. *Use of Multiple Nationwide Permits.* The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

25. *Transfer of Nationwide Permit Verifications.* If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee) _____
(Date) _____

26. *Compliance Certification.* Each permittee who received a NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include: (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions; (b) A statement that any required mitigation was completed in accordance with the permit conditions; and (c) The signature of the permittee certifying the completion of the work and mitigation.

the district engineer will wait an additional 15 calendar days before making a decision on the preconstruction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each preconstruction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5. (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act. (4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination. (5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS. (e) *District Engineer's Decision*: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

28. *Single and Complete Project*. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

CALIFORNIA COASTAL COMMISSION

45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200



March 12, 2012

Michelle Ray
Humberto Almaguer
Caltrans District 6 – Fresno
1352 W. Olive Avenue
P.O. Box 12616
Fresno, CA 93778-2616

Applicant: **Caltrans**
Project: **Highway 1 Repair and Maintenance**
Location: **Webb Creek, PM 11.04, east of Stinson Beach, Marin County**

Coastal Commission Permit/Appeal _____
Local Govt. CDP No: **2011-0329**
If a nationwide permit, NWP number: _____

The Coastal Commission staff has received your request to identify Commission jurisdiction for the purposes of processing an individual, nationwide, general or regional permit from the Army Corps of Engineers (Corps). Pursuant to the federal Coastal Zone Management Act (CZMA), the Corps cannot issue a permit for an activity, either in or out of the coastal zone, that affects land and water uses or natural resources of the coastal zone until the applicant has complied with the requirements of Section 307(c)(3)(A) of the CZMA. (16 USC Section 1456[c][3][A].) The applicant can meet these requirements by receiving a Commission concurrence with either (1) a consistency certification prepared by the applicant or (2) a showing that the activity does not affect the coastal zone. Alternatively, the applicant can satisfy these requirements by the issuance of a Commission approved coastal development permit. Since the Commission cannot delegate federal consistency authority to local governments, a coastal development permit issued by a local agency does not replace the requirement for a consistency certification. However, if an activity is within the Ports of San Diego, Long Beach, Los Angeles, or Port Hueneme and is identified in the Commission certified Port Master Plan, then no consistency certification is necessary.

The Coastal Commission staff has reviewed the information submitted for the above-referenced project, and has made the following determination:

The Coastal Commission declines to assert federal consistency jurisdiction, due to the fact that: (1) this project has received a locally issued coastal development permit (with conditions) from Marin County and is located within an area where such permit is

appealable to the Coastal Commission; (2) the permit was not appealed; and (3) with the conditions imposed on the permit by the County, the project does not raise significant concerns over protection of coastal resources.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Delaplaine", written in a cursive style.

MARK DELAPLAINE
Manager, Energy, Ocean Resources, and
Federal Consistency Division

cc: CCC Caltrans Liaison (Tami Grove)
North Central District
Army Corps, S.F. District
Caltrans District 4 - 111 Grand Ave.
P.O. Box 23660
Oakland, CA 94623-0660

MARIN COUNTY DEPUTY ZONING ADMINISTRATOR

RESOLUTION 12-101

A RESOLUTION APPROVING THE CALIFORNIA DEPARTMENT OF TRANSPORTATION
COASTAL PERMIT 2011-0329
STATE HIGHWAY 1 AT POST MILE 11.04
ADJACENT TO ASSESSOR'S PARCEL 199-040-53

SECTION I: FINDINGS

- I. WHEREAS the California Department of Transportation submitted a Coastal Permit to undertake repair and maintenance activities to repair storm damage located downslope of the underground drainage culvert located at approximately post mile 11.04 (adjacent to Assessor's Parcel 199-040-53). The proposed repair work entails installation of grouted steel bar anchors into the slope along with wire mesh attached to the exterior ends of the anchors, and use of "rock slope protection" at the outlet of the existing culvert. The proposed project is necessary to minimize future erosion potential and to stabilize the roadway. The project is adjacent to Assessor's Parcel 199-040-53.
- II. WHEREAS the Marin County Deputy Zoning Administrator held a duly noticed public hearing on Thursday, January 12, 2012 to consider the merits of the project, and hear testimony regarding the project. The Community Development Agency, Planning Division has provided public notice identifying the applicant, describing the project and its location, and giving the scheduled date of the public hearing in accordance with California Government Code requirements. This notice has been mailed to all property owners within 600 feet of the subject property and to interested parties and organizations.
- III. WHEREAS the Marin County Deputy Zoning Administrator finds that the California Department of Transportation, as the lead agency for the project, determined that the proposed project is Categorically Exempt from the requirements of the California Environmental Quality Act, per Section 15301, Class 1 because it entails repair and maintenance of an existing major highway facility that provides access to residents of and visitors to Stinson Beach, and would not result in potentially significant impacts to the environment. As a responsible agency, the County Planning Division is not required to supplement the California Department of Transportation's CEQA determination.
- IV. WHEREAS the Marin County Deputy Zoning Administrator finds that the proposed project is consistent with the mandatory findings for Coastal Permit approval (Section 22.56.130 of the Interim Marin County Code) pursuant to the requirements and objectives of the Local Coastal Program, Unit I as described below.

A. Water Supply:

The proposed project does not require or entail the construction of a water supply system.

B. Septic System Standards:

The proposed project does not require or entail the construction of a septic system.

C. Grading and Excavation:

The grading associated with the project is to repair the slope below a major roadway that provides access to Stinson Beach and other populated areas to the north. The amount of grading that will occur is the least amount necessary to conduct the repairs, and to allow for safe passage through this section of Highway 1.

D. Archaeological Resources:

The proposed project involves the excavation and fill of materials from a previously disturbed area. Therefore, it is highly unlikely that the project would disturb cultural resources.

E. Coastal Access:

The project will not impact the access to the Steep Ravine cabins. Furthermore, the project would not restrict the public's ability to access the shoreline in the surrounding areas.

F. Housing:

The proposed project does not involve the demolition or conversion of housing affordable to households of lower or moderate income.

G. Stream and Wetland Resource Protection:

The project entails repairs to the area downslope of the culverted portion of Webb Creek that flows underneath Highway 1 at post mile 11.04. The introduction of rock slope protection secured by wire mesh will prevent further erosion and sedimentation of Webb Creek, and will prevent the soils underneath that portion of Highway 1 from further sliding and instability. A biological report prepared by the California Department of Transportation has indicated that the project site does not contain any listed plant or animal species or communities, and that the project site does not provide habitat for spawning fish due to prohibitively steep inclines below the project site. The project includes the installation of native landscaping to further stabilize soils and minimize sedimentation/erosion.

H. Dune Protection:

The project site is not located in a dune protection area as identified by the Natural Resources Map for Unit I of the Local Coastal Program.

I. Wildlife Habitat:

The biological report prepared by the California Department of Transportation indicated that the project site does not contain plant or animal species listed on the Department of Fish and Game's Natural Diversity Database Maps, and does not provide significant habitat for wildlife. The repair work will not remove significant amounts of vegetation because the project site has been previously disturbed through construction activities and erosion.

J. Protection of Native Plant Communities:

The project site does not contain a significant number or type of nonindigenous, invasive plant species which would threaten the preservation or reestablishment of native plant species, either on or off the site.

K. Shoreline Protection:

The project is not located within a designated bluff-top erosion zone. Furthermore, the repair work is required to provide continued access to coastal-dependant land uses that occur in Stinson Beach and other nearby coastal communities.

L. Geologic Hazards:

Highway 1 is constructed in an area that is notoriously susceptible to soil movement. The repair project is to prevent future soil instability near and around this stretch of Highway 1.

M. Public Works Projects:

The proposed project will not detract from the rural scenic characteristics of the existing roadway, does not entail water or sewer improvements, and will conform to the resource and visual policies of the Local Coastal Program.

N. Land Division Standards:

No land division or property line adjustment is proposed as part of this project.

O. Visual Resources:

The project consists of limited earthwork activities (excavation and fill) to repair the area downslope of an existing culvert. The materials used to repair the area downslope of the culvert are natural (rocks) and will blend into the surrounding environment. The project includes installation of vegetation to further stabilize soils and visually soften the project site. Finally, the project site is not visually prominent from motorists traveling along Highway 1, is not visually prominent from hiking trails in the area, and would not interfere with panoramic views of the Pacific Ocean and surrounding foothills.

P. Recreation/Visitor Facilities:

The proposed project would not provide commercial or recreational facilities, and the project site is not governed by VCR (Village Commercial Residential) zoning regulations, which require a mixture of residential and commercial uses.

Q. Historic Resource Preservation:

The project site is not located within the designated historic preservation boundaries as identified in the Marin County Historic Study for the Local Coastal Program.

SECTION II: CONDITIONS OF APPROVAL

NOW THEREFORE BE IT RESOLVED that the Marin County Deputy Zoning Administrator hereby approves the California Department of Transportation Coastal Permit 2011-0329 subject to the conditions of approval listed below.

1. Pursuant to Marin County Code Section 22.56.130I, and consistent with "Exhibit A," entitled, "Highway 1 Repair and Maintenance, Marin County, State Route 1, Post Mile 11.04," prepared by the California Department of Transportation, this approval hereby authorizes repair and maintenance activities to repair storm damage located downslope of the underground drainage culvert located at approximately post mile 11.04 (adjacent to Assessor's Parcel 199-040-53). The approved repair work entails installation of grouted steel bar anchors into the slope along with wire mesh attached to the exterior ends of the anchors, and use of "rock slope protection" at the outlet of the existing culvert. The approved project is necessary to minimize future erosion potential and to stabilize the roadway.

This decision certifies the proposed project's conformance with the requirements of the Marin County Development Code and in no way affects the requirements of any other County, State, Federal, or local agency that regulates development. The Community Development Agency Director may administratively authorize modifications to the approved project and land use requirements that are determined to be minor and consistent with the findings herein.

2. If any work or staging of materials and/or construction equipment is proposed to be stored within a County-maintained right-of-way (such as Panoramic Highway), an encroachment permit may be required. Contact either Dave Nicholson or John Semerand at (415) 473-6528 for more information.

SECTION III: VESTING AND APPEAL RIGHTS

NOW, THEREFORE BE IT RESOLVED that the project is vested upon approval and termination of the appeal period. The project shall be valid for a period of 2 years. An extension of up to four additional years may be granted for cause pursuant to Section 22.56.120I of the Marin County Code if the applicant applies for an extension at least 30 days before the expiration date above and the Deputy Zoning Administrator approves it.

NOW, THEREFORE BE IT FURTHER RESOLVED that this decision is final unless appealed to the Planning Commission. A Petition for Appeal and a \$600.00 filing fee must be submitted in the Community Development Agency - Planning Division, Room 308, Civic Center, San Rafael, no later than **12:00 p.m. on January 20, 2012.**

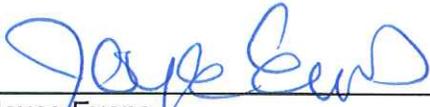
SECTION IV: ACTION

PASSED AND ADOPTED at a regular meeting of the Deputy Zoning Administrator of the County of Marin, State of California, on the 12th day of January, 2012.



BENJAMIN BERTO, AICP
MARIN COUNTY DEPUTY ZONING ADMINISTRATOR

Attest:



Joyce Evans
DZA Secretary



State of California – The Natural Resources Agency
DEPARTMENT OF FISH AND GAME
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558
(707) 944-5520
www.dfg.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director



March 19, 2012

Humberto Almaguer
California Department of Transportation
2015 East Shields, Suite 100
Fresno, CA 93726

Subject: Final Lake or Streambed Alteration Agreement
Notification No. 1600-2011-0371-R3
Webb Creek Culvert Outfall Repair Project

Dear Mr. Almaguer:

Enclosed is the final Streambed Alteration Agreement (“Agreement”) for the Webb Creek Culvert Outfall Repair Project (“Project”). Before the Department may issue an Agreement, it must comply with the California Environmental Quality Act (“CEQA”). In this case, the Department, acting as a lead agency, determined your project is exempt from CEQA and filed a notice of exemption (“NOE”) on March 19, 2012.

Under CEQA, filing a NOE starts a 35-day period within which a party may challenge the filing agency’s approval of the project. You may begin your project before the 35-day period expires if you have obtained all necessary local, state, and federal permits or other authorizations. However, if you elect to do so, it will be at your own risk.

If you have any questions regarding this matter, please contact Timothy S. Dodson, Environmental Scientist, at (707) 944-5513 or tdodson@dfg.ca.gov.

Sincerely,

Craig J. Weightman
Acting Environmental Program Manager
Bay Delta Region

cc: Frank Meraz
Lieutenant Jones
Warden Stinson
Timothy S. Dodson

CALIFORNIA DEPARTMENT OF FISH AND GAME
BAY DELTA REGION
7329 SILVERADO TRAIL
NAPA, CALIFORNIA 94558
(707) 944-5520
www.dfg.ca.gov



STREAMBED ALTERATION AGREEMENT
NOTIFICATION NO. 1600-2011-0371-R3

California Department of Transportation
Webb Creek

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Game (DFG) and the California Department of Transportation (Permittee), as represented by Humberto Almaguer.

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified DFG on October 18, 2011, that Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, DFG has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the project in accordance with the Agreement.

PROJECT LOCATION

The project is located on Webb Creek where it crosses under Highway 1 in Marin County at postmile marker 11.1. Approximately 50 linear feet of Webb Creek on the west side of Highway 1 will be impacted from the project. The Steep Ravine Campground entrance is located immediately adjacent to the project area. The project is located at Latitude 37°53'12"N and Longitude -122°37'36"W.

PROJECT DESCRIPTION

This project proposes to replace, repair, and stabilize failed and eroding rock slope protection (RSP), stream bank, and roadway fill material. An 11-foot diameter culvert was installed in 2006 by the California Department of Transportation to convey high flow volumes from Webb Creek under Highway 1. The culvert outlet was armored with undersized RSP that has since eroded and scoured away, creating a nearly 14-foot drop from the culvert flow line to the streambed.

The project includes two main components. The first includes installation of new RSP from about 50-feet downstream up to the elevation of the culvert. The second component includes stabilizing the fill slope above and around the culvert with the installation of wire a grid that will be secured with soil nails.

For the installation of the RSP, a keyway trench will be dug about 50-feet downstream of the culvert and 1-ton-plus size rocks will be placed in the trench to serve as a footing and reinforcement for rest of the RSP slope fill material. A RSP fabric will be laid down and then a foundation layer will be installed. The RSP will be placed so that each rock above the foundation layer will have a 3-point bearing on the underlying rocks. All rocks will be placed, no dumping will occur. The RSP will rise at a 1.5:1 slope from the keyway trench to about 10 feet downstream of the culvert. The final 10 feet between the RSP slope and culvert will be a flat RSP apron that will dissipate water energy from the culvert. Approximately 970 cubic yards of RSP will be installed within the creek channel.

A 4.7-inch wire mesh grid will be installed along the roadway fill slope that is above and around the culvert. The wire mesh will be supported with soil nails that will be perpendicularly drilled 10 feet into the slope and then grouted in place. The soil nails will be installed on 6.5-foot grid spacing. Approximately 2,250 square feet of wire mesh grid will be installed.

A coffer dam will be installed within the culvert to capture and divert creek flows downstream of the project area. The work area will then be dewatered and native aquatic organisms will be captured and relocated downstream. Two existing roadway storm drain culverts will remain in place. The outfall of the culverts will be armored to dissipate energy.

Haul trucks, long arm excavators, a crane, and front end loads will be used onsite. Equipment and project staging will occur at existing turnouts near the project site. One lane of Highway 1 may be closed during peak project activities.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include:

- coastal fish species
- nesting birds and raptors
- aquatic vertebrates
- aquatic invertebrates
- riparian habitat
- wetland vegetation

The adverse effects the project could have on the fish or wildlife resources identified above include:

- loss of stream habitat
- change in contour of bed, channel and bank
- permanent or temporary loss bed or bank
- loss or decline of instream woody material
- water quality degradation
- short-term release of contaminants
- change in stream flow
- dewatering
- entrapment in isolated pools from loss of water surface elevation
- increased erosion and sedimentation
- direct take of fish and other aquatic species
- disturbance to wildlife

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to DFG personnel, or personnel from another state, federal, or local agency upon request.
- 1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.

- 1.3 Notification of Conflicting Provisions. Permittee shall notify DFG if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, DFG shall contact Permittee to resolve any conflict.
- 1.4 Project Site Entry. Permittee agrees that DFG personnel may enter the project site at any time to verify compliance with the Agreement.
- 1.5 Conduct Only Specified Activities. Only those activities specifically mentioned in the Project Description may be conducted under this Agreement.
- 1.6 Notify DFG Prior to Work. The Permittee shall notify DFG by email at least five working days prior to commencement of covered activities. See contact information below.
- 1.7 Work According to Plans. Except as they are contradicted by measures required by this agreement, all work shall be conducted in conformance with the project description and measures included in the notification and the project design plans.

2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

- 2.1 Work Period. To minimize adverse impacts to fish and wildlife, all work shall be confined to the period of June 15 to October 15. Revegetation shall not be confined to this period.
- 2.2 Work During Dry Weather Only. The work period for completing the work within the stream zone, shall be restricted to periods of minimum stream flow and dry weather. No phase of the project may be started if that phase and its associated erosion control measures can not be completed prior to the onset of precipitation. After any storm event, the Permittee shall inspect all sites currently under construction and all sites scheduled to begin construction within the next 72 hours for erosion and sediment problems and take corrective action as needed. Seventy-two hour weather forecasts from the National Weather Service shall be consulted and work shall not start back up until runoff ceases and there is less

than a 30% forecast for precipitation for the following 24-hour period.

- 2.3 No Equipment in the Live Stream. Equipment shall not be operated in wetted areas (including but not limited to ponded, flowing, or wetland areas) without written approval from DFG.
- 2.4 Qualified Biologist Approval. At least 30 days prior to commencing project activities covered by this Agreement, the Permittee shall submit to DFG, for review and approval, the qualifications for a number of biologist(s) that shall oversee the implementation of the conditions in this Agreement. Project activities covered by this Agreement may not commence unless DFG has approved the proposed biologist(s). At a minimum, the DFG-approved biologist(s) shall have a combination of academic training and professional experience in biological sciences and related resource management activities.
- 2.5 Biological Monitor on Site. The Permittee shall designate a person to monitor on-site compliance with all conditions of this Agreement. The monitor shall have received training in special status species identification. The Biological Monitor shall communicate to the Resident Engineer when any activity is not in compliance with this Agreement and the Resident Engineer shall immediately stop the activity that is not in compliance with this Agreement.
- 2.6 Qualified Biologist to Check Dewatered Area. The Qualified Biologist shall check daily for stranded aquatic life as the water level in the dewatering area drops and until dewatering facilities are removed. All stranded native aquatic vertebrates in the dewatered areas shall be immediately relocated to the nearest suitable habitat.
- 2.7 Divert Water Around Work Areas. Work shall be performed in isolation from the creek. If water is present then the Permittee shall construct coffer dams upstream and downstream of the work site and divert all flow from upstream of the upstream dam to a DFG approved location, through a suitably sized pipe. Cofferdams shall be constructed as close as practicable upstream and downstream of the work area. The coffer dams shall be constructed with clean gravel and bags, and may be sealed with sheet plastic. All materials shall be removed from the creek upon project completion. Normal flows shall be restored to the affected creek immediately upon completion of work at that location. If the coffer dams or

stream diversion fail, they shall be repaired immediately. Diversion shall be conducted such that water at the downstream end does not scour the channel bed or banks. No other diversion method shall be used without authorization of the DFG. If another diversion method is preferred, the Permittee must submit a plan detailing the desired diversion method. Authorization of any other diversion method shall be at the discretion of the DFG.

2.8 Screen Intake: The water diversion intake apparatus shall be screened with a fine mesh screen. The screen shall be cleaned as needed. The following National Marine Fisheries fish screening requirements shall be implemented:

2.8.1 A self-cleaning screen shall have at least 2.5 square feet of submerged screen material for each cubic foot per second (450 gallons per minute) of the maximum diversion rate. A screen which is not self-cleaning shall have at least 5 square feet of submerged screen material for each cubic foot per second of the maximum diversion rate. Round openings in the screen shall not exceed 3/32-inch diameter, square openings shall not exceed 3/32-inch measured diagonally, and slotted openings shall not exceed 0.069 inches in width. The screen may be constructed of any rigid woven, perforated, or slotted material that provides water passage while physically excluding fish. Screen material shall provide a minimum of 27% open area, but more open area is better. Stainless steel is recommended to minimize corrosion problems. The screen shall be designed to distribute the flow uniformly over the entire screen area. The screen face generally should be parallel to the flow of the stream. The screen shall be cleaned as frequently as necessary to prevent the approach velocity from exceeding 0.4 feet per second. The screen shall be kept in good repair, and shall be used whenever water is being diverted. The applicant is advised to consult with the National Marine Fisheries Service to ensure that all their design criteria are being met.

2.9 Dewater Work Site. Once water has been diverted around the work site (see Condition 2.7) the work site shall be dewatered. The site shall be dewatered to provide an adequately dry work area.

Any muddy or otherwise contaminated water shall be pumped to a settling tank or DFG-approved location prior to re-entering the creek. Work site dewatering can be accomplished using pumps and or siphons using National Marine Fisheries fish screening requirements. Site dewatering shall be consistent with the capture and relocation guidelines (see Condition 2.10).

- 2.10 Capture and Relocation. Any capture or relocation of aquatic species shall be conducted in conformance with this condition. The Qualified Biologist shall be on site and direct all dewatering and relocation activities. Capture and relocation shall be conducted in a manner that minimizes stress and injury to captured animals.
- 2.10.1 The Qualified Biologist shall be on site and direct all dewatering and relocation activities. Capture and relocation shall be conducted in a manner that minimizes stress and injury to captured animals.
 - 2.10.2 Capture methods may include dip nets. All nets shall be made of a soft braded nylon material that is non abrasive. Mesh sizing shall be matched to species and the life stages likely encountered. Electrofishing shall be used as a last resort and only when appropriate according to the NMFS Guidelines for Electrofishing (Exhibit A).
 - 2.10.3 A relocation site shall be identified and the most direct transportation route shall be determined prior to project activities.
 - 2.10.4 Capture and handling of aquatic animals shall be minimized. Prior to the installation of the coffer dams, a fine mesh exclusion (block) net shall be placed across the wetted channel immediately upstream of the location of the diversion dam. Seining shall then be conducted starting upstream and moving in the downstream direction. Once seining has passed the limit of the downstream coffer dam location, exclusion net will be installed.
 - 2.10.5 Initial dewatering shall be done at a slow rate.

- 2.10.6 The number of animals captured and moved at any one time shall be limited to the number that can be relocated without stress or injury.
- 2.10.7 Prior to handling animals, all hands and equipment shall be wetted down with stream water and shall be free of any materials including hand sanitizers, sunscreen or insect repellent. No animals shall be handled with dry hands or dry equipment.
- 2.10.8 An aeration system shall be used in any live well or other holding facility. The aerator shall be operating prior to placing animals in it to ensure that sufficient oxygen is present during the adjustment period and to minimize the build-up of toxic carbon dioxide in holding waters. The aeration rate and the number of animals in each holding facility shall be managed such that the dissolved oxygen concentration shall be maintained above 6 parts per million.
- 2.10.9 Water from the local collection site shall be used in live wells or other holding facilities during loading and transport. At no time will chlorinated tap water be used.
- 2.10.10 Live wells or other holding facilities shall be sufficiently sized to minimize stress.
- 2.10.11 Dotted smartweed (*Persicaria punctata*) shall not be placed or allowed to enter live wells or holding facilities.
- 2.10.12 Water temperatures within any live well or other holding facility shall be kept at or below water temperature at the collection site. Temperatures must be managed in such a way as to minimize stress; for example, floating a sealed bag of ice in each container.
- 2.10.13 If salmonid species are expected to be present, activities shall not be initiated when and if water temperatures exceed or are expected to exceed 68°F.
- 2.10.14 Any captured salmonids shall be tallied by species.

2.10.15 No non-native invasive animals captured shall be returned to the stream or released alive.

2.10.16 Before and after each relocation effort, all equipment shall be sterilized following follow the general gear cleaning protocols in the California Department of Fish and Game *Administrative Report 2005-02: Controlling the Spread of New Zealand Mud Snails on Wading Gear* (Exhibit B). Note: Formula 409 Disinfectant (50% dilution) has recently changed its formula and is no longer recommended. DFG "Tank Disinfection Protocol" shall also be followed (Exhibit C).

2.11 Nesting Birds. To protect nesting birds, no project activities shall occur from February 15 through August 31 unless nesting bird surveys have been completed by a qualified biologist. Surveys shall be conducted no more than seven (7) days prior to the start of construction activities. To prevent nest abandonment, a qualified biologist should survey within 500 feet of the proposed Project for nesting birds. If nest are found within the Project site or 500 feet from the Project then the qualified biologist shall establish suitable buffers prior to tree removal and/or ground-breaking activities. The established buffer(s) shall remain in effect until the young have fledged or the nest has been abandoned as confirmed by the qualified biologist. Surveys shall be conducted during periods of peak activity (early morning, dusk) and shall be of sufficient duration to observe movement patterns.

If nesting birds are found, buffers shall be established in consultation with DFG. Flagging or other material shall be used along the project boundary perimeter fence to identify the location of nearby off site nests. Active nests found within the vicinity of the project area shall be monitored by the Qualified Biologist during all work activities for changes in bird behavior. Permittee shall perform at least two hours of pre-construction monitoring to characterize "normal" bird behavior. During work, should birds indicate unusual or distressed behavior that could be indicative of future nest abandonment, the biologist shall stop work immediately and consult with DFG.

2.12 Wildlife Encounters. If any wildlife is encountered during the course of project activities, said wildlife shall be allowed to leave the area unharmed and on their own volition.

- 2.13 Limit Disturbance to Vegetation. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations.
- 2.14 Stabilize Disturbed Areas. All exposed/disturbed areas within the project site shall be stabilized to the greatest extent possible. Erosion control measures, such as, silt fences, straw hay bales, gravel or rock lined ditches, water check bars, and broadcasted straw shall be used where ever silt laden water has the potential to leave the work site and enter State waters. Modifications, repairs and improvements to erosion control measures shall be made whenever it is needed. At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream. Materials containing monofilament or plastic shall not be used.
- 2.15 Equipment Storage and Maintenance. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the creek channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the creek shall be positioned over drip pans. Any equipment or vehicles driven and/or operated within or adjacent to the stream must be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. Vehicles must be moved out of the stream channel prior to refueling and lubrication.
- 2.16 Refueling of equipment. Refueling of construction equipment and vehicles shall not occur within 100 feet of any water body, or anywhere that spilled fuel could drain to a water body. Tarps or similar material shall be placed underneath the construction equipment and vehicles, when refueling, to capture incidental spillage of fuels. Equipment and vehicles operating in the project area shall be checked and maintained daily to prevent leaks of fuels, lubricants, or other liquids.
- 2.17 Concrete. Concrete shall be excluded from surface water for a period of 30-days after it is poured/sprayed/pumped. During that time the concrete shall be kept moist and runoff from the concrete shall not be allowed to enter any water body. Commercial sealants may be applied to the concrete surface where difficulty in excluding flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is cured. If groundwater

comes into contact with fresh concrete, it shall be prevented from flowing towards surface water.

- 2.18 Agreement Does Not Authorize Take of Listed Species. The Permittee shall comply with all applicable state and federal laws, including the California and Federal Endangered Species Act. This Agreement does not authorize the take of any state or federally endangered listed species. Liability for any take or incidental take of such species remains the responsibility of the Permittee for the duration of the project. Any unauthorized take of listed species may result in prosecution and nullification of the Agreement.
- 2.19 Remove Trash and Food Wastes. All trash will be properly stored and removed at the end of each work day.
- 2.20 No Pets on Site. No pets shall be permitted in the work area.

3. Compensatory Measures

To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, Permittee shall implement each measure listed below.

- 3.1 Riparian Vegetation. The project plans identify three red alder and two California laurel trees that will be removed or impacted by the project. Impacts to riparian tree species shall be mitigated as follows: Three red alder trees have been identified as being impacted by the project. Seven red alder trees shall be planted on site as mitigation. Two California laurel trees have been identified as being impacted by the project. Four California laurel trees shall be planted on site as mitigation. Additional tree mitigation in the form of supplemental tree planting shall occur on site. Twelve arroyo willows and four coast live oak trees shall also be planted. With the exception of willows, all trees planted shall at least be one-gallon container stock. Non-native trees and shrubs removed shall be mitigated at a ratio of 1:1 with native species appropriate for that location. If additional trees are removed or impacted they shall be mitigated with the same ratios as above.
- 3.2 Creek Impacts. At least 30-days prior to construction, a creek channel habitat mitigation plan shall be prepared by the Permittee and submitted to DFG for review and approval. The creek channel mitigation plan shall provide in-kind mitigation (RSP removal) at a 2:1 ratio for the Project's permanent impacts to approximately 50 linear feet and 0.07 acres of creek habitat. 100 linear feet and 0.14 acres of creek habitat shall be restored through in-kind mitigation at

a DFG approved location. If in-kind mitigation is not feasible, then a mitigation plan shall be prepared that mitigates linear and area creek impacts (50 feet and 0.07 acres) at a minimum of a 3:1 ratio at a DFG approved location. 150 linear feet and 0.21 acres of creek habitat shall be restored.

Other mitigation options are at the discretion of DFG. All mitigation plans shall at least include engineered construction plans, a construction schedule, project cost, identification of responsible parties, and a monitoring component that includes photo point monitoring.

4. Reporting Measures

Permittee shall meet each reporting requirement described below.

- 4.1 Capture and Relocation Results. Permittee shall submit a report of capture and relocation activities to DFG within 30 days after relocation activities have been completed. The report shall include: species encountered, capture methods; methods used for handling, stress minimization, equipment cleaning and disinfection; sizes of holding facilities; descriptions of relocation sites; number by species of all captured salmonids; and all instances of mortality and injury.
- 4.2 Survey Reports. Reports for the nesting bird survey shall be provided to DFG no more than 14 days after the surveys have been completed.
- 4.3 Revegetation Reporting. To ensure a successful revegetation effort, plantings shall be monitored and maintained (including irrigation if necessary) for five years. All plantings shall have a minimum of 70% survival at the end of five years with a minimum of two consecutive years (2 growing seasons) of monitoring after the removal of irrigation. The Permittee is responsible for replacement planting, additional watering, weeding, invasive exotic eradication, or any other practice to achieve these goals. Replacement plants shall be monitored with the same survival success for an additional five years. A status report shall be provided to the DFG by December 31st each year. Photos shall be submitted with the report.
- 4.4 Notification to the California Natural Diversity Database (CNDDDB). If any listed, rare, or special status species are detected during

project surveys or on or around the project site during project activities, the Permittee shall submit CNDDDB Field Survey Forms to CNDDDB within five working days of the sightings. Information on submitting data to CNDDDB can be found at http://www.dfg.ca.gov/biogeodata/cnddb/submitting_data_to_cnddb.asp. Copies of such submittals shall also be submitted to the DFG regional office as specified below.

CONTACT INFORMATION

Any communication that Permittee or DFG submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail, fax, or email, or to such other address as Permittee or DFG specifies by written notice to the other.

To Permittee:

Humberto Almaguer
California Department of Transportation
2015 E. Shields, Suite 100
Fresno, CA 93726
Phone: (559) 243-3501
Email: Humberto_almaguer@dot.ca.gov

To DFG:

Department of Fish and Game
Bay Delta Region
7329 Silverado Trail
Napa California 94558
Attn: Lake and Streambed Alteration Program – Timothy S. Dodson
Notification #1600-2011-0371-R3
Phone: (707) 944-5513
Email: tdodson@dfg.ca.gov

LIABILITY

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute DFG's endorsement of, or require Permittee to proceed with the project. The decision to proceed with the project is Permittee's alone.

SUSPENSION AND REVOCATION

DFG may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before DFG suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before DFG suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused DFG to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes DFG from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects DFG's enforcement authority or that of its enforcement personnel.

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 et seq. (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

DFG may amend the Agreement at any time during its term if DFG determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by DFG and Permittee. To request an amendment, Permittee shall submit to DFG a completed DFG "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter DFG approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to DFG a completed DFG "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

EXTENSIONS

In accordance with FGC section 1605(b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, Permittee shall submit to DFG a completed DFG "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). DFG shall process the extension request in accordance with FGC 1605(b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (Fish & G. Code, § 1605, subd. (f)).

EFFECTIVE DATE

The Agreement becomes effective on the date of DFG's signature, which shall be: 1) after Permittee's signature; 2) after DFG complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at http://www.dfg.ca.gov/habcon/ceqa/ceqa_changes.html.

TERM

This Agreement shall expire on December 31, 2014, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

EXHIBITS

The documents listed below are included as exhibits to the Agreement and incorporated herein by reference.

- Exhibit A. NMFS Guidelines for Electrofishing
- Exhibit B. Controlling the Spread of New Zealand Mud Snails on Wading Gear
- Exhibit C. Tank Disinfection Protocol

AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

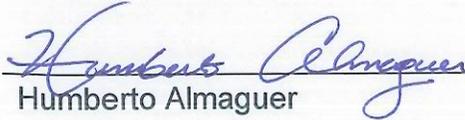
AUTHORIZATION

This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify DFG in accordance with FGC section 1602.

CONCURRENCE

The undersigned accepts and agrees to comply with all provisions contained herein.

**FOR CALIFORNIA DEPARTMENT OF
TRANSPORTATION**

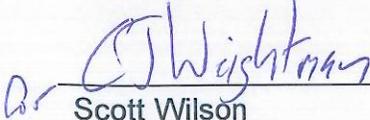


Humberto Almaguer

3-15-12

_____ Date

FOR DEPARTMENT OF FISH AND GAME



Scott Wilson

Acting Regional Manager

3/19/12

_____ Date

Prepared by: Timothy S. Dodson
Environmental Scientist

Date Sent: February 24, 2012
Revised Draft Sent: March 13, 2012

EXHIBIT A

National Marine Fisheries Service Guidelines for Electrofishing



Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act

June 2000

Purpose and Scope

The purpose of this document is to provide guidelines for the safe use of backpack electrofishing in waters containing salmonids listed by the National Marine Fisheries Service (NMFS) under the Endangered Species Act (ESA). It is expected that these guidelines will help improve electrofishing technique in ways which will reduce fish injury and increase electrofishing efficiency. These guidelines and sampling protocol were developed from NMFS research experience and input from specialists in the electrofishing industry and fishery researchers. This document outlines electrofishing procedures and guidelines that NMFS has determined to be necessary and advisable when working in freshwater systems where threatened or endangered salmon and steelhead may be found. As such, the guidelines provide a basis for reviewing proposed electrofishing activities submitted to NMFS in the context of ESA Section 10 permit applications as well as scientific research activities proposed for coverage under an ESA Section 4(d) rule.

These guidelines specifically address the use of backpack electrofishers for sampling juvenile or adult salmon and steelhead that are *not* in spawning condition. Electrofishing in the vicinity of adult salmonids in spawning condition and electrofishing near redds are not discussed as there is no justifiable basis for permitting these activities except in very limited situations (e.g., collecting brood stock, fish rescue, etc.). The guidelines also address sampling and fish handling protocols typically employed in electrofishing studies. While the guidelines contain many specifics, they are not intended to serve as an electrofishing manual and do not eliminate the need for good judgement in the field.

Finally, it is important to note that researchers wishing to use electrofishing in waters containing listed salmon and steelhead are not necessarily precluded from using techniques or equipment not addressed in these guidelines (e.g., boat electrofishers). However, prior to authorizing the take of listed salmonids under the ESA, NMFS will require substantial proof that such techniques/equipment are clearly necessary for a particular study and that adequate safeguards will be in place to protect threatened or endangered salmonids. Additional information regarding these guidelines or other research issues dealing with salmon and steelhead listed under the ESA can be obtained from NMFS' Protected Resources Divisions in:

Washington, Oregon, and Idaho

Leslie Schaeffer
NMFS
525 NE Oregon Street, Suite 500
Portland, Oregon 97232-2737
Phone: (503) 230-5433
FAX: (503) 230-5435
Internet Address: Leslie.Schaeffer@noaa.gov

California

Dan Logan
NMFS
777 Sonoma Ave., Room 325
Santa Rosa, California 95404-6515
Phone: (707) 575-6053
FAX: (707) 578-3435
Internet Address: Dan.Logan@noaa.gov

Appropriateness of Electrofishing

Backpack electrofishing for salmonids has been a principal sampling technique for decades, however, recent ESA listings underscore the need to regulate the technique and assess its risks and benefits to listed species (Nielsen 1998). With over 25 Evolutionarily Significant Units (ESUs) of threatened or endangered salmonids now identified along the U.S. West Coast, researchers can expect to encounter one or more listed species in nearly every river basin in California, Oregon, Washington, and Idaho. There are few if any non-invasive ways to collect distribution, abundance, or morpho-physiological data on salmonids in freshwater. This is reflected in the requirement that all activities that involve intentional take of juvenile salmonids for research or enhancement of an ESA listed species require an ESA Section 10 permit from NMFS. While NMFS has not precluded the use of electrofishing in all cases, researchers must present rigorous study designs and methods for handling fish prior to NMFS authorizing electrofishing to take listed salmonids under the ESA.

NMFS believes there is ample evidence that electrofishing can cause serious harm to fish and the general agency position is to encourage researchers to seek out other less invasive ways to sample listed species. Direct observation by snorkeling is one of the least invasive ways to collect information concerning abundance and distribution, although there can be both practical (e.g., poor viability) and statistical (e.g., large numbers of fish, low observation probability) constraints to direct observation. Preliminary efforts should be directed at study designs that use less invasive methods. If such methods cannot provide the quality of data required or when the benefit exceeds potential mortality risk, then electrofishing can be considered. Electrofishing used on a limited basis to calibrate direct observations (e.g., Hankin and Reeves 1988) is commonly used and methods are currently under development that increase the use of direct observation counts (e.g., bounded counts, "multiple snorkel passes") which, in many cases, will further reduce the need for electrofishing.

Electrofishing Guidelines

Training

Field supervisors and crew members must have appropriate training and experience with electrofishing techniques. Training for field supervisors can be acquired from programs such as those offered from the U. S. Fish and Wildlife Service - National Conservation Training Center (*Principles and Techniques of Electrofishing* course) where participants are presented information concerning such topics as electric circuit and field theory, safety training, and fish injury awareness and minimization. A crew leader having at least 100 hours of electrofishing experience in the field using similar equipment must train the crew. The crew leader's experience must be documented and available for confirmation; such documentation may be in the form of a logbook. The training must occur before an inexperienced crew begins any electrofishing and should be conducted in waters that do not contain ESA-listed fish. Field crew training must include the following elements:

1. A review of these guidelines and the equipment manufacturer's recommendations, including basic gear maintenance.
2. Definitions of basic terminology (e.g. galvanotaxis, narcosis, and tetany) and an explanation of how electrofishing attracts fish.
3. A demonstration of the proper use of electrofishing equipment (including an explanation of how gear can injure fish and how to recognize signs of injury) and of the role each crew member

- performs.
4. A demonstration of proper fish handling, anesthetization, and resuscitation techniques.
 5. A field session where new individuals actually perform each role on the electrofishing crew.

Research Coordination

Research activities should be coordinated with fishery personnel from other agencies/parties to avoid duplication of effort, oversampling small populations, and unnecessary stress on fish. Researchers should actively seek out ways to share data on threatened and endangered species so that fish samples yield as much information as possible to the research community. NMFS believes that the state fishery agencies should play a major role in coordinating salmonid research and encourages researchers to discuss their study plans with these agencies prior to approaching NMFS for an ESA permit.

Initial Site Surveys and Equipment Settings

1. In order to avoid contact with spawning adults or active redds, researchers must conduct a careful visual survey of the area to be sampled before beginning electrofishing.
2. Prior to the start of sampling at a new location, water temperature and conductivity measurements should be taken to evaluate electroshocker settings and adjustments. **No electrofishing should occur when water temperatures are above 18°C or are expected to rise above this temperature prior to concluding the electrofishing survey. In addition, studies by NMFS scientists indicate that no electrofishing should occur in California coastal basins when conductivity is above 350 µS/cm.**
3. Whenever possible, a block net should be placed below the area being sampled to capture stunned fish that may drift downstream.
4. Equipment must be in good working condition and operators should go through the manufacturer's preseason checks, adhere to all provisions, and record major maintenance work in a logbook.
5. Each electrofishing session must start with all settings (voltage, pulse width, and pulse rate) set to the **minimums** needed to capture fish. These settings should be gradually increased only to the point where fish are immobilized and captured, and generally not allowed to exceed conductivity-based maxima (Table 1). Only direct current (DC) or pulsed direct current (PDC) should be used.

Table 1. Guidelines for initial and maximum settings for backpack electrofishing.

	Initial settings	Maximum settings	Notes								
Voltage	100 V	<table style="border: none;"> <tr> <td style="text-align: center;"><u>Conductivity (µS/cm)</u></td> <td style="text-align: center;"><u>Max. Voltage</u></td> </tr> <tr> <td style="text-align: center;">< 100</td> <td style="text-align: center;">1100 V</td> </tr> <tr> <td style="text-align: center;">100 - 300</td> <td style="text-align: center;">800 V</td> </tr> <tr> <td style="text-align: center;">> 300</td> <td style="text-align: center;">400 V</td> </tr> </table>	<u>Conductivity (µS/cm)</u>	<u>Max. Voltage</u>	< 100	1100 V	100 - 300	800 V	> 300	400 V	In California coastal basins, settings should never exceed 400 volts. Also, no electrofishing should occur in these basins if conductivity is greater than 350 µS/cm.
<u>Conductivity (µS/cm)</u>	<u>Max. Voltage</u>										
< 100	1100 V										
100 - 300	800 V										
> 300	400 V										
Pulse width	500 µs	5 ms									
Pulse rate	30 Hz	70 Hz	<i>In general</i> , exceeding 40 Hz will injure more fish								

Electrofishing Technique

1. Sampling should begin using straight DC. Remember that the power needs to remain on until the fish is netted when using straight DC. If fish capture is unsuccessful with initial low voltage, gradually increase voltage settings with straight DC.
2. If fish capture is not successful with the use of straight DC, then set the electrofisher to lower voltages with PDC. If fish capture is unsuccessful with low voltages, increase pulse width, voltage, and pulse frequency (duration, amplitude, and frequency).
4. Electrofishing should be performed in a manner that minimizes harm to the fish. Stream segments should be sampled systematically, moving the anode continuously in a herringbone pattern (where feasible) through the water. Care should be taken when fishing in areas with high fish concentrations, structure (e.g., wood, undercut banks) and in shallow waters where most backpack electrofishing for juvenile salmonids occurs. Voltage gradients may be high when electrodes are in shallow water where boundary layers (water surface and substrate) tend to intensify the electrical field.
5. Do not electrofish in one location for an extended period (e.g., undercut banks) and regularly check block nets for immobilized fish.
6. Fish should not make contact with the anode. Remember that the zone of potential injury for fish is 0.5 m from the anode.
7. Electrofishing crews should be generally observant of the condition of the fish and change or terminate sampling when experiencing problems with fish recovery time, banding, injury, mortality, or other indications of fish stress.
8. Netters should not allow the fish to remain in the electrical field any longer than necessary by removing stunned fish from the water immediately after netting.

Sample Processing and Recordkeeping

1. Fish should be processed as soon as possible after capture to minimize stress. This may require a larger crew size.
2. All sampling procedures must have a protocol for protecting held fish. Samplers must be aware of the conditions in the containers holding fish; air pumps, water transfers, etc., should be used as necessary to maintain safe conditions. Also, large fish should be kept separate from smaller prey-sized fish to avoid predation during containment.
3. Use of an approved anesthetic can reduce fish stress and is recommended, particularly if additional handling of fish is required (e.g., length and weight measurements, scale samples, fin clips, tagging).
4. Fish should be handled properly (e.g., wetting measuring boards, not overcrowding fish in buckets, etc.).
5. Fish should be observed for general condition and injuries (e.g., increased recovery time, dark bands, apparent spinal injuries). Each fish should be completely revived before releasing at the location of capture. A plan for achieving efficient return to appropriate habitat should be developed before each sampling session. Also, every attempt should be made to process and release ESA-listed specimens first.
8. Pertinent water quality (e.g., conductivity and temperature) and sampling notes (e.g., shocker settings, fish condition/injuries/mortalities) should be recorded in a logbook to improve technique and help train new operators. *It is important to note that records of injuries or mortalities pertain to the entire electrofishing survey, including the fish sample work-up.*

Citations and Other References

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EXHIBIT B

Controlling the Spread of New Zealand Mud Snails on Wading Gear

These procedures are sourced from Appendix 3 of the Department of Fish and Game, Controlling the Spread of New Zealand Mud Snails on Wading Gear, Administrative Report 2005-02 May 16, 2005.

The following procedures for cleaning NZMS infested wading gear can be followed upon exiting NZMS infested waters. Wading gear should be cleaned prior to leaving the site. If this is not possible then wading gear should be completely sealed inside of a large plastic bag and cleaned before it is used in any other waters. Three different cleaning protocols have been tested and found to be effective using specific cleaning solutions:

1) Immersion Procedure

- a. Remove wading gear upon exiting NZMS infested waters. **Avoid allowing infested wading gear to come in contact with interior surfaces of vehicles or camping gear such as tents or trailers.** NZMS can be transferred to any surface they come in contact with and they could later be transferred back to cleaned wading gear. Turn waders right side out and remove insoles from wading boots.
- b. Place waders, wading boots, boot insoles and the streambed contact end of a wading stick, if used, in a container of sufficient size to allow the gear to be completely covered by a cleaning solution.
- c. Pour sufficient cleaning solution into the container with the infested wading gear to completely cover the gear. It may be necessary to weight down the gear to ensure that it remains immersed in the cleaning solution.
- d. Allow the wading gear to remain in the cleaning solution for at least 5 minutes.
- e. Remove the wading gear from the cleaning solution one piece at a time and inspect it to make sure that all debris that could harbor NZMS has been removed from the gear as well as any NZMS that could be lodged in cracks or crevices. If necessary, use a stiff plastic bristled brush such as a kitchen brush to remove any remaining debris and mud.
- f. Rinse wading gear in clean water. **DO NOT USE WATER FROM THE NZMS INFESTED SOURCE.** This may reintroduce NZMS to the wading gear.
- g. Return cleaned wading gear to its appropriate storage container.

2) Dry Sack Procedure

- a. Remove wading gear upon exiting NZMS infested waters. **Avoid allowing infested wading gear to come in contact with interior surfaces of vehicles or camping gear such as tents or trailers.** NZMS can be transferred to any surface they come in contact with and they could later be transferred back to cleaned wading gear. Turn waders right side out and remove insoles from wading boots.
- b. Place waders, wading boots, and boot insoles into a dry sack (recommended size: 65 liter). Walking sticks will need to be cleaned separately outside of the dry sack to avoid rupturing the sack.

- c. Add 8 to 10 liters of cleaning solution to dry sack and the seal dry sack.
 - d. Pick up the dry sack and shake it back and forth using a rolling motion to ensure that the contents are thoroughly coated with the cleaning solution. Continue shaking for approximately 30 seconds.
 - e. Let dry sack sit undisturbed for at least 5 minutes. Then repeat the shaking and mixing for another 30 seconds.
 - f. Open the dry sack and remove the contents one piece at a time and inspect it to make sure that all debris that could harbor NZMS has been removed from the gear as well as any NZMS that could be lodged in cracks or crevices. If necessary, use a stiff plastic bristled brush such as a kitchen brush to remove any remaining debris and mud.
 - g. Rinse wading gear in clean water. **DO NOT USE WATER FROM THE NZMS INFESTED SOURCE.** This may reintroduce NZMS to the wading gear.
 - h. Return cleaned wading gear to its appropriate storage container.
- 3) Spray Bottle Procedure (**Note:** this procedure has only been tested using a copper sulfate cleaning solution).
- a. Remove wading gear upon exiting NZMS infested waters. **Avoid allowing infested wading gear to come in contact with interior surfaces of vehicles or camping gear such as tents or trailers.** NZMS can be transferred to any surface they come in contact with and they could later be transferred back to cleaned wading gear. Turn waders right side out and remove insoles from wading boots.
 - b. Place waders, wading boots, boot insoles and the streambed contact end of a wading stick, if used, in a container of sufficient size to allow the gear to be easily accessed.
 - c. Using a standard 1 liter squeeze-trigger type spray bottle containing the cleaning solution, spray the wading gear to the point of saturation and runoff with the cleaning solution. Be sure to treat the inside of the wading boots as well as the outside. Use the stream setting to be sure and dislodge any debris from the wading boots. Be sure to treat both top and under side of gravel guards if they are permanently attached to the waders.
 - d. Allow the wading gear to set for at least 5 minutes with the cleaning solution on it. Remove the wading gear one piece at a time and inspect it to make sure that all debris that could harbor NZMS has been removed from the gear as well as any NZMS that could be lodged in cracks or crevices. If necessary, use a stiff plastic bristled brush such as a kitchen brush to remove any remaining debris and mud.
 - e. Rinse wading gear in clean water. **DO NOT USE WATER FROM THE NZMS INFESTED SOURCE.** This may reintroduce NZMS to the wading gear.

f. Return cleaned wading gear to its appropriate storage container.

4) Cleaning Solutions.

- a. a. Copper sulfate: Dissolve 3.785 grams of copper sulfate pentahydrate crystals (99.1% purity) for each gallon of solution you want to make. This will achieve a concentration of 252 mg/L of copper in the cleaning solution.
- b. Benzethonium chloride: Dissolve 7.57 grams of benzethonium chloride (97% purity) for each gallon of cleaning solution you want to make. This will achieve a concentration of 1,947 mg/L in the cleaning solution.
- c. Formula 409[®] Disinfectant: Dilute the commercially available solution 1:1 with clean water to achieve the needed concentration for the cleaning solution (i.e. 1 gallon of Formula 409[®] Disinfectant to 1 gallon of water).

EXHIBIT C
Tank Disinfection Protocol

Tank Disinfection Protocol: 200 ppm active chlorine solution

1. Determine the percentage of active chlorine in commercial liquid bleach or bleaching powder.

- a. For example, the percentage of active chlorine in store bought liquid bleach (initial volume = 5.14 L) is 6%.
- b. Calculate initial chlorine concentration:

$$6\% \div 100 \times 1,000,000 = 60,000 \text{ ppm.}$$

Conclusion: The concentration of chlorine in store bought liquid is 60,000 ppm.

2. Calculate total volume that will be treated with 5.14 L of store bought liquid bleach at a final chlorine concentration of 200 ppm

- a. Example calculation:

- 1) Variables:

Initial bleach $Volume_1 = 5.14 \text{ L}$

Initial chlorine $Concentration_1 = 60,000 \text{ ppm}$

Final $Volume_2$ treated = unknown

Final chlorine $Concentration_2$ in tank = 200 ppm

- 2) Equation:

$$Volume_1 (Concentration_1) = Volume_2 (Concentration_2)$$

- 3) Calculation:

$$5.14 \text{ L} (60,000 \text{ ppm}) = V_2 (200 \text{ ppm})$$

$$308,400 = V_2 (200 \text{ ppm})$$

$$1,542 \text{ L} = V_2$$

- b. Conclusion: One standard store bought container of bleach (5.14L) will treat 1,542 L (407 gallons) at a final chlorine concentration of 200 ppm.
- c. Adjust the foregoing calculation according to unknown variables.

3. Tank treatment

- a. Pour the bleach slowly into the tank, mixing as you pour and then fill the tank up to full capacity with clean water.
- b. Let the bleach stand in the tank for 1 hour.
- c. Completely empty the tank and rinse thoroughly with clean water.
- d. Dispose of bleach solution into a municipal waste water treatment system.