

Appendix B

Staff Report

REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

STAFF REPORT

To: Bruce Wolfe
Executive Officer

Date: April 28, 2006

From: Brendan Thompson

File No. 2199.9457 (BJT)

Signature:

SUBJECT: CALIFORNIA DEPARTMENT OF TRANSPORTATION, PIGEON PASS STATE ROUTE 84 REALIGNMENT PROJECT, ALAMEDA COUNTY - ISSUANCE OF WASTE DISCHARGE REQUIREMENTS AND WATER QUALITY CERTIFICATION

Introduction

The California Department of Transportation (hereinafter Caltrans) has submitted an application for Water Quality Certification and Waste Discharge Requirements to realign an approximately two mile stretch of State Route 84 (SR84) between the City of Livermore and Interstate 680 (hereinafter Project). The current roadway is a heavily traveled, winding, two-lane road that is used as a corridor for commuters between Livermore and the Silicon Valley. The Project is intended to reduce the current highway's higher than average accident rate. The Project consists of the following elements:

- a) Relocating steep and winding portions of the road to reduce grades and straighten the road;
- b) Conversion of portions of the existing SR84 to a frontage road; and,
- c) Earthwork activities resulting in the placement of approximately 654,000 cubic yards of cut and fill.

There are approximately 4.66 acres of jurisdictional waters of the United States on the Project site, including 5,318 linear feet of creeks and 4.05 acres of freshwater seasonal wetlands on the Project site. The Project will result in the direct placement of approximately 4,130 cubic yards of fill into jurisdictional waters. The site's waters provide habitat for federal- and state- listed special status species, including the California red-legged frog, California tiger salamander, and the vernal pool fairy shrimp.

Project impacts and mitigation required of Caltrans for these impacts:

Jurisdictional Water	Total on-site	Filled	On-Site Mitigation Proposed		Off-Site Mitigation Proposed	Mitigation Required
Wetlands	4.05 acres	1.87 acres	0.92 acres created		2.5 acres created	5.6 acres created
Creeks	5,300 linear feet (l.f.)	2,775 l.f.	791 l.f. created	1,510 l.f. enhanced	5,410 l.f. enhanced	11,900 l.f. enhanced

The Project will also have stormwater impacts both during and after construction, once it is operating. Caltrans has proposed measures to address those impacts.

Remaining issues

Mitigation: The California Wetlands Policy, part of the wetland fill policy incorporated into the San Francisco Bay Basin Water Quality Control Plan (Basin Plan), requires that there be “no overall net loss” and a “long-term net gain in the quantity, quality, and permanence of wetlands acreages and values.” Thus, the Tentative Order (T.O.) requires a combination of creek and wetland mitigation to address Project impacts. The T.O.’s requirements exceed the mitigation package currently proposed by Caltrans, in that they require additional linear feet of creek enhancement and additional acres of wetland creation. As discussed further below, staff believes the T.O.’s mitigation requirements appropriately address the Project’s anticipated impacts to creeks and wetlands.

Additionally, the T.O. requires that a portion of the proposed off-site mitigation be completed by January 31, 2008 (off-site mitigation hereinafter called “Sweet Property”). This requirement is expected to minimize temporal losses of beneficial uses due to any time lag between impacts and establishment of mitigation. Because of Project constraints, on-site mitigation cannot be initiated until all Project impacts have taken place. To more clearly address temporal losses, the T.O. requires that additional mitigation be identified if there is a delay in the construction of mitigation on the Sweet Property. This amount would be based on the number of years of delay, if any. Sweet Property mitigation construction may commence as soon as the summer of 2006, while Project construction is scheduled to begin March 1, 2007.

Post-Construction Stormwater Treatment Controls: The proposed Project will impact beneficial uses through the discharge of stormwater containing automobile-related pollutants (e.g., oil, grease, heavy metals, etc.). As a result of spatial limitations within the Project site, Caltrans was only able to propose treatment for 50% of the Project site’s impervious surface, which staff found to be an insufficient amount of treatment. As a result, the Department proposed an alternate compliance project to provide capture and treatment of urban summertime flows in the City of Livermore in-lieu of on-site treatment. The T.O. requires either the Livermore project or another project to be implemented that provides an equivalent water quality benefit to treating runoff from the rebuilt section of SR84. While Caltrans does not object to providing off-site treatment of polluted water flows in-lieu of on-site treatment measures, Caltrans would rather the

off-site treatment project be made optional, and the size of the off-site project not be specified. This would allow Caltrans to fall-back on its original treatment option in the event that off-site opportunities were not available. The T.O. has been revised to not specify the size of the off-site project, but would make off-site treatment a requirement to ensure its implementation.

Project Permitting Status with Other Agencies

Army Corps of Engineers (Corps): The Corps received a permit application from Caltrans in mid-January 2006. The Corps issued a Public Notice on March 16, 2006, for a 22-day public comment period. It is unknown at this time when an individual permit will be issued.

United States Fish and Wildlife Service (USFWS): The USFWS issued a Biological Opinion on February 28, 2005. An amendment to the BO was subsequently issued on April 27, 2005.

California Department of Fish and Game (CDFG): CDFG received an application for a Streambed Application Agreement on February 10, 2006. A notice of incomplete application was sent in March, and the application was completed on April 17, 2006. As of the date of this transmittal, an Agreement has yet to be issued.

Application History

Caltrans submitted the Project application to the Board on January 18, 2006, and stated that Pigeon Pass was an urgent public safety project that should be heard not later than the May Board meeting. Permitting history at the Board suggested that projects with comparable degrees of permanent impacts could require up to one year to issue WDRs from the date of application submission. Board and Caltrans staff have worked extensively to expedite the delivery of this T.O. to the Board, recognizing that Caltrans may not be able to provide complete details of its proposed mitigation in advance of the May Board meeting.

The T.O. was circulated for public comment starting on March 24, 2006, and the public comment period closed on April 24, 2006. Four comment letters were received and appropriate changes have been made to the T.O. In addition, the Executive Officer and Board staff met with Caltrans representatives on April 28, 2006. We have made further revisions and clarifications to the T.O. in response to the meeting.

Creek and Wetland Avoidance

Board staff finds that Caltrans has proposed a Project design that appropriately maximizes the avoidance of creeks and wetlands. Along the two-mile stretch of highway, many of the roadside creeks and wetlands are nestled between steep hillsides. To accommodate the proposed design, Caltrans has acquired adjacent land from private property owners, and intends to cut away hillsides that are restricting the designed roadway width. Opportunities for avoidance of creeks and wetlands are significantly constrained by these factors. Measures to avoid wetlands and creeks include: installation of a retaining wall to minimize impacts to the California tiger salamander pond, and steepening stretches of roadway and its' banks at appropriate locations.

Additionally, seasonal restrictions on the construction schedule will reduce construction-stage impacts to creeks and wetlands.

Project Mitigation

The mitigation required in this T.O. is the minimum amount necessary to ensure the protection of beneficial uses and the achievement of no net loss of wetlands. The Basin Plan's Wetland Fill Policy specifies that mitigation for fill activities be on or nearby the project site, and replace the same kind of water resources being impacted, whenever possible. Off-site and out-of-kind mitigation may be accepted, but at a greater level of mitigation to compensate for the loss of beneficial uses within a project area. The mitigation requirements of this T.O. reflect that Caltrans is mitigating for impacts at a location 10 miles northeast of the Project site, and at additional sites that are yet to be identified, but which must be within a geographic area specified in the T.O. Other elements of the Project that particularly justify the mitigation requirements include:

- Permanent fill of a significant length and area of a mature oak riparian and creek system;
- Permanent impact to special-status species habitat;
- Lack of details pertaining to the proposed off-site wetland mitigation (e.g., hydrological analysis demonstrating wetland creation feasibility);
- Uncertainty of successful creation and restoration associated with any creek or wetland mitigation project;
- Loss of wetland and creek beneficial uses resulting from a delay between impacts and mitigation implementation; and,
- Absence of a submitted plan identifying mitigation details for the remaining required mitigation.

The amounts of mitigation required in this T.O. are consistent with other WDRs issued by the Board in recent years for similar projects with significant creek and wetland impacts (e.g., Dublin Ranch, Gale Ranch, Montanera, and Pleasanton Municipal Golf Course).

Caltrans has proposed a combination of on-site and off-site mitigation. The on-site mitigation consists of creation and enhancement activities of creeks and wetlands. 0.92 acres of wetlands will be created on-site, through either expansion of existing wetlands, or creation using soils from impacted wetlands on-site. 791 linear feet of permanently filled creek will be re-created adjacent to the new roadway. 220 linear feet of this re-creation will be unvegetated, rock-lined channels, and 571 linear feet will have a combination of natural and rock-lined bottom. These are expected to have lower functions and values than the filled creek. Another 535 linear feet of permanently filled creek will be relocated on-site. However, those 535 linear feet of creek will be re-created in an area that is subject to future development, and will likely be impacted by

future projects. Finally, 1,510 linear feet of existing creek on the Project site will be enhanced through the planting of native trees and shrubs.

The proposed off-site mitigation would be completed in cooperation with the Alameda County Conservation Partnership (ACCP). The ACCP is a joint collaboration between the federal Natural Resource Conservation Service and the Alameda County Resource Conservation District to rehabilitate natural resources on private lands. While one off-site mitigation site has now been identified, it will not provide mitigation sufficient to meet the T.O.'s requirements. Because of the Project's public safety nature, rather than delay consideration of Project approval until all mitigation is identified, the T.O. requires future identification of sites within a specified geographic area of Alameda County. Staff recognizes that, based on past experience, such provisions result in significant delays in mitigation construction, as well as requiring extensive Board staff work after the Board approves a project's WDRs.

The proposed off-site mitigation at the Sweet Property is within an actively grazed ranchland with hillside seeps and an unnamed tributary to the Arroyo Mocho, approximately 10 miles northeast of the Project site in the city of Livermore. Staff believes the mitigation site provides significant opportunities for enhancement, particularly given the cooperative and engaged attitude of the landowner. Based on discussions with ACCP staff, staff believes that additional sites will be available under this program shortly, allowing Caltrans to complete its mitigation requirements within the deadlines specified in the T.O. Staff believes that the identification of one mitigation site and accompanying general Program outlines will allow the mitigation required in the T.O. to be completed in a timely manner.

Although the Project has been under development for three years or more, the submitted application does not contain the level of detail typically present in other applications when they are brought before the Board, particularly in the proposed creek and wetland mitigation package. While Caltrans does have a proposed package of on- and off-site mitigation, significant basic information is absent or not fully developed, including:

- Draft conservation easements for the off-site mitigation;
- Detailed conceptual mitigation plans for the off-site mitigation, including design concepts, performance criteria, success criteria, reporting, and other information;
- Water budgets for the on- and off-site mitigation showing it is likely to be successful;
- A draft grazing management plan;
- Proposed mitigation sites and plans for the T.O.'s remaining required mitigation;
- Draft conservation easement endowments for the proposed mitigation sites; and,
- Proposed conservation easement holders for the off-site mitigation.

The T.O. has been revised to provide more flexibility to Caltrans in meeting the T.O.'s mitigation requirements, so that Caltrans can receive credit for the quality of the mitigation it actually implements and/or for the timing of this implementation relative to when the Project's actual impacts occur. Thus, while all details of the Project's mitigation have yet to be specified, staff is bringing the application before the Board at this time because of its status as Caltrans' highest-priority public safety project within the boundaries of Caltrans District 4.

Conclusion

In recent weeks leading up to the end of the public comment period, Caltrans has submitted additional information relating to the proposed off-site mitigation. Mitigation proposed at the Sweet Property includes 5,410 linear feet of creek enhancement, up to 2.5 acres of wetland creation, preservation of at least 52 acres of contiguous upland grassland, a grazing management plan, and conservation easements over all the off-site mitigation areas.

Implementation of work at the proposed on- and off-site mitigation locations will not satisfy all of the mitigation requirements of this T.O. After taking into account all proposed on- and off-site mitigation, Caltrans will still need to create approximately 2.6 acres of wetlands and enhance an additional 4,595 linear feet of creek. As such, adoption of this T.O. will leave required mitigation unidentified. Board staff have put language into the T.O. that would require a work plan for this remaining required mitigation. This work plan would be subject to the approval of the Executive Officer, prior to Project completion. The remaining mitigation would have to be constructed by January 31, 2010. The T.O. has been revised to allow Caltrans to receive credit for the quality and timing of all mitigation actually implemented.

Recommendation

The T.O. has been revised to address all comments received and subsequent meetings with Caltrans. While some issues remain, I recommend that the Board approve the T.O. as revised to ensure Caltrans can expeditiously proceed with its high priority safety project.