



FEDERAL HIGHWAY ADMINISTRATION  
 CALIFORNIA DIVISION  
 AND  
 CALIFORNIA DEPARTMENT OF TRANSPORTATION



FINAL REPORT

**ENVIRONMENTAL COMMITMENT COMPLIANCE  
 PROCESS REVIEW**

FHWA #S50828  
 CALTRANS Division of Local Assistance #07-04



Dye Creek Bridge Replacement – Revegetation Corridor, Redding, CA.

August 23, 2007

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## II. EXECUTIVE SUMMARY

Tracking and documenting the completion of environmental commitments throughout the project delivery process is FHWA's and Caltrans shared responsibility as environmental stewards. It is for this reason that an Environmental Commitments Record (ECR), a facsimile or other tracking method is prepared for each project. Since terminology varied among districts, "ECR" in this report is used within a generic context. Within the ECR is all relevant information needed for project team members to track progress and identify actions they need to make. For example, the ECR may be a source document for the Resident Engineers pending file, executing environmental certification and Ready-to-List, and preparing the Certificate of Environmental Compliance. During design and preparation of contract plans there will be periodic environmental reviews to ensure mitigation measures and other commitments are incorporated into final project plans, specifications, cost estimates, or other appropriate documents as needed. The tracking system identifies appropriate staff responsible for ensuring that each mitigation measure is done.

The reviewers found that many of the recommendations from the 2001 FHWA California Division Environmental Commitments Process Review are being implemented statewide. All districts visited have established liaison positions between environmental and engineering for projects on the State highway system. Mitigation monitoring on construction is working as intended but requires close attention by the districts. Training and intra- and interagency rotational assignments are successful in facilitating environmental commitments.

From the available information obtained through site visits, interviews and questionnaires, it appears that environmental commitments are being satisfied. However, there is no uniform recordation or central depository for this information. As such, the information is not easily tracked, obtained or verified. After compiling the findings and conclusions of this report, the review team will prepare a plan to implement their recommendations and take the necessary follow-up actions.

Below is a synopsis of the findings and recommendations identified in this report.

### Findings –

- The Caltrans Division of Local Assistance (DLA) is not currently required to adhere to Caltrans' Chief Engineer's ECR memo, since the requirement was originally initiated only for the Capital Improvement Program (CIP).
- Environmental commitment requirements do not have a separate funding mechanism to provide assurance for long-term mitigation monitoring and maintenance requirements.
- Although most districts reported using ECRs, the extent of use and up-to-date records appear inconsistent throughout the State.
- Caltrans DLA requires local agencies to certify that they have met all environmental mitigation requirements and verify compliance with periodic process reviews.
- There was limited information available on the costs of compensatory mitigation.

## Recommendations –

- Require all projects, including those in Local Assistance, to have an up-to-date ECR or comparable record that reflects maintenance requirements and is accessible to all parties.
- Create a separate funding mechanism for environmental commitments for the CIP
- Require use of ECRs by all project proponents and have identified personnel responsible for data input.
- Caltrans needs to ensure that environmental commitments are clearly identified and incorporated into local agency contracts.
- Caltrans needs to monitor compensatory mitigation costs and ensure that costs are reasonable, appropriate and justifiable in relation to impacts of the project for both CIP and Local Assistance projects.

## III. INTRODUCTION

The successful implementation of the environmental commitments described in the documents required by the National Environmental Policy Act (NEPA) or related to appropriate resource permits is a critical aspect of the transportation project development process. Not only is it the Federal Highway Administration's (FHWA) responsibility to assure that these measures are implemented according to FHWA Code of Federal Regulations 23 CFR 771.109 (b), but it is also a key element of agency objectives to exhibit good environmental stewardship. By fully communicating and implementing all commitments, transportation agencies will not only build their transportation projects more efficiently and effectively, but also protect and enhance the environment while maintaining the integrity of the transportation project development process. All Federal projects, as well as all Federally-funded State and local projects, must implement the environmental commitments stated in their NEPA documents in order to fully comply with laws, regulations and policies and to achieve desired environmental outcomes.

Historically, given the importance of the ECR process, FHWA has conducted several previous process reviews of the CIP practices. A localized effort by the California Division-FHWA was conducted in 2001 and, on the national level, an FHWA review was conducted in 2002. In the latter, FHWA sponsored the Domestic Scan Tour on Environmental Commitments. The Domestic Scan's focus was on successful practices and procedures of the follow-through of commitments made both during and after the NEPA process. The Domestic Scan Team was formed of members of varied expertise from the FHWA Headquarters Office of Project Development and Environmental Review, FHWA Division Offices, State Departments of Transportation (DOT), the U.S. Environmental Protection Agency, the U.S. DOT Volpe National Transportation Systems Center, the American Association of State Highway and Transportation Officials, and the American Road and Transportation Builders Association. A recent report entitled "Mitigation Project Study Final Report," dated May 21, 2007, was funded by Caltrans and conducted by the University of California-Davis. The importance of environmental commitment compliance was a consistent theme throughout the discussion in these documents. Although none of these previous efforts considered Local Agency Federal-

Aid Transportation Projects “off” the State Highway System, the Division of Local Assistance’s need for involvement and awareness in this effort is now being recognized and FHWA will continue to engage the Division in the future.

Further, our State partner, the California DOT (Caltrans), recognizing the importance of environmental commitments in the project development process, conducted a comprehensive review/analysis in December of 2000 entitled “Improving Caltrans Environmental Planning, Management and Mitigation”. Here, the ECR process was of paramount concern. In addition, Caltrans promulgated a memo from the Chief Engineer ([http://www.dot.ca.gov/ser/downloads/memos/DDD\\_const\\_design\\_env\\_proj\\_mgmt.pdf](http://www.dot.ca.gov/ser/downloads/memos/DDD_const_design_env_proj_mgmt.pdf)) on June 10, 2005 committing to (1) recording each environmental commitment; (2) specifying how each commitment will be met and (3) documenting the completion of each commitment for all on-system projects.

The California Division-FHWA, through a 2006 risk analysis, identified environmental commitments to be one of its highest risk areas. This assessment is based largely on FHWA’s commitment to environmental stewardship and, given staffing constraints, the limited oversight FHWA has over mitigation for transportation projects. Emanating from this risk analysis, a process review was initiated to evaluate Caltrans’ implementation of provisions of the Chief Engineer’s 2005 memorandum that directed each Caltrans district to establish and maintain an ECR or similar record (e.g., Mitigation Monitoring Reporting Record (MMRR) used in Caltrans District 11 or Permits, Agreements, and Mitigation form (PAM) used in Caltrans District 4) for each CIP project.

In summary, this process review was to:

- Verify whether environmental commitments presented in FHWA/Caltrans environmental documents are implemented throughout the design, construction and maintenance of the corresponding CIP project; and
- Review Caltrans’ ECR process for tracking and implementing environmental commitments through the life of the CIP project.

This report documents the team’s findings and recommendations to improve processes and better ensure full implementation of environmental commitments. Due to resource and timing constraints associated with the overall breadth of this endeavor, the scope of this evaluation is guided by impacts and mitigation associated with two key areas which hold the highest risk: 1) biological resources and; 2) cultural resources.

#### IV. SCOPE

This process review examines the overall health of the environmental commitment process, including prudent and reasonable expenditure of federal funds, and primarily focuses on the two surrogate areas of biological resources and cultural resources. With respect to biological resources, this would include implementation of commitments such as avoidance of environmentally sensitive areas (ESA); incorporation of exclusionary measures; mitigation compensation; monitoring etc. For cultural resources, this may include the implementation of ESAs; Memorandum of Agreement requirements; and archaeological data recovery plans.

As described in the project scope statement (Attachment A), this process review was conducted in two parts. The first part involved distributing survey questionnaires to all 12 Caltrans districts and focused on district staff from environmental, cultural resources, and local assistance offices. The purpose of the survey was to identify from a statewide perspective the awareness and use of ECRs, how the process was implemented, and to establish any trends that were occurring across district boundaries. The second part involved a more focused assessment on the ECR process and included site visits to districts representing northern, central and southern areas. The review team visited four Caltrans districts and performed on-site interviews. On April 17<sup>th</sup> and 18<sup>th</sup>, 2007, the team visited District 2 (Redding); on May 1<sup>st</sup> and 2<sup>nd</sup>, 2007, District 11 (San Diego); on May 3<sup>rd</sup>, 2007, District 4 (cultural resource staff only) (Oakland); and on May 8<sup>th</sup> and 9<sup>th</sup>, 2007, District 5 (San Luis Obispo).

Sample projects, selected by the districts, were reviewed to assess how the respective districts fulfilled their environmental commitments. The focused assessment reviewed projects' environmental commitment compliance from a biological and cultural resources perspective, and only involved capital improvement projects. The review of environmental commitments from a Local Assistance program-wide viewpoint was purposely kept at the statewide level and accomplished via the survey questionnaires. This was primarily due to the limited time and resources available to complete the process review, and the fact that the Caltrans Chief Engineer's ECR memo does not directly apply to the Local Assistance at this time.

#### Process Review Team

##### FHWA

David Tedrick – Environmental Program Coordinator  
Steve Healow – Senior Project Development Engineer  
Larry Vinzant – Senior Environmental Specialist  
Joseph Vaughn – Environmental Specialist

##### Caltrans

Greg King – Chief, Cultural & Community Studies Office  
Amy Pettler – Senior Endangered Species Coordinator  
Germaine Belanger – Environmental Coordinator – Local Assistance  
Eugene R. Shy – Process Review Engineer – Local Assistance

## V. FINDINGS AND RECOMMENDATIONS

The circulation of the survey questionnaires to the districts was intended to gain insight on the environmental compliance process from a statewide perspective, and was geared toward the biological resources, cultural resources, and local assistance programs. Based on the surveys distributed, we had a 67% biological; 75% cultural; and 75% local assistance response rate from the districts, for a total of 26 completed surveys. A table was then developed to highlight the survey results (Attachment B). One of the basic findings from the survey identified that 88% of respondents in CIP were using or intending to use an ECR process for their projects. 11% of respondents in the Local

Assistance offices had similar documentation, although it is not required under current procedures. The following findings and recommendations were based primarily on information gathered from Caltrans district responses to the survey questionnaire, discussions with Caltrans district staff during our site visits, and project case studies.

**Finding 1** - Environmental commitment requirements for CIP projects do not have a separate funding mechanism to assure funding availability in the future to finance completion of environmental commitments, if necessary (i.e., after completion of construction). As a result, mitigation of project impacts is at risk of losing funding after the end of the construction phase. This could severely impair the ability to assure that mitigation requirements are being met. This issue was also identified in the 2006 joint FHWA/Caltrans Wetland Mitigation Process Review Report, as well as Final Report of the Caltrans Mitigation Process Improvement Team (MPIT) in 2000 and as a recommendation in the “Mitigation Project Study Final Report” University of California, Davis, May 21, 2007).

**Recommendation 1** - Environmental commitments would benefit by having their own dedicated source of capital (e.g., a “stewardship or owner operator fund”), such as an open/revolving account or a dedicated Expenditure Authorization that would be available to address such things as actual mitigation costs (e.g., long-term commitments) as well as unanticipated contingencies. In addition, as recommended by the Caltrans MPIT and to encourage appropriate “follow-through” of CIP project completion and closeout, “Caltrans should begin to measure a PM (Project Manager) [that is, a Project Manager’s performance on successful accomplishment of mitigation] at completion of construction (Milestone 600), again at completion/acceptance of mitigation (create Milestone 650) and finally at true project closure (Milestone 700).” This would provide the accountability mechanism necessary for project management to stay focused on a project post-construction.

**Finding 2** - Although most districts reported using ECRs on capital projects, the extent of use and up-to-date records appear inconsistent across the State. Most districts reporting have acknowledged the mandate to include an ECR for CIP projects as part of the project file; however, most districts have just recently initiated the effort and are still new to the process. Some districts have reported that capital project ECRs may not always be kept up-to-date due to the amount of information needed. In addition, some environmental sections maintain their own district specific databases which may or may not be include an ECR.

**Recommendation 2** - Use of ECRs or comparable record needs to be a requirement for all Caltrans CIP and Local Assistance projects. This, most likely, will require a follow-up memorandum expanding upon the Chief Engineer’s 2005 memorandum regarding establishment and maintenance of environmental commitment documentation. Any follow-up memorandum would have to be jointly issued with the Deputy Director of Planning and Modal Systems, or the Division of Local Assistance, or by the Director, in order to be implemented. Either through this supplemental memorandum, or by other effective means, there needs to be clear guidance that ECRs are to be kept up-to-date and that personnel be identified as responsible for specific data input.

**Finding 3** - The Caltrans Local Assistance program is not currently required to adhere to the Caltrans Chief Engineer ECR memo, since the requirement was originally initiated only for CIP. For that reason, few if any districts use an ECR (or its equivalent) for

tracking environmental commitments for local assistance projects. Current Local Assistance procedures require that local agencies certify completion of mitigation in design via a PS&E checklist and completion of mitigation post-construction in a Final Report of Expenditures. Caltrans reviews one PS&E package per agency per year because of staffing limitations and rarely has sufficient staff to follow-up further. However, about half of the Districts reporting did develop some form of environmental mitigation completion document in the form of a stand-alone list, identification in the environmental document (or Categorical Exclusion), or similar method. Because it is not required, this process is variable among districts. Districts, per established procedure, typically rely on local agencies to track their own commitments. District staff noted that when used, ECRs appeared to instill into the local agencies the need to document environmental findings. The Division of Local Assistance this year expanded environmental fields to provide for tracking and reporting on environmental mitigation as well as other components of NEPA compliance. Most district Local Assistance personnel were either using or starting to use the new LP2000 database fields for monitoring purposes; however, this practice was not universal. Caltrans Division of Environmental Analysis (DEA), in the meantime, is developing a new data tracking system (named STEVE) for CIP projects. This will probably not be on-line for another year or two, although other, less formal databases exist for specific kinds of mitigation, such as wetlands replacement. An important finding was that mitigation data and tracking information in the districts are not routinely shared with Caltrans DEA. Information needs to be readily available, transparent and easily exchanged to document mitigation accomplishments within Caltrans, and reportable to FHWA.

**Recommendation 3** - Require all projects, including those in Local Assistance, to have an ECR that is up-to-date as the project is developed. The ECR information needs to be provided by the districts/regions to Caltrans HQ Department of Environmental Analysis for state-wide data management. Local Assistance staff in all districts needs to use LP2000 to track commitments. Caltrans DEA needs to expeditiously implement STEVE and/or other tools to effectively track local/district projects. Overall, all mitigation commitment data needs to be coalesced from the districts to DEA into a universal or interchangeable data management system. Caltrans DEA needs to manage such information so it is complete, accurate and accessible to responsible parties.

**Finding 4** – The Local Assistance Procedures Manual requires local agencies to certify that they have incorporated environmental commitments into their PS&E and that they have implemented all required environmental commitments during construction. Caltrans DLA holds the local agencies responsible for ensuring compliance with environmental commitments. As discussed previously, limited oversight by Caltrans is in the form of a possible inspection at project close-out, inclusion of requirements in environmental documents or PS&E and interagency coordination. A minority of districts had written procedures (through PS&E, environmental documents, some by ECR, etc.) to get the project commitments to the contractor. However, most district staff interviewed did not know how this information was relayed. Caltrans did very few inspections (e.g., if a Native American monitor were required), since responsibility for compliance again is procedurally assigned to the local agencies, who must, however, certify they are compliant. Therefore, Caltrans has very little involvement in rectifying deviation from permit or contract requirements, since this responsibility also lies with the local agencies. However, if Caltrans staff is aware of such a deviation, they should contact the local agency or the District Local Assistance Engineer to rectify the deviation.



**Recommendation 4** – Caltrans, both CIP and DLA needs to ensure that environmental commitments are clearly identified and incorporated into local agency PS&E and/or contracts. This may involve additional oversight for contract review. Caltrans also should ensure the completion of all projects and implementation of associated environmental commitments. Cross-training on contract language and procedures can also provide staff biologists, cultural resource specialists and contracting personnel a better ability to address contract and/or mitigation agreements can better articulate technical criteria to be achieved.

**Finding 5-** Based on the surveys, very little information was available on the costs of compensatory mitigation. As such, it was difficult to determine whether these costs were justified and reasonable. Given Caltrans state-wide policy for CIP projects, mitigation costs in excess of \$500,000 are to be reviewed by Caltrans DEA. It does not appear that these project costs are being consistently provided to Caltrans DEA.

**Recommendation 5** - Caltrans needs to monitor mitigation costs and evaluate project impacts concomitant with expenditures (e.g., expenditures are not excessive relative to the degree of project impact). Every CIP project needs to go through the Project Implementation Document phase to identify issues and associated potential costs, including those for biological and cultural resources, maintenance activities and minor projects. It is strongly encouraged to report all detailed mitigation costs with a cumulative expenditure in excess of \$500,000 to Caltrans DEA for CIP projects for review and record maintenance.

### **Best Practices**

During this investigation, particular practices were readily apparent that significantly improved implementation, execution, management and success of mitigation commitments. In this section, we identify approaches that we believe should be implemented to better demonstrate our collective commitment to environmental stewardship. Implementation, maintenance and expansion of these efforts should be on-going and encouraged.

- Ensuring that all appropriate Caltrans (CIP and Local Assistance) personnel with applicable expertise are involved to the extent practicable in the review of contract provisions prior to advertisement so that no important mitigation components are overlooked.
- Regular and close cooperation with regulatory/resource agencies is instrumental and effective in mitigation success and project delivery. This is particularly important when late/last minute changes/modifications occur which may require permit amendments (e.g., not being able to stay within work windows to avoid nesting or migration periods, need for night work to facilitate project completion, contractors working outside of Areas of Potential Effect, etc.), mitigation changes or design modifications. Early and continuous coordination can effectively accommodate changes and avoid project delays, cost over-runs or other problems. These efforts need to be strongly encouraged on a state-wide basis.
- For CIP projects, maintaining early in-house coordination efforts among technical elements to minimize project changes and to ensure commitments are biddable

and buildable. Technical experts should identify potential issues and solutions early-on; allowance for float and contingency measures may need to be included in project scopes and schedules.

- Continue and institutionalize contractor training for CIP and Local Assistance projects to the maximum extent practicable. Additional out-reach efforts should include citizens advisory committees, environmental compliance meetings and regular information update reports.
- There should be clear identification and maintenance of the responsibilities of the Resident Engineer in CIP particularly in resolving and documenting violations and resolutions. Documentation needs to be consistently included in the hard-copy file.
- Encouraging use and information exchange of full-time biological monitors in all districts, as warranted and justified for mitigation success.
- Maintaining a liaison between environment and construction which is important in communicating, implementing and assuring success of mitigation measures for transportation projects. Ensure this position or similar position is maintained in each district for capital projects. This environmental “construction” coordinator position in each District would be under the District Environmental Division Chief and be responsible for commitment compliance throughout the entire project development process. The role can be filled for Local Assistance projects typically by a consultant with supervision and coordination with responsible Caltrans Local Assistance personnel.
- Focusing more effort and resources on compliance at the construction phase of the project. This is important in having department engineers instructed on the importance of the environmental process and the responsibility of compliance since failure to meet environmental commitments are more likely to occur at the construction phase of the project rather than design. Failures can result from a contractor not adhering to conditions of PS&Es, seasonal and migratory constraints conflict with construction schedules, and scope creep affect ability to meet commitments at the construction phase.
- Considering creative and innovative mitigation strategies for meeting commitments without having to revisit and modify proposed mitigation. Commitments to proposed mitigation may be complicated by a lack of land suitable for mitigation, the lack of mitigation banks, regulatory personnel changes or the cumbersome process of fund transfers, which may ultimately affect the ability to ensure environmental compliance. These sorts of negotiations and delays can cause an increase in the cost, change the type of mitigation and/or affect the timeliness of mitigation. In extreme cases, inability to implement proposed mitigation can severely impact project delivery. Such considerations can include the use of in-lieu fees, advanced mitigation, early interagency coordination, etc. Revisiting mitigation needs leads to additional negotiations and delays that can cause an increase in the cost, change the type of mitigation and/or affect the timeliness of mitigation. The advanced mitigation/planning research effort contracted to the University of California-Davis may provide some insight

into this for CIP projects. While this study is on-going, initial findings are in the 2007 report entitled “Mitigation Project Study Final Report.”

## VI. IMPLEMENTATION PLAN

The implementation plan would rely on the recommendations proposed in this report. Caltrans should determine how best to achieve the desired outcomes of these recommendations. To the extent appropriate, FHWA would assist Caltrans in developing the procedures, guidance, and/or processes necessary to ensure successful incorporation of recommended process improvements.

## VII. CONCLUSION

This process review focused on two important components of environmental compliance: biological and cultural resources. Questionnaires, face-to-face interviews and case studies resulted in the overall conclusion that environmental commitments are generally being adequately implemented. However, there is an important void in recordation and dissemination of this information. The primary recommendations of this report revolve around centralization of a data management system and a clear understanding of how and why this important data is documented, transmitted, stored and made available to other interested/involved parties. It is important that ECR requirements have the same status of importance and level of urgency as other project deliverable requirements. This will require Caltrans top leadership to fully embrace and promote an environmental ethic at all levels to foster successful implementation of environmental commitments. It is expected that development and execution of the Implementation Plan will provide the necessary framework to create a more streamlined, accountable and transparent data management system of environmental information.

# ATTACHMENT A

## ENVIRONMENTAL COMMITMENT COMPLIANCE WORKPLAN/SURVEY QUESTIONNAIRE

**FEDERAL HIGHWAY ADMINISTRATION**  
**CALIFORNIA DIVISION**  
Process Review on Implementation of Environmental Commitments  
Project Scope Statement  
(S49711)

OBJECTIVE/PURPOSE

Through Risk Analysis, the California Division of the Federal Highway Administration (FHWA) has identified environmental commitments to be one of its highest risks. This is largely based on FHWA's commitment to environmental stewardship and limited oversight of mitigation for transportation projects. This review will evaluate Caltrans' implementation of provisions of a June 10, 2005 memorandum signed by the Chief Engineer (Attachment A) that directed each district to establish and maintain an Environmental Commitments Record (ECR) or similar record (e.g., Mitigation Monitoring Reporting Record (D-11), Permits, Agreements, and Mitigation form (D-4)) for each project.

The purpose of this process review is to:

- Verify whether environmental commitments presented in FHWA/Caltrans environmental documents are implemented throughout the design, construction and maintenance of the corresponding project
- Review Caltrans' Environmental Commitments Record process for tracking and implementing environmental commitments through the life of the project.
- Identify where and by whom the ECR information is kept.
- Review random sample projects to ensure use of appropriate fiscal responsibility.
- Determine whether the process is working as envisioned.

A report will be prepared documenting the team's findings and, if necessary, recommendations to improve processes and better ensure full implementation of proposed mitigation measures.

SCOPE/APPROACH

During the course of this evaluation, the team will explore if proper implementation of environmental commitment measures were done. An environmental commitment is a measure that FHWA, Caltrans or a local agency commits to implement in order to avoid, minimize and/or otherwise mitigate unavoidable environmental impacts. It can be identified as early as the planning and scoping stages, during the environmental document or design processes, or as late as construction or maintenance of a project.

Due to resource and timing constraints associated with the overall breadth of this endeavor, the scope of this evaluation will be guided by impacts and mitigation associated with two key areas which hold the highest risk: 1) biological resources and; 2) cultural resources. These two areas were chosen since they typically involve actions to be taken after project construction is complete. Future process reviews may continue to delve into the other environmental commitment compliance topic areas as necessary. While the study will focus on larger aspects of the environmental commitment

compliance process as a whole, it will also focus on project specific compliance elements associated with biological and cultural resources. Therefore, the team will focus on larger and more complex projects involving Environment Assessments and Environmental Impact Statements.

The initial effort will be to develop a questionnaire to be widely circulated to the districts. The survey will focus on the process of mitigation measures identified in environmental documents and, through site visits, verify that we are meeting those commitments. These site visits will be closely coordinated with Caltrans and will include interviews with appropriate district and headquarters personnel.

This process review will examine the overall health of the environmental commitment process, including prudent and reasonable expenditure of federal funds, and will primarily focus on specific aspects in the following two areas:

#### 1. Biological Resources

- Environmentally Sensitive Areas (ESAs) to include delineation on plans and avoidance
- Adequacy of Inferred Presence Determinations
- Appropriate Determinations pursuant to the Endangered Species Act
- Pre-Construction or Protocol Surveys
- Exclusionary Measures (e.g. netting to prevent entry of swallows and bats) and Effectiveness
- Monitoring Required and Appropriately Conducted
- Wetlands/Riparian/Upland Mitigation (specify mechanisms: credits, acquisition; creation; restoration; etc.) and Success
- Additional Agency(ies) Permit Requirements

#### 2. Cultural Resources

- ESAs for cultural resources (prehistoric, historic, built environment, and traditional cultural properties)
- Archaeological data recovery/treatment plan
- Native American monitor
- Unexpected discovery treatment
- Memorandum of Agreement (MOA) requirements

The following areas will not receive a detailed focused assessment due to resource and timing constraints. If warranted, future process reviews may be undertaken to assess the health of these other NEPA process elements.

- Traffic
- Air Quality
- Noise
- Land Use
- Environmental Justice/Title VI
- Farmland
- Aesthetics/Visual Resources
- Public Utilities
- Hazardous Materials
- Geology

- Soils
- Hydrology
- Water Quality
- Section 4(f) Resources
- Societal Impacts

## VIII. RESPONSIBILITIES

A multi-discipline team with representation from FHWA – California Division and Caltrans will conduct this review. Team members and others with applicable expertise will assist on an “as needed” basis. The basic team is identified below.

### FHWA

- Steve Healow
- David Tedrick
- Joseph Vaughn
- Larry Vinzant
- 

### Caltrans

- Gregg Erickson
- Greg King
- Germaine Belanger

## IX. SCHEDULE/MILESTONES

<u>TIMELINES*</u>	MILESTONES
10/10/06 <b>(Completed)</b>	Hold internal “kick-off” meeting
11/17/06 <b>(Completed)</b>	Draft work plan complete
12/29/06 <b>(Completed)</b>	Identify Caltrans team members
12/29/06 <b>(Completed)</b>	Final work plan approved
1/12/07 <b>(Completed)</b>	Circulate survey questionnaire
January-March 2007 <b>(Completed)</b>	Conduct site visits, interviews, etc.
March - May 2007 <b>(Completed)</b>	Review and analyze data. Prepare Draft Report.
6/30/07	Complete Draft Report. Circulate for management review
7/31/07	Circulate Final Draft Report for Signature
8/17/07	Conduct “Closeout” Conference
8/31/07	Issue and distribute final signed report

\* Estimated cost to conduct process review is \$8-10,000.

**RECOMMENDATIONS/APPROVAL**

Recommendation: \_\_\_\_\_ /S/ \_\_\_\_\_ Date \_\_\_\_\_  
David Tedrick, Environmental Program Coordinator

\_\_\_\_\_ /S/ \_\_\_\_\_ Date \_\_\_\_\_  
Larry Vinzant, Senior Environmental Specialist

\_\_\_\_\_ /S/ \_\_\_\_\_ Date \_\_\_\_\_  
Joseph Vaughn, Environmental Specialist

\_\_\_\_\_ /S/ \_\_\_\_\_ Date \_\_\_\_\_  
Steve Healow, Senior Transportation Engineer

Approval: \_\_\_\_\_ /S/ \_\_\_\_\_ Date \_\_\_\_\_  
Dennis Scovill  
Chief Operating Officer



## GUIDELINES

### X. Interviews and Reviews

Questionnaires will be distributed to all 12 Caltrans districts. Each district will be requested to have a representative complete the questionnaire from each of the following disciplines: project management; environmental and archeological. Site visits will be conducted with at least 3 districts representing north, central and south regions. Random sampling of projects (3-4 per district) will be reviewed in more detail for environmental commitment compliance. Interviews and reviews may be conducted with, but not necessarily limited to the following District personnel:

- District Local Assistance Engineers (DLAEs), Environmental Coordinators
- Senior Caltrans Biologists/Archeologists
- Project Team Members ( Environmental Staff, Project Managers, Project Engineers, Resident Engineers (RE) or others)

### Review Procedures

The review is separated into three parts as follows:

1. Project Development: Process and Procedures
  - a. District Interviews and Project Site Visits:
    - i. Implement work plan, including questionnaire.
    - ii. Begin interviews and review of written procedures to determine how Caltrans advances commitments from environmental studies and permits, through final design, contract documents, and construction, to close-out of ECR.
  - b. Review and visit a random sample of projects (est. 3-4 per district site visit) to determine if environmental commitments made during project development, construction, and close-out have been implemented or there is a reasonable expectation that they will be implemented. Project reviews will not second guess decisions or commitments made during project development. This review will include the following documents:
    - i. Environmental Documents and Technical Reports
    - ii. Environmental Commitment Records (ECRs)
    - iii. Certificate of Environmental Compliance
2. Evaluation of Commitment Implementation and Maintenance

3. Prepare report documenting findings and recommending long-term process improvements, if necessary
  - a. Report (to the extent necessary) will:
    - i. Document results
    - ii. Identify any deficiencies
    - iii. Identify best practices
    - iv. Provide any needed recommendations
  - b. Overall goal is to:
    - i. Confirm that we are meeting our mitigation commitments
    - ii. Identify ways to improve reporting, as necessary
    - iii. Evaluate the effectiveness of ECRs at bringing all relevant compliance information together in a single place, and whether or not project team members are finding it easier to identify the actions they need to take with respect to:
      1. Tracking and documenting the completion of environmental commitments through the project delivery process.
      2. Assisting the RE in preparing/updating RE pending file.
      3. Executing the Environmental Certification prior to “Ready To List.”
      4. Preparing the Certification of Compliance with Environmental Mitigation Requirements.

## SURVEY QUESTIONNAIRE

1. Is your district using Environmental Commitments Records (ECR) for projects? If so, what percentages of projects have ECRs, and what types of projects (CE, EA, EIS) have them? If not, are other similar reports (e.g., checklists, computerized databases, others) prepared for each project?
2. Is there a centralized district or statewide database to monitor progress in meeting environmental commitments? If not, is anything being developed?
3. Who ensures that required mitigation from the environmental document or permits is incorporated into design and contract documents? How long are mitigation commitments monitored? Are there regular, required reports?
4. How are environmental commitments conveyed to the contractor (e.g., verbally and/or in writing)? How often are inspections done?
5. Have commitments been made during the environmental process that could not be complied with in design or during the construction phase? If so, what types of changes were made and what process was followed?
6. What action(s) would you take if a contractor is not abiding by a permit or contract requirement?
7. Can you give any examples of what has worked well with the ECR process and what needs improvement?
8. Are there unique processes to address mitigation commitments relative to the Endangered Species Act (ESA) or National Historic Preservation Act (NHPA)? Please identify.
9. What have been unique or difficult issues related to ESA and NHPA commitments? What process is used to resolve issues?
10. What are the estimated costs for mitigating different habitat types (i.e. riparian, coastal sage scrub, etc.)?

## ATTACHMENT B

### SURVEY RESPONSE MATRIX

ENVIRONMENTAL COMMITMENT COMPLIANCE PROCESS REVIEW SURVEY RESULTS LOCAL ASSISTANCE									
	District X	District X	District X	District X	District X	District X	District X	District X	District X
Q1 a. Is your district using ECR for projects?	No	No	No	No	No	No	Yes - LA prepared ECR	No	No
Q1b. Are other similar reports used?	No	No - NEPA doc only	No	No - LA tracks EC	No	No - LA tracks EC	Yes - LA prepared ECR	No	Internet Tracking DB
Q2. Centralized district or statewide database?	Yes - LP2000	No - Not aware	Yes - LP2000	Yes - LP2000	Yes - LP2000	Yes - LP2000	Yes - LP2000	Yes - LP2000	Yes - LP2000
Q3. Who ensures mitigation reqts are incorp into contracts?	Locals	Locals	Locals	Locals	Locals	Locals	Locals	Not sure.	Locals
Q4. How are ECs conveyed to contractor?	PS&Es	??? - LA responsibility	PS&Es	PS&Es	??? - LA responsibility	??? - LA responsibility	??? - LA responsibility	As part of env. Doc.	PS&E - LA resp.
Q5. Aware of any commitments not being met?	No	???	Yes	Yes	No	No	Yes	???	Yes
Q6. Actions taken if contractor not in compliance?	Local responsibility	???	LA - stops work	CT Lead - coord with LA/CTR-	CT Lead - coord with LA/CTR-	CT Lead - coord with LA/CTR-	CT Lead - coord with LA/CTR-	???	CT Lead - coord with LA/CTR-
Q7. Examples of ECR pros/cons?	No	No	No	Yes	No	No	Yes	No	No
Q8. Unique processes to address ESA/NHPA commitments?	No	???	No	No-Proj, spec only reqts	No	No	No	No	No-Proj, spec only reqts
Q9. Unique/difficult issues related to ESA/NHPA commitments?	No	???	No	Yes-Re-initiation issues	Yes-Lack of LA notify	No	No	No	Yes-Re-initiation issues
Q10. Estimated costs for mitigating different habitat types?	???	???	???	Don't track	\$7K/1ac-SJKF; \$3K/1stem-VELB; \$80K/ac	VP	???	???	???

ENVIRONMENTAL COMMITMENT COMPLIANCE PROCESS REVIEW SURVEY RESULTS- BIOLOGICAL RESOURCES								
	District <del>X</del>	District X	District X	District X	District X	District X	District X	District <del>X</del>
Q1a. Is your district using ECR for projects?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Q1b. Are other similar reports used?	Redbook	PAM	Filemaker Pro>link to MMRR	Filemaker Pro>link to MMRR	Filemaker Pro>link to MMRR	Filemaker Pro>link to MMRR	Filemaker Pro>link to MMRR	CE cont. sheets; MMPs
Q2. Centralized district or statewide database?	No	No	IT Database - being developed	IT Database - being developed	IT Database - being developed	IT Database - being developed	IT Database - being developed	No - Branch logs/file systems only
Q3. Who ensures mitigation reqts are incoro into contracts?	Proj Coord/PM	OEA	Entire PDT	Entire PDT	Entire PDT	Entire PDT	Entire PDT	Not sure. Entire PDT
Q4. How are ECs conveyed to contractor?	Preconst mtgs/prmt copies to Contractr	PS&Es	Pre-const mtgs/const kickoff.	Pre-const mtgs/const kickoff.	Pre-const mtgs/const kickoff.	Pre-const mtgs/const kickoff.	Pre-const mtgs/const kickoff.	As part of env. Doc. PS&Es
Q5. Aware of any commitments not being met?	Yes- infeasible timeframe contractr issues.	Yes	Yes- ex. mod of wk windows	Yes- ex. mod ofwk windows	Yes- ex. mod ofwk windows	Yes- ex. mod ofwk windows	Yes- ex. mod of wk windows	Yes-mostly const. phase/not design
Q6. Actions taken if contractor not in compliance?	Inform RE/Const mgmt/env m gmt. Pos. work stoppage.	RE can retain 25% funds to ensure compl.	Mtg w/RE to doc issue. Const halted. Coord w/Res Ags	Mtgw/RE to doc issue. Const halted. Coord w/Res Ags	Mtgsw/RE to doc issue. Const halted. Coord w/Res Ags	Mtgw/RE to doc issue. Const halted. Coord w/Res Ags	Mtg w/RE to doc issue. Const halted. Coord w/Res Ags	Coord. w/RE. Cannot instruct contractor directly.

Q7. Examples of ECR pros/cons?	Better comm w/ division & staff. Improve document and report follow up.	ECR-mixed reviews. Need follow-up.	Ident feas commit an Issue. Permit amends, weaken relations w/Res Ags	Ident feas commit an issue. Permit amends, weaken relations w/Res Ags	Ident feas commit an issue. Permit amends, weaken relations w/Res Ags	Ident feas commit an issue. Permit amends, weaken relations w/Res Ags	No	Ensure Biossps/nasps w/in spec.
Q8. Unique processes to address ESA/NHPA commitments?	36CFR800. dispute res for adverse effects and MOAs. Recovery mit*removal	Yes-FTE Bio. Monitor	BO special conditions-before/after report status	BO special conditions-before/after report status	BO special conditions-before/after report status	BO special conditions-before/after report status	BO special conditions-before/after report status; NHPAMOAs	Issues Need funding assurance for env. Commits.
Q9. Unique/difficult issues related to ESA/NHPA commitments?	Encroachment violations, reconcile arch/native values of cultural sites	Yes-S.7 process; basis for mitigation	Yes-Too quick to accept permit cond. w/o determ feas.	Yes-Too quick to accept permit cond. w/o determ feas.	Yes-Too quick to accept permit cond. w/o determ feas.	Yes-Too quick to accept permit cond. w/o determ feas.	Yes Re-initiation issues	Reneging on work exclusion conditions-sensitive areas(noise/ nitewk)
Q10. Estimated costs for mitigating different habitat types?	Costs vary.	\$500K/ac wetlands \$17K/ac CRLF/TS MB; \$420K/ac upland/transitional -	Costs vary.	Costs vary.	Costs vary.	Costs vary.	Costs vary.	\$ 80-100K/ac riparian; \$30-40K/ac coastal sage scrub; problem is not enough land for mitigation; few mitigation banks.

**ENVIRONMENTAL COMMITMENT COMPLIANCE PROCESS REVIEW SURVEY RESULTS - CULTURAL RESOURCES**

	District X	DistrictX	DistrictX	DistrictX	District X	DistrictX	DistrictX	DistrictX	DistrictX
Q1a. Is your district using ECR for projects?	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No
Q1b. Are other similar reports used?	Redbook	Redbook	Redbook	PAM	Filemaker Pro>link to MMRR	100% CE,EA,EIS 50% PCES	Don't know	Filemaker Pro>link to MMRR	CE cont. sheets; MMPs
Q2. Centralized district or statewide database?	Yes- Statewide Interagency	No	IT Database	IT Databases tracking not issue. Lack of resource to create infrastrct for LT mit/ trkng and funding	IT Database- being developed	No aware of existence or developme nt of central district or statewide database	Don't know		Not aware of central database to monitor environmt/ commits or of any being developed
Q3. Who ensures mitigation reqts are incorp into contracts?	Approp. PDT POC	Proj Coord/PM	Approp. PDTPOC	Approp. PDTPOC	D5 Constructn Liaison	Approp. PDTPOC; Const. Liaison	Approp. PDT POC	Cult/Env Staff upon PS&E rev	Approp. PDT POC
Q4. How are ECs conveyed to contractor?	PS&Es	Preconst mtgs/prmt copies to Contractr	RE- conveys commits to contractor	Coord. w/RE, contr. & inspectors. Pre-const mtgs/const kickoff	PS&Es; Pre const mtgs/const kickoff.	SSPs; nSSPs; Pre-const mtgs; RE informs contractor verbally	Verbally and in writing.	Pre-const mtgs; Redbook; special provisions ; project inspection	PS&Es; special provisions ; RE Pending file; pre-const mtg
Q5. Aware of any commitments not being met?	Yes	Yes- infeasible timeframe contractr issues.	No. Action plan outlines commits.	Const. Monitoring an issue. Need better commun.	No-Don't commit to things we can't do.	Yes. during design/con st phase; footprint chgs, new elements...	No	Yes- late design changes resulted in new imp	Yes- const. phase mods/nite work.



<p>Q6. Actions taken if contractor not in compliance?</p>	<p>RE can retain 25% funds to ensure compl.</p>	<p>Inform RE/Const mgmt/env.mgmt. Pos. work stoppage.</p>	<p>Staff can halt const. Const liaisons help to avoid probs.</p>	<p>Inform RE/Const mgmt/env.mgmt. Pos. work stoppage.</p>	<p>Mtgw/RE to doc issue. Const halted. Coord w/Res Ags</p>	<p>Mtg w/RE to doc issue. Const halted. Coord w/Res Ags</p>	<p>Mtgs w/RE to doc issue. Const halted til reqts met</p>	<p>Notify RE and/or his supervisor</p>	<p>Coord. w/RE; inspector; contractor poss. Work stoppage.</p>
<p>Q7. Examples of ECR pros/cons?</p>	<p>PAM-mixed reviews. Need follow-up.</p>	<p>Better comm w/ division &amp; staff. Improve document and report follow up.</p>	<p>Changes in project design complicate mitigation process with decision doc in place.</p>	<p>Pre-const mtgs effective. IT database good "reminder". LT funding a issue. EAs closes w/unfinished reqts.</p>	<p>No</p>	<p>Environmental liaison enhances commun bet. CT, and contractor. Env Const. Maint, Mit, Mon (CM3) re-established in Env Plng Div; develop ECR database linked to D8 "Env. Database".</p>	<p>N/A</p>	<p>Currently, process isn't working&gt;&gt; not being applied. Improvement needed. Mgmt should instr use of MMRR; training needed.</p>	<p>Draft MMP after PA&amp;ED so that by PS&amp;E, commits are located in one doc and submitted to various functional units invld in des pkg</p>
<p>Q8. Unique processes to address ESA/NHPA commitments?</p>	<p>Yes-FTE Bio. Monitor</p>	<p>36CFR800. dispute res for adverse effects and MOAs. Recovery mit "removal"</p>	<p>IT database allows for tracking of mit/commit and status</p>	<p>Early coord w/NA community. Develop mechs for participation</p>	<p>Not specific</p>	<p>Not specific</p>	<p>Include commits reqts in construct plans</p>	<p>None identified</p>	<p>Use of Program Agreement; Enables compl. w/shorter review periods.</p>

Q9. Unique/difficult issues related to ESA/NHPA commitments?	Yes-S.7 process; basis for mitigation	Encroachment violations, reconcile arch/native values of cultural sites	Dealing with design changes. Reopening S.106 with a new MOAs as one solution	Project design changes requiring suppl. Cult studies and commit mods. Proj delays.	Old projects subject to commitments becoming outdated. loss of institutional knowledge	Not specific; Follows NHPA resolution procedures; as well as coord. With res. Ags.	Not aware of any.	Funding constraint due to mit assoc with discoveries during construction.	Some rare, none unique. Funding issues - lack of funding for env. Desp est. provided in advance.
Q10. Estimated costs for mitigating different habitat types?	\$500K/ac wetlands \$17K/ac CRLF/TS MB; \$420K/ac upland/transitional	Costs vary.	Not avail.	Costs vary.	Landscape Architect determines costs for mitigation. Range in cost from \$100K to \$300K/acre	\$3K-\$7K/acre for mitigation habitat present in district	Don't know	N/A	N/A

# ATTACHMENT C

## DISTRICT SITE VISIT MEETING MINUTES

**Environmental Commitments Compliance Process Review**  
**April 17, 2007, 1:00 p.m. meeting**  
**Caltrans D2 Office**  
**1657 Riverside Drive**  
**Redding, CA**

In attendance:

Caltrans		FHWA
District 2	HQ	Dave Tedrick
Tom Balkow	Greg King	Steve Healow
Chris Azzari	Amy Pettler	
Chris Quiney		
Beth Bennett (arche.)		
Sharon Stacey (bio.)		
Cassandra Hensher (DNAC)		

In D2 environmental commitments, permits, contract requirements are compiled in the 'Red Book' (1 per project). This practice has been in effect since 2004, which pre-dates the Rick Land memo. The Red Book is merely a record of existing commitments, not a record of completed mitigation measures. Environmental commitments incorporated into capital projects are listed in the Project Study Report. D2 maintains all their project files within the P Drive (shared server).

In the North Region, environmental commitments are monitored by Carolyn Brown from the Stewardship Branch (3-4 years old) in the D3 Marysville office.

After 1.5 years of pro-active development, in cooperation with resource agencies, D2 has established the Toomes Creek Mitigation Area. Terms of the agreement include ongoing monitoring (10 years) and research (e.g. dust).

After Caltrans assumes NEPA responsibilities, it is anticipated there will be more recordation. The challenge to the Districts is to avoid duplication.

USACE has made the Habitat Mitigation and Monitoring Plan a permit condition.

There is good communication between PM, Construction and Environmental. Construction liaison has adequate support. PM supports and provides fiscal mechanism (EA) for environmental commitments to be met.

Recommendations:

1. Ms. Bennett noted the on-site monitors frequently change from day to day. To maintain consistency among monitors Ms. Bennett delivers a standard briefing to each new monitor.
2. A suggestion was made to stagger mitigation monitoring plan (MMP) timing so there is adequate staff to complete review of MMPs/annual monitoring reports – typically prepared in-house.

3. Another suggestion to increase programmatic streamlining coordination was to facilitate rotational assignments between CT and resource agencies (i.e. SHPO>CT, etc.)

The meeting adjourned approx. 3:30 p.m.

### SITE VISITS

Dye Creek Bridge (#8-162)  
02-TEH-99, PM 16.6  
02-295920

During project development phase there was formal consultation for VELB and Central Valley Spring Run Chinook and Steelhead.

There were two eligible historic sites: CA-Teh-303 and CA-Teh-305. A treatment plan and MOA were processed to resolve adverse effects. The CatEx was signed by Gary Sweeten on 2/17/04.

Our team visited the project site on Wed. (4/18/07) and 9:30 a.m. The bridge replacement project was completed in one season. Dye Creek is an ephemeral stream. At the time of this visit there were a few remaining ponds, but the creek bed was mostly dry. Prior to demolition a detour bridge was constructed on the downstream side of the old bridge. After the replacement bridge was constructed and traffic shifted back to the mainline the detour bridge was removed. Construction ended approx. Oct. 2006.

Rock slope protection is evident on both banks vicinity of the project.

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Toomes Creek Bridge  
02-TEH-99, PM 8.4

During project development there was formal consultation for VELB and Central Valley spring run and fall/late fall run Chinook. An MOA and treatment plan were prepared to mitigate for adverse effects to historic site CA-TEH-34. The CatEx was signed June 23, 2004 by Leland Dong.

Construction was nearly complete on the replacement Toomes Creek Bridge at the time of this visit (10:00 a.m. on 4/18/2007). The replacement 4-span bridge is immediately upstream of the 18 span 1917 bridge. There was low flow in Toomes Creek (e.g. 10 cubic feet per second) at the time of this visit.

The Toomes Creek Mitigation Area is on 80 acres immediately southeast of the new bridge. Caltrans paid \$600k to purchase the site in 2002 to mitigate for future projects by creating VELB habitat and preserving riparian habitat. So far the site has been used to mitigate for eight projects.

**Environmental Commitments Compliance Process Review**  
**May 3, 2007, 10:00 a.m. meeting**  
**Caltrans D4 Office**  
**Oakland, CA**

In attendance:

Caltrans		FHWA
District 4	HQ	Dave Tedrick
Jennifer Darcangelo	Greg King	Joe Vaughn
Thad VanBueren		Steve Healow
Mary K. Smith		

The District 4 site visit involved only cultural resources staff.

District 4 tracks cultural resource (CR) requirements using an excel database managed by a CR senior. Project managers and project level staff manage the actual commitments made and provide the mitigation senior with the updates. This database is located on a server and accessible to only cultural resources staff. Data sources include Memorandums of Agreement (MOAs), project correspondence, and completed reports. A hardcopy file room is gradually being converted to digital format.

District 4 does not use a construction liaison for projects in the construction phase. Instead, the project leads are responsible for ensuring compliance with mitigation requirements. PS&E reviews occur at 65% and 95% completion and include environmental commitments but not cultural resources elements. This is a gap.

Generalists and environmental planners use the Permits, Mitigation, and Agreements form (PAM) and input data received from the other environmental sections. Although the PAM has been in existence for about 5 years, there is no central database. It appears the various environmental sections work within their own stovepipes and relay data to the environmental planner to update the PAM. Jennifer suggested that better coordination with PAM would be useful.

All environmental commitments are made prior to PA&ED. Once the project goes to construction, a significant amount of monitoring is performed by consultants.

It was suggested that cross-training for design engineers on environmental requirements would be helpful in facilitating better communication/coordination between engineering and environmental. This could help to raise environmental commitment awareness and help to support long-term funding mechanisms. EAD staffer Joe Mihelarakis has developed an environmental short course for engineers.

ADCOM – District Advisory Committee (?). Would be helpful for PMs to have checklists of requirements to complete prior to closeout of EA. On larger projects (i.e. SFBB) an annual report of environmental commitments is prepared which includes yearly strategies to complete requirements.

Jennifer indicated that there is sufficient cultural resource staff to handle workload. There are (just barely) enough architectural historians on staff. Jennifer has access to more money for mitigation, if needed.

Overall Environmental Analysis Department (EAD) findings:

- Needs better communication within Department
- Lots of new staff
- “Legacy of anti-mitigation position”
- No EAD staff meetings

A recommendation was made to include cross-references in the SER between requirements of Design, Construction and Environmental Issues.

There have been improvements at scoping projects over the past few years; the side benefit is fewer surprises.

For Local Assistance projects, although they don't have their own cultural resource staff, they do coordinate with Jennifer's staff. There is one point person for tracking environmental commitments for LA projects (Brett Rushing).

#### Projects:

1. Carquinez Bridge Replacement  
04-Sol-80  
04-013091

Pursuant to the Caltrans seismic retrofit initiative, the 1927 Carquinez Bridge was replaced, rather than retrofitted, as the more cost effective alternative. The new replacement suspension span, a.k.a. Alfred Zampa Memorial bridge, was opened to traffic in Nov. 2003 at a cost of \$500M.

Coordination for this MOA began in 1994. The MOA was executed in May 2000 and included mitigation for the removal of the 1927 Carquinez Bridge. A joint museum exhibit (with SFOBB East Span) is being prepared for the Oakland Museum. In addition, specific elements (i.e. large sections of structural members and bridge railing) from the bridge will be relocated to vista points at each end of the bridge. The vista points are expected to be completed NLT Dec. 2007.

2. Central Freeway Replacement Project  
04-SF-101  
04-291001

San Francisco's U.S. 101 Central Freeway was partly damaged by the 1989 Loma Prieta earthquake. A Caltrans project to seismically retrofit the freeway began in July of 1988. After the earthquake the project scope was expanded to re-configure with an elevated structure south of Market Street and a ground-level boulevard on Octavia Street between Market and Fell Streets. The ultimate project was opened to traffic in Sept. 2005.

Archaeological research design and treatment plan associated with this project were the subject of long-term negotiations between CTD4 and SHPO from 1998 through 2003. Identification, evaluation and treatment of potential historic properties within the project APE was complicated because subsurface testing prior to project implementation was not possible. Eventually SHPO concurred with the compressed strategy and 'no adverse effect' finding proposed by CTD4, pursuant to the Seismic Retrofit PA. Ultimately four eligible sites were subject to data recovery.



Environmental Commitments Compliance Process Review  
 May 8, 2007, 9:00 a.m. meeting  
 Caltrans D5 Office  
 1150 Laurel Ln.  
 San Luis Obispo, CA

In attendance:

Caltrans		FHWA
District 5	HQ	Dave Tedrick
John Luchetta	Greg King	Joseph Vaughn
Julie McGuigan	Amy Pettler	
Dave Hacker		
Val Levulett		
Cecilia Boudreau		

The generalist for each project enters into Filemaker Pro (FMP) all information pertaining to environmental commitments and permit requirements. This information can be found under the mitigation monitoring reporting record (MMRR). This MMRR is available to the Construction Liaison and others within the Central region. The Construction Liaison is a dedicated position, not a collateral duty.

The construction liaison reviews the construction contract and the PSE package in conjunction with the information that is identified in FMP. The Liaison determines what the environmental commitments are and the permits required. Per consultations with the technical specialist the liaison assures that the ECR are carried forward into the PSE package and memos to file to the resident engineer.

Preconstruction meetings also occur and are routine for cultural and bio.

Increasing issues of minor projects requiring five year monitoring reports. Given the focus on project delivery, the expenditure authorization (EA) account for each project are typically closed too soon to allow for this extended monitoring. Revisiting/reopening the EA to allow for this is the only mechanism used to facilitate this monitoring. In addition, contingency measures are also an issue. How is the failure of required plantings, for example, carried forward?

Recently initiated an annual review of EAs to determine if this reopening is required.

There is a separate local assistance section within District 5 with separate technical elements (for example, for bio, cultural). Here, a detailed list of environmental commitments are prepared. Currently, Caltrans is requesting copies of all regulatory agency permits from the local agencies. These permit conditions are then entered into the FMP. This section benefits from a very experienced staff, with an excellent understanding of regional issues.

**Project Discussions:**

SLO-46 Corridor Improvement Project

This project converts a two-lane conventional highway into a four lane expressway and is over twenty miles in length. It will be built in several phases over the next 15-20 years with the first phase breaking ground in late 2007/early 2008. An EIR/FONSI was completed in May 2006. Biological resources affected include blue oak woodlands, vernal pool fairy shrimp, Red-legged frog, California tiger salamander and San Joaquin kit fox. There are also impacts to waters of the U.S. and wetlands. Extensive design revisions minimized or avoided impacts to many of the resources. Cultural resources include the James Dean Memorial near Cholame and several prehistoric archaeological sites. Although none of these sites are being affected by this project due to a flexible design, there is the potential for a buried prehistoric site to be impacted during construction.

Utilized extensive use of GIS databases to minimize environmental impacts. Environmental monitor is a funded position—permanent PY. This is a unique requirement—attempt to better the process.

#### SLO-1 Rocks Realignment

This project was built in 2002 and addressed an emergency situation where the Pacific Ocean continues to erode the coastline and threaten Highway 1. It constructed two inland detours while a much larger realignment is working its way through the project development process and is expected to be built in 2012. A Negative Declaration/CE was completed in March 2002.

The project impacted native grasslands, Compact cobweb thistle, Red legged frogs, waters of the U.S. and wetlands. There were also three prehistoric sites located in the vicinity that were impacted. None of the sites were eligible for listing on the National Register.

Effective in house mitigation and monitoring took place. Extensive effort made to relocate/reestablish California Oatgrass Grassland.

#### Recommendations:

Environmental commitments need own slush fund—i.e. an open/revolving account that would be available to address such things as unanticipated contingencies.

More use of banking mechanisms would help facilitate long range planning for commitments and provide flexibility for commitments.

ECR requirements need to be elevated to the same level as deliverable milestones.

**Environmental Commitments Compliance Process Review**  
**May 1-2, 2007**  
**Caltrans D-11 Office**  
**4050 Taylor St.**  
**San Diego, CA 92110**

In attendance:

Caltrans		FHWA
District 11	HQ	Larry Vinzant
Suzanne Glasgow	Greg King	Steve Healow
Bruce April (bio.)	Amy Pettler	
Kevin Hovey		
Marty Rosen (cultural)		
David Nagy		

SR125 (South)

11-SD-125, PM 0.0/11.2

The FEIS for this project was approved in January 2000. This 11.2-mile freeway on new alignment runs from Route 905 (Otay Mesa Road) on Otay Mesa to State Route 54 in Bonita/Spring Valley and consists of three sections identified as the Gap, the Connector and the Toll Road, each with separate funding. The ultimate project, from Olympic Parkway to SR-54 would consist of up to eight mixed-flow lanes and a median wide enough to accommodate two HOV lanes or transit. From Otay Mesa Road to Olympic Parkway, the project would consist of six mixed-flow lanes and a wide median to accommodate two possible HOV lanes or transit.

The SR 125 (South) is nearing completion as a private toll road in a partnership effort with South Bay Expressway. The project had 8 HPSRs. Field work/surveys began in 1988. There are numerous archaeological sites, particularly along the Otay River (other sites are identified as Eucalyptus Site and Salt Creek Site). Historical sites include the Grant House, Bellinger House and Sweetwater Dam. The Otay River Valley, now spanned by a bridge, contained a native village as recently as 800 years ago, inhabited by hunter-gatherers. The area has been intensively investigated by McGowan. A management plan was written to establish proper methodology for treating archaeological sites on the Otay Mesa. Once the design/build contract was let, a sub-contractor (EDAW) was hired to monitor mitigation. Through most of the construction EDAW kept two full-time monitors on site. Additional measures included a kick-off meeting and a four-hour training course for construction workers. The environmental commitments compliance team met weekly. EDAW prepares monthly reports to Caltrans and resource agencies. District 11 Environmental Stewardship Branch includes a construction liaison (Lauren Kemp ) to ensure mitigation measures from permits, B.O.s, NEPA documents are written correctly into the ECR and contract documents. This liaison position has been in place since the 1980s and is associated with all District 11 projects. Bruce April emphasized that he believed that the position is better suited for an engineer who will coordinate with specialists.

I-15 Managed Lanes Project (SR 163 to Ted Williams Parkway)  
11-SD-15, PM 10.7/31.8

Design sequencing was used for this project which is divided up into the North, Middle and South segments; the Middle segment is currently under construction. Kick-off meetings, formation of a Civilian Advisory Committee and weekly Critical Job Meetings with reports were integral parts of the project implementation and execution.

Three separate nationwide permits were required for the project.

Mitigation Sites

A number of mitigation sites were visited. Habitat mitigation sites were acquired/enhanced for these two projects plus S.R. 905. The combination of these sites for S.R. 125 mitigation was accepted as an Exemplary Ecosystem Initiative in 2006.

A field visit was conducted to the bridge over Lake Hodges (PM 26.5). The work platform under the bridge is temporary fill 10'-12' deep. Dense swallow nesting was noted on completed portions of the roadway. Netting appears to be successful in the area still under construction.

The field visit continued with a visit to the Forrester Creek Mitigation Site, established in 2006 for I-15 and SR52 projects. 125,000 CY of fill was borrowed from this 20-acre site for a nearby interchange project. The site resembles a detention basin and plant establishment is going well. There will be four more years of monitoring and the site looks quite successful after only one year. There is an archaeological site present, however, two surveys, including a subsurface remote survey revealed on non-significant debiting.

Bonita Meadows is an 11-acre mitigation site for SR905, I-15 and SR125 projects. Activities thus far include grading, planting, weeding, hydroseeding for tarplant, coastal sage scrub and grasses. Cuttings and container plants are also included. There are heavy clay soils to contend with. All the site lacks is an owner-manager.

Rancho Jamul Mitigation Bank.

Sweetwater River and Otay River Bridges.

Johnson Canyon. Efforts are being made to reconstruct the mima mound/vernal pool topography in the area. The site had burrowing owls nesting in artificial dens and is slated to have captive-born Quino butterflies transplanted to the site. Extensive efforts are also underway to recreate cactus-dominated habitat.

We also visually inspected the Grant House, Bellinger House and the Sweetwater Dam.

Findings

The MMRR, which has been subsequently renamed as an ECR, is sometimes not kept up-to-date. District 11 is adapting this to web-based information set to facilitate monitoring.

Contractor training is an important part of implementing projects.

At least for S.R. 125, the management ladder is from the contractor (EDAW) to Caltrans to the Resident Engineer. The resident engineer is responsible for taking any necessary action.

The Construction Liaison is a very important position in implementing and assuring success of mitigation measures.

A “couple” of contractor violations were identified on the S.R. 125 project. As with other minor violations, these are noted and a non-compliance report may or may not be written. However, there is some documentation (e.g., email), but this may not be included in the hard file copy.

At least for S.R. 125, South Bay Expressway let a contract without input from Caltrans. One oversight of this contract was that there was no provision for curation of archaeological finds. This issue may have been resolved.

Mitigation tracking is not shared with Caltrans HQ.

Recommendations:

Project protocols (e.g., contractor training, civilian advisory committees, environmental compliance meetings/reports, etc.) should be maintained and standardized.

The position of Construction Liaison should be adopted by other Caltrans districts and should be filled by an engineer with direct and constant contact with project specialists.

All violations should be documented in the hard file copy.

Caltrans HQ should be an integral player in contract provisions and mitigation monitoring, compliance and success.