

San Joaquin Hills  
Corridor Agency

Chairman:  
Jim Dahl  
San Clemente



**TRANSPORTATION CORRIDOR AGENCIES**

Foothill/Eastern  
Corridor Agency

Chairman:  
Lance MacLean  
Mission Viejo

April 15, 2008

Thomas H. Magness  
Colonel, US Army  
District Commander  
Los Angeles District  
U.S. Army Corps of Engineers  
915 Wilshire Boulevard, Suite 1550  
Los Angeles, CA 90017

Dear Colonel Magness:

This letter and its attachment respond to your April 7, 2008 letter to Mr. Thomas Street of the National Oceanic and Atmospheric Administration ("April 7 Letter"). The Foothill/Eastern Transportation Corridor Agency respectfully requests that you issue a clarification of the April 7 Letter that corrects the record regarding the federal environmental process for the State Route 241 project ("Project") that resulted in the identification of the preliminary Least Environmentally Damaging Practicable Alternative by the Corps of Engineers and by the U.S. Environmental Protection Agency. (See preliminary LEDPA letters, **Attachment A**).

We understand that you intended the April 7 Letter to indicate that the Corps of Engineers has not made a final permit decision concerning the Project. Unfortunately, the April 7 Letter contains serious misstatements concerning the nine year, \$20 million collaborative federal-state environmental review process undertaken for the extension of State Route 241. As a result, the Letter has created significant misunderstandings in the press and the public regarding the determinations of the Corps of Engineers and the other federal and state agency participants in the Collaborative. It is critical that the Corps of Engineers correct the record in this matter.

As you have acknowledged, this innovative federal-state agency Collaborative process resulted in the identification of the "Green Alignment" as the preliminary Least Environmentally Damaging Practicable Alternative ("LEDPA") by the Corps of Engineers and by the U.S. Environmental Protection Agency in Fall 2005. This was a key concurrence point in the Collaborative process and reflected many years of professional and detailed work by the representatives of the state and federal agencies, including the evaluation of over thirty Project alternatives.

I have attached a detailed description of the federal-state environmental process regarding the Project that resulted in the identification of the Green Alignment as the preliminary LEDPA and in the selection of this alternative by the Board of Directors of the Foothill/Eastern

*Thomas E. Margro, Chief Executive Officer*

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Transportation Corridor Agency. The attachment corrects the record regarding a number of statements in the April 7 Letter and provides appropriate citations to the formal meeting minutes of the Collaborative process and to other documents generated in the course of the federal and state agency evaluation of the Project.

We are committed to continuing to work with the Corps of Engineers and the other members of the federal and state Collaborative to complete the federal environmental process for the Project to improve mobility for all Californians and to avoid, minimize and mitigate impacts to the human and the natural environment.

Very truly yours,

**TRANSPORTATION CORRIDOR AGENCIES**

  
Thomas E. Margro  
Chief Executive Officer  
Transportation Corridor Agencies

**The Federal and State Collaborative Process Concerning  
State Route 241 Project**

**The Memorandum of Understanding National Environmental Policy Act and Clean Water Act Section 404 Integration Process for Surface Transportation Projects in Arizona, California and Nevada**

The federal and state agencies conducted the Collaborative process in accordance with the formal Memorandum of Understanding National Environmental Policy Act and Clean Water Act Section 404 Integration Process for Surface Transportation Projects in Arizona, California and Nevada ("NEPA/404 MOU"). (**Attachment B**).

The fundamental purpose of the NEPA/404 MOU is to integrate the Corps' Clean Water Act section 404 evaluations of transportation projects into the Federal Highway Administration ("FHWA") NEPA process. The Corps and the other federal signatories to the NEPA/404 MOU agreed to the process set out in the MOU to (1) insure that the Corps' section 404 regulatory issues are addressed in the Environmental Impact Statement ("EIS"), and (2) to provide the Corps an early and central role in the identification of a preferred alternative that will comply with the Corps' regulatory requirements under section 404 of the Clean Water Act. The NEPA/404 MOU does this by committing all of the agencies to a rigorous step-by-step definition of the Project purpose and need, the identification of a reasonable range of alternatives for evaluation in the EIS, identification by the Corps of a LEDPA, and agreement on mitigation measures.

The NEPA/404 MOU represents a formal commitment by the Corps and the other federal agencies to a rigorous process that is intended to result in the identification of a project alternative that satisfies applicable federal environmental requirements – including specifically compliance with the requirements of the section 404 of the Clean Water Act.

As dramatic evidence of the extensive and detailed nature of the Collaborative evaluation of the Project, our agencies have now worked closely together for nearly nine years on the Project, along with 5 other state and federal agencies. While all parties understood that the federal agencies in the Collaborative could only make a final decision on the Project after FHWA's approval of the Final EIS, the clear understanding of all of the parties (and the clear intent of the NEPA/404 MOU) is that the Collaborative agencies will respect the incremental determinations on the Project reached through the course of the Collaborative process and the NEPA process in general.

By following this accepted procedure, the requirements of the two processes (404 and NEPA) are integrated and the information necessary for both is developed early on. Most importantly, the steps are set up so that, upon concurrence and providing the necessary information at a specific decision point, the project "may proceed to the next stage without modification." The Corps, Environmental Protection Agency ("EPA") and United States Fish and Wildlife Service

("USFWS") are given a central role in the FHWA NEPA process. In particular, the MOU allows for the Corps to concur in various determinations in the NEPA process with the express understanding that the agencies "agree not to revisit previous concurrences unless there is significant new information."

The Corps and EPA reiterated the goals of the SOCTIIP Collaborative in a White Paper prepared by the Corps of Engineers in consultation with EPA, February 2004. (**Attachment C**).

"Achieving concurrence at each of these checkpoints is intended to streamline the environmental evaluation processes by providing a higher degree of assurance that substantive issues identified by resource and regulatory agencies under their respective statutory purviews are addressed within an appropriate and timely manner such that they will not be revisited later in the process."

### **The SOCTIIP Collaborative**

The SOCTIIP Collaborative members are representatives of FHWA, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, USFWS and California Department of Transportation ("Caltrans"). The TCA participated as the lead agency for the Project under the California Environmental Quality Act. The U.S. Marine Corps also participated actively in the Collaborative with regard to issues relevant to the U.S. Marine Corps Base at Camp Pendleton.

The Mission Statement agreed to by the Corps and the other members identified the primary goals of the Collaborative as: 1) develop criteria to be used in the NEPA/Section 404 processes to evaluate project alternatives, and 2) select alternatives to be evaluated in the environmental review process. As part of the first goal, the Collaborative developed and concurred on a Purpose and Need Statement. At the end of Phase I, in May and June 2000, the Collaborative concurred in writing on the conceptual project alternatives. The members also ratified the proceedings of Phase I and affirmed their commitment to, and support for, the ongoing collaborative NEPA/Section 404 integration process.

The Collaborative then agreed to convene Phase II. While the Collaborative time period is often referred to as a six-year process, that period reflects the time from when the initial work began in 1999 through the selection of the preliminary LEDPA by the Corps and EPA in August 2005. Since the process is still ongoing, and the Collaborative met as recently as March 24, 2008, the SOCTIIP Collaborative is approaching its ninth year.

### **Preferred Alternative/Least Environmentally Damaging Practicable Alternative**

The Collaborative carefully followed the process described in the NEPA/404 MOU for the identification of a preferred alternative that would also qualify as the LEDPA for the purposes of section 404 of the Clean Water Act. As the MOU makes clear, once the Corps and EPA identify the preliminary LEDPA, the agencies should not reconsider the identification unless there is new information or changes to the Project that require a reconsideration. While the Collaborative members understood that no decision under the MOU could be "final" prior to the approval of the Final EIS and the issuance of the records of decision, it was understood clearly that once the Corps and EPA identified the preliminary LEDPA, FHWA and the TCA would include the

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preliminary LEDPA as the proposed Project alternative in the final NEPA and CEQA documents.

This is exactly what occurred during the Collaborative. The Corps and other Collaborative members 1) agreed on alternatives to be evaluated; 2) refined the alternatives for detailed evaluation, 3) agreed on criteria to use for identification of the LEDPA and 4) agreed that the Green Alignment should be identified in the Final EIS as the LEDPA.

We take exception to your assertion that some of the statements made in the TCA's Coastal Zone Management Act appeal are false. The Corps misinterpreted text in the TCA's appeal regarding the standards that are applied by the Secretary of Commerce under the Coastal Zone Management Act. The Coastal Zone Management Act establishes standards applicable to an override decision by the Secretary of Commerce that are similar to, but also different from, standards applicable to the Corps under section 404. For example, the section 404 regulations and guidelines refer to "practicable" alternatives while the CZMA regulations refer to "reasonable and available" alternatives. The decisions of the Secretary of Commerce under the CZMA make it clear that that an alternative that is "practicable" for the purposes of section 404 may nonetheless NOT BE "reasonable and available" as those terms have been defined under the CZMA. It is unfortunate that the author of the April 7 Letter did not appreciate the differences in the definitions of these terms under section 404 and under the CZMA.

The larger point reflected in the TCA's brief is that lengthy, multi-decade evaluation of the Project under state and federal law has demonstrated that the alternative identified by the Collaborative agencies is environmentally preferable and that other alternatives (such as the widening of Interstate 5) are not "reasonable and available" because (1) the alternatives entail more severe impacts on the human or natural environment, and (2) there is no identified funding for the non-toll road alternatives.

In addition to establishing the "Purpose and Need" during Phase I, hundreds of alternatives were evaluated and ultimately narrowed down to the 24, which underwent detailed technical review during Phase II. Upon completion of the technical studies, the Collaborative jointly agreed on reducing the 24 alternatives to the eight that were included in the Draft EIS/SEIR.

To assist in the elimination process, and as suggested by the Corps and EPA, matrices were developed using a "multi-dimensional evaluation approach" (**Attachment D**), which assisted in identifying alternatives that the Corps could use to select the LEDPA. This evaluation method was so highly regarded by the Collaborative, that during the April 19, 2004 meeting, the Corps' representative expressed such overall satisfaction and appreciation of TCA utilizing the matrix, they were quoted as saying "Hats off to TCA" (**Attachment E**).

From these final eight alternatives the "preliminary LEDPA" was selected and this selection was documented in the Corp letter dated November 1, 2005, in which the Corps states, "...we offer our agreement that the A7C-FEC-M is the 'preliminary' LEDPA" (refer to Attachment A).

On page 5 of your letter, you indicate that the Corps and the Collaborative identified several "practicable" alternatives for evaluation in the Draft EIS. To be clear on this point, in its Coastal Zone Management Act appeal brief the TCA never claimed that there were no other practicable alternatives. As was confirmed by the Collaborative, however, all of the other "practicable" alternatives would result in greater environmental impacts than the alternative identified by the Corps and by the EPA as the preliminary LEDPA.

During the SOCTIIP Collaborative, and as identified in the joint Corps and EPA letter, dated August 12, 2004, it was agreed that the LEDPA would be determined through a two-step process (**Attachment F**). The two sequential steps included: 1) first identify alternatives that are impracticable; 2) and then from what remains as practicable alternatives, identify the one that would result in the least overall environmental harm. Practicability by Corps regulation is defined as *available and capable of being done after taking into consideration costs, logistics, and existing technology in light of the overall project purposes*. By applying these criteria to the final eight alternatives included in the Draft EIS/SEIR the Collaborative found the Interstate 5 Widening and Arterial Improvements Only alternatives to be impracticable.

The remaining six alternatives were deemed practicable and carried to the second step of the process. Of the remaining six, only one was deemed to be the least environmentally damaging and thus the Green Alignment was selected as the "preliminary" LEDPA.

#### **Separation of California Environmental Quality Act and NEPA Final Documents**

The April 7 Letter asserts that when TCA allowed the Final Subsequent Environmental Impact Report ("SEIR") to proceed in advance of the Final EIS, the Corps claims "staff had no prior knowledge or input on this action taken by the TCA Board of Directors." These comments in the April 7 Letter are contradicted by the official minutes of the Collaborative meetings. The comment in the April 7 Letter also does not accurately reflect the process and do not acknowledge the valid reasons why this procedure was followed. In fact, there was no other way that the process could proceed, as explained below.

The Collaborative was well aware that TCA was going to certify the EIR prior to the finalization of the EIS. The Collaborative meeting summary of December 13, 2004 (**Attachment G**) states the "Collaborative will participate in discussion on the preliminary Preferred Alternative/LEDPA to give a general direction to TCA prior to TCA's Board taking action on the Preferred Alternative." At the same meeting, it was stated that TCA would circulate responses to comments to the commenters **before TCA takes action on the EIR** (emphasis added).

The Collaborative was also provided with draft responses to their comments on the Draft EIS/SEIR, along with responses to other substantive comments, in December 2004. "The Collaborative agencies agreed that they would consider receipt of the response to their comments ... sufficient for them to proceed with their next steps." (December 13, 2004 Collaborative Meeting Summary). Thus, the Corps, along with the federal resource agencies, agreed they had the information needed to move forward.

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There were several reasons why the EIR was certified in advance of the Final EIS. Council on Environmental Quality and FHWA regulations require that the Final EIS describe the preferred alternative. (40 C.F.R. section 1502.14(e); 23 C.F.R. section 771.125(a)). In practice, FHWA also requires that the Final EIS include a focused discussion of the impacts of that alternative. In order to focus the Final EIS on the preferred alternative, the preferred alternative must be identified and the applicant must take whatever internal action is required to designate that alternative as its preferred alternative. TCA staff cannot take such a step without action by its Board of Directors. Under the California Environmental Quality Act ("CEQA"), the Board cannot take an action such as selecting a preferred alternative, without first completing the CEQA process. In this case, that required that the EIR be certified first. Cal.Pub.Resources Code, § 21061.

Again, this was not a surprise to the Collaborative, and is common practice for joint state/federal documents. As to the statement in your letter about the implication relative to the unanimous recommendations of the Collaborative, it is TCA's understanding, as supported by the Collaborative meeting summaries, that the Collaborative members were unanimous in their support for the designation of the Green Alignment as the preferred alternative/preliminary LEDPA.

As stated in the agency's letters on the LEDPA, (Corps, November 1, 2005; EPA, November 8, 2005; USFWS, September 30, 2005) this was with the full understanding that the Corps had not completed its process for the 404 permit and USFWS had not completed the Section 7 consultation (refer to Attachment A). The statement in the TCA's Coastal Zone Management Act brief that the selection of the Green Alternative by the TCA Board of Directors reflected the unanimous recommendation of the Collaborative is accurate. As reflected in the minutes of the Collaborative meetings NONE of the Collaborative members disputed the identification of the Green Alignment as the preferred alternative by the TCA. ALL of the Collaborative members understood clearly that, after the Corps and EPA preliminary LEDPA identification, the TCA would recommend to its Board of Directors that it approve the Green Alignment and that the TCA would then initiate the process of applying for permits (including processing a Coastal Zone Management Act Consistency Certification) premised on the Green Alignment.

In fact, there was discussion among the Collaborative members that "Section 7 consultation is conducted on a particular alternative" and that "it is necessary and advisable for TCA to move forward with Section 7 consultation by identifying an alternative." Collaborative Meeting Summary of December 13, 2004 - "The Collaborative agreed that TCA and FHWA should identify an alternative for the purpose of initiating Section 7 consultation (refer to Attachment G). Then, in February, 2005, the Collaborative was informed that the Biological Assessment would "include the green alignment as the preferred alternative". (**Attachment H**).

In summary on this issue, the Collaborative was informed that the TCA Board would certify the EIR prior to the issuance of a Final EIS. The Collaborative was also informed and was in agreement that TCA identify the Green Alignment as the TCA's Preferred Alternative to initiate Section 7, and ultimately allowing the EPA and the Corps to identify the preliminary LEDPA. During the November 8, 2006 Collaborative meeting, EPA and the Corps again reconfirmed

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their acceptance of the preliminary LEDPA determinations made one year earlier (**Attachment I**).

**Actions of the TCA and the Collaborative Since the Identification of the Preliminary LEDPA by the Corps and U.S. EPA**

Since the November 2005 preliminary LEDPA determination made by the Corps, TCA staff has continued project coordination with your office, specifically Susan Meyer. E-mail exchanges support TCA's contention that we have remained in contact and continued to provide updated project information. In an e-mail dated February 27, 2006, only three months after the preliminary LEDPA letter was issued from your office, TCA transmitted the draft Public Notice and the draft 404(b)(1) Alternatives Analysis to Susan Meyer of your office. On March 13, 2006, TCA staff sent a follow-up e-mail to Susan Meyer requesting a status update of her review, which Susan replied that she was still reviewing the documents provided to her by TCA. Susan also commented that "due to workload issues, (she) can't make any promises on an exact date for providing more detailed comments (if any at all)..." (**Attachment J**).

Subsequent to these e-mails, additional correspondence between TCA and the Corps included a March 28, 2006 e-mail confirmation of GIS data received by Susan Meyer. (**Attachment K**).

In August 2006, the TCA notified the Corps that it had submitted its 401 application to the San Diego Regional Water Quality Control Board (RWQCB) and participated in coordinating the exchange of Project information between the Corps and staff from the RWQCB. In this same e-mail exchange between TCA staff and Susan Meyer there was reference made to the upcoming Collaborative meeting. Additional e-mails regarding the 401 submittal between TCA and Corps staff occurred on September 6, 2006. (**Attachment L**).

On September 7, 2006, TCA and Corps staff communicated about potential conceptual mitigation for wetland impacts (**Attachment M**). These discussions continued and ultimately assisted the TCA prepare draft mitigation plans.

On October 23 and November 3, 2006, e-mails addressed to the Collaborative members confirming the Agenda for the upcoming November 8, 2006 meeting. Susan Meyer was listed on the distribution list for this meeting agenda and submitted comments on the meeting minutes. (**Attachment N**).

Correspondence with the Corps continued after the November 2006 meeting, which included the transmittal of Project documents. These documents included the draft Environmental Assessment, which was submitted via e-mail to Susan Meyer on January 22, 2007. (**Attachment O**). On April 4, 2007, TCA forwarded to Susan Meyer a copy of the draft Conceptual Habitat Mitigation and Monitoring Plan for the Project. A copy was also provided during this same transmittal to the other Collaborative members, including the EPA, FHWA, Caltrans and USMC Camp Pendleton. (**Attachment P**). An additional, updated copy was again forwarded to Susan Meyer on January 17, 2008. (**Attachment Q**).

**A**



DEPARTMENT OF THE ARMY  
LOS ANGELES DISTRICT, CORPS OF ENGINEERS  
P.O. BOX 532711  
LOS ANGELES, CALIFORNIA 90053-2325

November 1, 2005

REPLY TO  
ATTENTION OF:

Office of the Chief  
Regulatory Branch

Mr. Gene Fong  
Division Administrator  
U.S. Department of Transportation  
Federal Highway Administration  
650 Capitol Mall, Suite 4-100  
Sacramento, California 95814

Dear Mr. Fong:

We have reviewed your letter dated October 13, 2005 and received October 17, 2005 requesting our agreement on the South Orange County Transportation Infrastructure Improvement Project ("SOCTIIP"; "Project") alternative most likely to represent the least environmentally damaging practicable alternative ("LEDPA").

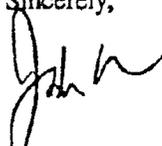
The Project's jointly prepared Environmental Impact Statement ("EIS") and Subsequent Environmental Impact Report ("SEIR") evaluated eight build alternatives and two no action alternatives. In our earlier review, the Corps found the Interstate 5 Widening and Arterial Improvement Only alternatives to be impracticable because neither is available to the applicant, (i.e., Transportation Corridor Agencies; "TCA"), for acquisition and implementation. Of the six remaining build alternatives, the A7C-FEC-M alternative appears to be the 'preliminary' LEDPA based on information contained in the draft EIS/SEIR and its appendices/technical studies; Table 1.1 of the draft EIS/SEIR entitled *Evaluation Matrix Summary of Adverse Impacts Before Mitigation*; public comments received on the draft EIS/SEIR (dated 2004) and the Corps' preliminary Public Notice (dated 2004); the Corps' final jurisdictional determination for the SOCTIIP (letter dated September 27, 2005); and the U.S. Fish and Wildlife Service's preliminary conclusions for the A7C-FEC-M alternative (letter dated September 30, 2005).

In accordance with the 1994 California National Environmental Policy Act ("NEPA")/Section 404 of the Clean Water Act ("404") Integrated Process Memorandum of Understanding ("MOU"), we offer our agreement that the A7C-FEC-M is the 'preliminary' LEDPA. Please be advised this determination does not constitute our final Department of Army permit decision. As part of our final regulatory decision-making process a final Corps Public Notice must be published to solicit agency and public comments on the TCA's proposed action as well as to consider all relevant public interest review factors outlined in 33 C.F.R. § 320.4(a)(2) to evaluate whether the A7C-FEC-M is contrary to the public interest.

I am forwarding a copy of this letter to Mr. Steven John, Environmental Protection Agency, 600 Wilshire Blvd., Suite 600, Los Angeles California 900017; Ms. Jill Terp, U.S. Fish and Wildlife Service, 6010 Hidden Valley Road, Carlsbad, California 92011; California Department of Transportation, Ms. Smita Deshpande, 3337 Michelson Drive, Suite 380, Irvine, California 92612; and Ms. Macie Cleary-Milan, Transportation Corridor Agency, 125 Pacifica, Irvine, California 92618.

If you have any questions, please contact Ms. Susan A. Meyer of my staff at (213) 452-3412. Please refer to this letter and 200000392-SAM in your reply.

Sincerely,

  
David J. Castanon  
Chief, Regulatory Branch



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

November 8, 2005

Gene K. Fong, Division Administrator  
Federal Highway Administration, California Division  
650 Capitol Mall, Suite 4-100  
Sacramento, CA 95814

Subject: Concurrence on the Preliminary Least Environmentally Damaging  
Practicable Alternative for the South Orange County Infrastructure  
Improvement Project, Orange County, California

Dear Mr. Fong:

The Environmental Protection Agency (EPA) has reviewed Federal Highway Administration's (FHWA) October 17, 2005 letter requesting concurrence, under the National Environmental Policy Act/Clean Water Act (CWA) Section 404 Integration Process Memorandum of Understanding (NEPA/404 MOU), on the preliminary least environmentally damaging practicable alternative (LEDPA) for the South Orange County Infrastructure Improvement Project (SOCTIIP), Orange County, California. We appreciate the interagency coordination efforts by FHWA, California Department of Transportation, and Transportation Corridor Agency to identify the LEDPA.

EPA concurs that the A7C-FEC-M Initial Alignment is the preliminary LEDPA. Our concurrence is based on: 1) the information contained in the Draft Environmental Impact Statement (EIS) and its technical studies, 2) the preliminary determination by Fish and Wildlife Service, dated September 30, 2005, that the A7C-FEC-M Initial Alignment will not jeopardize the continued existence of listed species, including the Pacific pocket mouse, and 3) the concurrence by the Corps of Engineers, dated November 1, 2005, that alternative A7C-FEC-M is the preliminary LEDPA.

EPA looks forward to working with the SOCTIIP Collaborative on the development of the conceptual mitigation plan for impacts to aquatic resources, to be completed in advance of the Final EIS. This is the next step in the NEPA/404 integration process. EPA will also provide comments on the Final EIS pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act, as well as the Corps of Engineers Final Public Notice for the Clean Water Act Section 404 permit when they are

published for public review. If you have questions, please contact me or Matthew Lakin, the lead reviewer for this project, at (415) 972-3851 or Lakin.Matthew@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Duane James". The signature is stylized with a large loop and a long horizontal stroke.

For Duane James, Manager  
Environmental Review Office

Cc: Susan Meyer, Army Corps of Engineers, Los Angeles District Office  
Jill Terp, Fish and Wildlife Service  
Smita Deshpande, California Department of Transportation  
Macla Cleary-Milan, Transportation Corridor Agency  
Larry Rannals, Marine Corps Base Camp Pendleton



## MEMORANDUM OF UNDERSTANDING

### National Environmental Policy Act and Clean Water Act Section 404

### Integration Process for Surface Transportation Projects in Arizona, California, and Nevada

#### I. APPLICABILITY

- A. This memorandum of understanding (MOU) applies to all projects needing both Federal Highway Administration (FHWA)/ Federal Transit Administration (FTA) action under the National Environmental Policy Act (NEPA) and a U.S. Army Corps of Engineers (Corps) individual permit under section 404 of the Clean Water Act. This MOU is limited to issues pertaining to waters of the United States (waters of the U.S.) and associated sensitive species.
- B. Regulatory/resource agency participation in this process does not imply endorsement of all aspects of a transportation plan or project. Nothing in this MOU or its Appendices is intended to diminish, modify, or otherwise affect the statutory or regulatory authorities of the agencies involved.

#### II. BACKGROUND

In a May 1, 1992 agreement, the U.S. Department of Transportation, the U.S. Department of Army-Civil Works, and the U.S. Environmental Protection Agency (EPA) adopted as agency policy (1) improved interagency coordination and (2) integration of NEPA and the Clean Water Act section 404 procedures. This MOU implements this policy.

#### III. NEPA-SECTION 404 INTEGRATION

The signatories to this MOU are committed to integrating NEPA and section 404 of the Clean Water Act in the transportation planning, programming, and implementation stages. We are committed to ensuring the earliest possible consideration of environmental concerns pertaining to waters of the U.S., including wetlands, at each of these three stages. We place a high priority on the avoidance of adverse impacts to waters of the U.S. and associated sensitive species, including threatened and endangered species.

Whenever avoidance of waters of the U.S. is not practicable, minimization of impacts will be achieved, and unavoidable impacts will be mitigated to the extent reasonable and practicable. We will improve interagency cooperation and consultation at all levels of government throughout the process. We will integrate compliance with the Section 404(b)(1) Guidelines with compliance with the National Environmental Policy Act.

#### IV. ANTICIPATED BENEFITS OF PROCESS

The process embodied in this MOU will:

1. Improve cooperation and efficiency of governmental operations at all levels, thereby better serving the public,
2. Expedite construction of necessary transportation projects, with benefits to mobility and the economy at large,
3. Enable more transportation projects to proceed on budget and on schedule, and
4. Protect and enhance the waters of the U.S., which will benefit the region's aquatic ecosystems and the public interest.

#### V. IMPLEMENTATION PROCEDURES

- A. Appendix A is a NEPA-404 Concurrent Process paper for the Project Development stage which is incorporated into this MOU.
- B. The signatory agencies agree to jointly develop guidance by March 1, 1994 and to use the guidance to facilitate the implementation of this MOU. These guidance papers include, but are not limited to, the following:
  1. Level of Data Needs / Threshold for Regulatory/Resource Agency Involvement
  2. Purpose and Need
  3. Alternatives Analysis and Avoidance
  4. Mitigation
  5. Tiered/Corridor EIS

#### VI. CONCURRENCE/NONCONCURRENCE

- A. Timeliness: Regulatory/resource agencies will provide their comments in a timely manner, as defined for each stage (see Agency Commitments section below).

B. Concurrence: written determination that:

1. The information to date is adequate for this stage, and
2. The project may proceed to the next stage without modification.

Agencies agree not to revisit previous concurrences unless there is significant new information or significant changes to the project, the environment, or laws and regulations.

C. Nonconcurrence: written determination that:

1. The information to date is not adequate for this stage, or
2. The potential adverse impacts of the project are severe.

Agencies agree to provide an explanation of the basis for nonconcurrence. All agencies (transportation and regulatory/resource) agree to attempt to resolve issues causing nonconcurrence, and to try to do so informally before entering formal dispute resolution.

## VII. DISPUTE RESOLUTION

Initiated upon request of any signatory agency. Reasons may include:

1. Unresolved written nonconcurrence,
2. Lack of response within agreed-upon time limits, and
3. Substantive departure from the MOU process.

See Appendix B, Dispute Resolution.

## VIII. PARTICIPATION

If Corps, EPA, Fish and Wildlife Service (FWS), and/or National Marine Fisheries Service (NMFS) choose not to participate in early planning, programming, or the pre-scoping phase of project development, they will notify the project sponsors, who may proceed to the next stage (or next phase of project development) without prejudice. There would be no formal concurrence or nonconcurrence. However, nonparticipation implies that, based upon information provided by the project sponsors, it appears that regulatory and resource issues are of a magnitude amenable to resolution at the next stage.

IX. MONITORING/EVALUATING IMPLEMENTATION OF MOU

The signatory agencies will monitor the success of the MOU process and modify it as necessary to improve it. Each signatory agency shall designate a representative to serve on a monitoring and evaluation team. See Appendix C, MOU Monitoring and Evaluation.

X. AGENCY COMMITMENTS

A. Pipeline Projects

Projects that were extant on the date this MOU is signed are "pipeline" projects. These projects will be made current by completing the analyses required by earlier stages prior to proceeding to the next concurrence point. The remaining MOU integration process will then be followed.

B. Non-Metropolitan Planning Organization (MPO) Projects

Non-MPO projects that have not gone through this MOU process in the transportation plan stage will adhere to the processes contained in the MOU for the programming and project development stages.

C. Continuity

FHWA and FTA will ensure that project sponsors provide copies of all relevant portions of correspondence from regulatory/resource agencies in documentation at subsequent stages.

D. Transportation Plan Stage

1. FHWA and FTA agree to:

- a. Issue regional guidance indicating that adherence to this MOU would satisfy the environmental planning provisions of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) regarding waters of the U.S.
- b. Emphasize consideration of environmental impacts to waters, wetlands, and associated sensitive species in their federal planning priority statements.
- c. Evaluate MPO inclusion of planning provisions of this MOU and federal planning priorities in the Overall Work Program review.
- d. Evaluate the MPO's process for avoiding impacts to waters of the U.S. and associated sensitive species during the review and certification of MPO

planning processes. Modifications consistent with this MOU integration process will be recommended as appropriate.

2. State Department of Transportation's (State DOT's) agree to:
  - a. Encourage all MPO's to formally agree to follow the NEPA-404 integration process.
  - b. Provide technical assistance and/or existing biological data to MPO's for the development of inventories of waters of the U.S. and associated sensitive species.
  - c. Review and comment on the adequacy of information and avoidance of sensitive resources presented in the regional transportation plans (RTP's) and associated environmental analyses.
  - d. Request federal regulatory/resource agency to review and comment on the RTP's and associated environmental analyses of MPO's that have formally agreed to follow the NEPA-404 integration process.
3. For those MPO's that have formally agreed to follow the NEPA-404 integration process, the Corps, EPA, FWS, and NMFS agree to:
  - a. Provide input to draft RTP's (relating to waters of the U.S. and to associated sensitive species).
  - b. Review and comment on RTP's and associated environmental analyses within the public review period: purpose and need, alternative selection, mode, environmental impacts including cumulative impacts.
  - c. Concur or not concur on the RTP by the end of the public review period for the RTP.

E. Project Programming Stage

1. FHWA and FTA agree to:
  - a. Review project programming documents and identify those projects that have not followed the process described in this MOU or have not included practicable avoidance alternatives.
  - b. Ensure that documents are supplemented by the project sponsor, if necessary for adherence to the

MOU, before sending them for review to regulatory/  
resource agencies.

2. State DOT's agree to:
  - a. Screen documentation for significant section 404 issues and for their adherence to the MOU.
  - b. Ensure that State DOT sponsored project documents are supplemented if necessary for adherence to the MOU, before sending them for review to regulatory/  
resource agencies.
  - c. For State DOT sponsored projects, include the costs of avoiding, minimizing, and compensating impacts to waters of the U.S. and associated sensitive species in the project cost of the practicable alternatives evaluated.
  - d. Encourage all other project sponsors to:
    - (1) supplement documents if necessary for adherence to the MOU, before sending them for review to regulatory/resource agencies,
    - (2) include the costs of avoiding, minimizing, and compensating impacts to waters of the U.S. and associated sensitive species in the project cost of the practicable alternatives evaluated, and
    - (3) provide the environmental information resulting from the programming process to the MPO's for inclusion in the cumulative impact assessment of the RTP.
  - e. Recommend that projects which have not followed the NEPA-404 process outlined in this MOU not be programmed.
  - f. For State DOT sponsored projects, provide the environmental information resulting from the programming process to the MPO's for inclusion in the cumulative impact assessment of the RTP.
3. Corps, EPA, FWS, and NMFS agree to:
  - a. Review environmental elements of pre-programming documents as requested by FHWA/FTA and/or State DOT's.
  - b. Within 45 days of receipt, concur or nonconcur on refinements of purpose and need, project alternatives, impacts to waters of the U.S. and associated sensitive species (including cumulative impacts to these resources), and mitigation.

F. Project Development Stage

All signatory agencies agree to implement Appendix A, the NEPA EIS/EA/CE--404 Permit Concurrent Process for Project Development.

1. FHWA and FTA agree to:

Not approve a final EIS, categorical exclusion (CE), or, for an environmental assessment (EA), not issue a finding of no significant impact (FONSI) unless there is written preliminary agreement from the Corps, after consultation with EPA, that the project complies with the Section 404(b)(1) Guidelines.

2. State DOT's agree to:

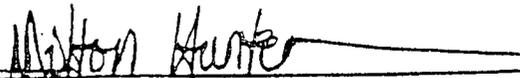
- a. Request regulatory/resource agency involvement early in the NEPA process.
- b. Provide the information necessary to identify the least environmentally damaging practicable alternative and associated mitigation.

3. Corps, EPA, FWS, and NMFS agree to:

- a. Participate in project development process when aquatic resource impacts are substantial.
- b. Review and concur or nonconcur on NEPA purpose and need, section 404 basic and overall project purpose, criteria for alternative selection, project alternatives to be evaluated in the draft EIS, and the preferred alternative.
- c. Respond to requests for concurrence within 45 days.

XI. MODIFICATION/TERMINATION

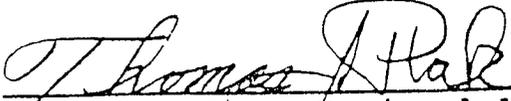
This MOU may be modified upon approval of all signatories. Modification may be proposed by one or more signatories. Proposals for modification will be circulated to all signatories for a 30-day period of review. Approval of such proposals will be indicated by written acceptance. A signatory may terminate participation in this agreement upon written notice to all other signatories.

  
BG Milton Hunter, Division Engineer  
U.S. Army Corps of Engineers, South Pacific Division

12/9/93  
Date

  
Felicia Marcus, Regional Administrator  
U.S. Environmental Protection Agency, Region IX

12/9/93  
Date

  
Thomas J. Ptak, Regional Administrator  
Federal Highway Administration, Region Nine

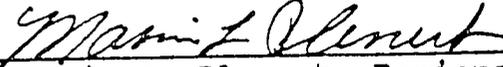
12/13/93  
Date

  
Louis F. Mraz, Jr., Regional Administrator  
Federal Transit Administration, Region 8

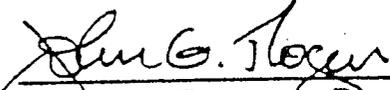
12/14/93  
Date

  
Stewart F. Taylor, Regional Administrator  
Federal Transit Administration, Region 9

12/3/93  
Date

  
Marvin L. Plenert, Regional Director  
U.S. Fish and Wildlife Service, Region 1

1/14/94  
Date

  
John G. Rogers, Regional Director  
U.S. Fish and Wildlife Service, Region 2

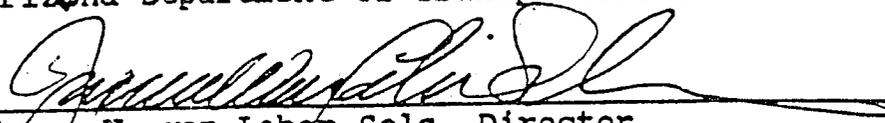
2/2/94  
Date

Annika W. Bane, Acting Regional Director  
National Marine Fisheries Service, Southwest Region

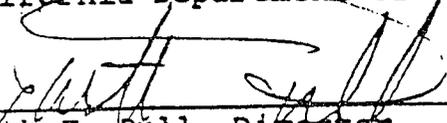
\_\_\_\_\_  
Date

  
Larry Bonine, Director  
Arizona Department of Transportation

1/25/94  
Date

  
James W. van Loben Sels, Director  
California Department of Transportation

12/27/93  
Date

  
Garth F. Dull, Director  
Nevada Department of Transportation

12/20/93  
Date

## NEPA EIS — 404 PERMIT CONCURRENT PROCESS<sup>1</sup>

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### PRE-SCOPING

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For EIS projects likely to require an individual permit, impact "special aquatic sites," or impact greater than five acres of other waters of the U.S., State DOT invites Corps, EPA, FWS, and NMFS (when marine and anadromous fish resources are involved) to actively participate in the project development process.

- State DOT invitation letter will include pre-scoping information (e.g., "project assessment" in Arizona and Nevada; "project study report" in California) and a pre-assessment of waters of the U.S. (i.e., area of jurisdiction and aquatic resource impact).

The Corps, EPA, FWS, and NMFS will each choose to participate in the project development process at an appropriate level of involvement depending on the quality and quantity of resource involved (e.g., choose not to participate in some or all of the project meetings and/or in the first agreement point (marked ► below)); however, the remaining agreement points (marked ►► below) will be executed prior to advancing to the next stage.

- *Reaffirm/refine/develop Corps, EPA, FWS, NMFS, State DOT, FHWA preliminary agreement on:*
  - *NEPA purpose and need/404 basic and overall project purpose,*
  - *Criteria for alternative selection,*
  - *Project alternatives to be evaluated in draft EIS, and*
  - *Level of agency involvement and cooperating agency role.*

### SCOPING

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- FHWA notice of intent.
- State DOT public information meetings.
- Corps pre-application meetings may be a forum to further address issues.
- FHWA invite Federal agencies to be cooperating agencies.

### DRAFT EIS DEVELOPMENT

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- *Final Corps, EPA, FWS, NMFS, State DOT, FHWA agreement on:*
  - *NEPA purpose and need/404 basic and overall project purpose,*
  - *Criteria for alternative selection,*
  - *Project alternatives to be evaluated in draft EIS,*
  - *Preliminary preferred alternative (if known), and*
  - *Cooperating agencies (develop agreement/MOU for cooperating agency involvement).*

State DOT delineation of waters of the U.S.

- *Corps verification of jurisdictional determination.*

FHWA/State DOT environmental inventory/impact evaluation.

- State DOT requests threatened and endangered species list from FWS/NMFS, begins informal consultation, and prepares biological assessment for any identified species.
- Develop 404 resource/endangered species mitigation options.

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<sup>1</sup> For transit projects, any references to FHWA and State DOT in this appendix can be replaced with FTA and FTA grantees, respectively.

Corps, EPA, FWS, NMFS participation in development of draft EIS. Such activities could include, as appropriate:

- Informal staff coordination,
- Interagency coordination meeting,
- Corps pre-application meeting,
- Draft biology and/or other technical report review, and/or
- Pre-draft EIS review.

State DOT submits application for Corps permit  
(allowing enough time for Corps to prepare the public notice for a joint draft EIS/PN transmittal).

FHWA/State DOT draft EIS approval.

### DRAFT EIS CIRCULATION / SECTION 404 PUBLIC NOTICE OF EIS DOCUMENT

*Note: The draft EIS circulation and 404 public notice must be closely coordinated.*

FHWA/State DOT NEPA public hearing (joint NEPA/Corps 404 hearing, if appropriate).

### FINAL EIS DEVELOPMENT

FHWA/State DOT evaluate draft EIS comments received.  
Corps evaluates comments received on public notice.

- ▶▶ *State DOT/Corps/FHWA identify final EIS NEPA preferred/section 404 least environmentally damaging practicable alternative alignment (w/ design concept) to achieve NEPA project purpose and need/404 basic project purpose.*
- ▶▶ *Preliminary agreement of preferred alternative compliance with the section 404(b)(1) guidelines. The following documents are to be obtained by FHWA/State DOT for inclusion in the final EIS as a preliminary agreement of section 404(b)(1) compliance:*
  - (1) *Written FWS preliminary agreement in the project mitigation plan as a result of earlier Fish & Wildlife Coordination Act consultation.*
  - (2) *If FWS/NMFS threatened and endangered species list identifies listed species potentially in project area, written FWS/NMFS documentation: species not present, not likely to be affected, or non-jeopardy biological opinion.*
  - (3) *Section 401 certification or waiver from State Water Quality Management Agency.*
  - (4) *Written Corps and EPA preliminary agreement that:*
    - *the final EIS NEPA preferred/section 404 least environmentally damaging practicable alternative,*
    - *project will not significantly degrade the aquatic environment, and*
    - *the project mitigation plan and implementation schedule is adequate.*

Cooperating agency review/participation in development of final EIS  
(e.g., cooperating agency review of draft EIS comments and responses).

FHWA/State DOT final EIS approval.

### FINAL EIS CIRCULATION / SECTION 404 PUBLIC NOTICE OF PROPOSED PERMIT

## DEVELOPMENT OF RECORD OF DECISION

FHWA/State DOT evaluate any final EIS comments received.  
Corps evaluates comments received on public notice.

Opportunity for cooperating agency review of the draft record of decision for consistency with the above preliminary agreement of section 404(b)(1) compliance.  
FHWA record of decision approval.

State DOT develops final project design, finalizes mitigation plan and implementation schedule, and initiates right-of-way acquisition.

## CORPS PERMIT DECISION

- Corps determination of compliance with the section 404(b)(1) guidelines.
- Corps public interest review/determination.

FHWA/State DOT approval of project plans, specifications, & estimate (PS&E)<sup>2</sup>  
(after all necessary permits/findings obtained).

State DOT advertise / award contract.  
Commence construction.

Permit compliance / mitigation monitoring.

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<sup>2</sup> This approval is not applicable for FTA transit projects.

## NEPA EA/CE – 404 PERMIT CONCURRENT PROCESS<sup>3</sup>

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### PRE-ASSESSMENT

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For EA or CE projects likely to require an individual permit, impact "special aquatic sites," or impact greater than five acres of other waters of the U.S., State DOT invites Corps, EPA, FWS, and NMFS (when marine and anadromous fish resources are involved) to actively participate in the project development process.

- State DOT invitation letter will include pre-scoping information (e.g., "project assessment" in Arizona and Nevada; "project study report" in California) and a pre-assessment of waters of the U.S. (i.e., area of jurisdiction and aquatic resource impact).

The Corps, EPA, FWS, and NMFS will each choose to participate in the project development process at an appropriate level of involvement depending on the quality and quantity of resource involved (e.g., choose not to participate in some or all of the project meetings); however, the agreement points marked ▶▶ below will be executed prior to advancing to the next stage.

- ▶▶ *Reaffirm/refine/develop Corps, EPA, FWS, NMFS, State DOT, FHWA agreement on:*
  - *NEPA purpose and need/404 basic and overall project purpose,*
  - *Criteria for alternative selection,*
  - *Project alternatives to be evaluated in draft EA or CE,*
  - *Preliminary preferred alternative (if known), and*
  - *Level of agency involvement.*

### DRAFT EA or CE DEVELOPMENT

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State DOT delineation of waters of the U.S.

- ▶▶ *Corps verification of jurisdictional determination.*

FHWA/State DOT environmental inventory/impact evaluation.

- State DOT informal endangered species consultation with FWS/NMFS as appropriate.
- Develop 404 resource/endangered species mitigation options.

Corps, EPA, FWS, NMFS participation in development of draft EA or CE. Such activities could include, as appropriate:

- Informal staff coordination,
- Interagency coordination meeting,
- Corps pre-application meeting,
- Draft biology and/or other technical report review, and/or
- Pre-draft EA/CE review.

For EA projects, FHWA/State DOT draft EA approval.

State DOT submits application for Corps permit.

For EA projects, a copy of the approved draft EA will be included with application.

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<sup>3</sup> For transit projects, any references to FHWA and State DOT in this appendix can be replaced with FTA and FTA grantees, respectively.

## DRAFT EA CIRCULATION / SECTION 404 PUBLIC NOTICE

For EA projects, opportunity for FHWA/State DOT NEPA public hearing (joint NEPA/Corps 404 hearing, if appropriate).

CE's are not circulated to the general public. Required project information will be included with the section 404 public notice. Corps 404 hearing held, if appropriate

## FINAL EA/CE DEVELOPMENT

For EA projects:

FHWA/State DOT evaluate draft EA comments received.  
Corps evaluates comments received on public notice.

FHWA decision to prepare an EIS or to develop a FONSI.  
If EIS, initiate EIS development process.

If FONSI or CE, proceed with either of the following processes that is mutually agreeable to the Corps and State DOT/FHWA:

- <A> State DOT/FHWA identify final EA/CE preferred alternative to achieve NEPA project purpose and need.
- If appropriate, Corps would identify section 404 least environmentally damaging practicable alternative alignment (w/ design concept) to achieve section 404 basic project purpose.

### CORPS PERMIT DECISION

- Corps determination of compliance with the section 404(b)(1) guidelines.
- Corps public interest review/determination.

FHWA FONSI or CE approval.

State DOT begins final project design, finalizes mitigation plan and implementation schedule, and initiates right-of-way acquisition.

or

- <B> ▶▶ State DOT/Corps/FHWA identify final EA NEPA preferred/section 404 least environmentally damaging practicable alternative alignment (w/ design concept) to achieve NEPA project purpose and need/404 basic project purpose.
- ▶▶ Preliminary agreement of preferred alternative compliance with the section 404(b)(1) guidelines. The following documents are to be obtained by FHWA/State DOT for inclusion in the final EA as a preliminary agreement of section 404(b)(1) compliance:
- (1) Written FWS preliminary agreement in the project mitigation plan as a result of earlier Fish & Wildlife Coordination Act consultation.
  - (2) If FWS/NMFS threatened and endangered species list identifies listed species potentially in project area, written FWS/NMFS documentation: species not present, not likely to be affected, or non-jeopardy biological opinion.

- (3) *Section 401 certification or waiver from State Water Quality Management Agency.*
- (4) *Written Corps and EPA preliminary agreement that:*
  - *the final EA NEPA preferred/section 404 least environmentally damaging practicable alternative,*
  - *project will not significantly degrade the aquatic environment, and*
  - *the project mitigation plan and implementation schedule is adequate.*

FHWA FONSI approval.

State DOT begins final project design, finalizes mitigation plan and implementation schedule, and initiates right-of-way acquisition.

#### CORPS PERMIT DECISION

- Corps determination of compliance with the section 404(b)(1) guidelines.
- Corps public interest review/determination.

then:

FHWA/State DOT approval of project plans, specifications, & estimate (PS&E)<sup>4</sup>  
(after all necessary permits/findings obtained).

State DOT advertise / award contract.  
Commence construction.

Permit compliance / mitigation monitoring.

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<sup>4</sup> This approval is not applicable for FTA transit projects.

## DISPUTE RESOLUTION

### I. INTRODUCTION

The purpose of this dispute resolution procedure is to provide a process to resolve disagreements between signatory agencies or project sponsors. The intention is to expeditiously resolve disputes at the lowest level of the organizations through consensus. Alternative dispute resolution processes (e.g., facilitation or mediation) can be used.

### II. LEVELS OF DISPUTE RESOLUTION

#### A. Informal dispute resolution

1. "Informal dispute resolution" is agency staff and mid-level management coordination between parties to resolve the issue.
2. Informal dispute resolution can be initiated by any signatory agency or a project sponsor who has formally agreed to follow the NEPA/404 process.
3. All normal and reasonable coordination options need to be exhausted before formal dispute resolution is initiated.

#### B. Formal dispute resolution

1. If the parties agree that the informal dispute resolution process has been exhausted, the second-level panel member of a signatory party can initiate the formal dispute resolution process.
2. The second-level panel member will invite all signatory agencies in writing to convene a meeting of the second-level panel within 45 days to resolve the issue.
3. The inviting party will include a statement of issue and any pertinent background material in the invitation.
4. The second-level panel may elect to raise the issue to the signatory level.
5. The written conclusion of the formal process will be distributed to all signatory parties.

MOU Signatory Level

Corps Division Engineer  
FWS/NMFS Regional Directors  
EPA/FHWA/FTA Regional Administrators  
State DOT Directors

Second-Level Panel

Corps District Engineer  
FWS Field Office Supervisor  
NMFS Field Office Supervisor  
EPA Division Director  
FHWA Division Administrator  
FTA Deputy Regional Administrator  
ADOT/NDOT State Engineer  
Caltrans District Director

## MOU MONITORING AND EVALUATION

### I. TEAM MEMBERSHIP

MOU monitoring and evaluation will be conducted by a team made up of one representative from each signatory agency. FHWA will chair the team and coordinate the meetings.

### II. FREQUENCY AND SCOPE OF MEETINGS

This team shall hold quarterly meetings to consider and recommend:

1. Minor editorial corrections to the MOU,
2. More substantive proposals for improvement in the MOU process,
3. How to monitor and measure the success of the MOU process,
4. Changes to the MOU process to reflect monitoring results, and
5. Continuation of monitoring and evaluation.

### III. PROCESS/MOU CHANGES

The monitoring and evaluation team will:

1. Present minor revisions to the MOU to their agencies for concurrence, or
2. For more substantive issues, recommend a process for obtaining the agreement of all signatories to amend the MOU. This may require reconvening the interagency body which developed the MOU, and/or initiating the dispute resolution process at the signatory level.

### IV. REPORTING

- A. Minutes of all quarterly meetings will be distributed to signatory agencies.
- B. The team will report to the signatory agencies on implementation of this MOU one calendar year after the MOU is signed and as necessary thereafter.



# **GUIDANCE PAPERS**

TO FACILITATE THE IMPLEMENTATION

OF THE

## **MEMORANDUM OF UNDERSTANDING**

FOR THE

### **NEPA AND SECTION 404**

### **INTEGRATION PROCESS**

FOR

**SURFACE TRANSPORTATION PROJECTS**

IN

**ARIZONA, CALIFORNIA, AND NEVADA**



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## INTRODUCTION

These guidance papers have been prepared by staff of the MOU signatory agencies to facilitate its implementation. The papers provide guidance to the various offices of the signatory agencies for the integrated preparation and processing of NEPA documents and section 404 evaluations and permits for surface transportation projects in Arizona, California, and Nevada.

The guidance papers, which are summarized below, address different, but closely related elements of the NEPA and section 404 processes and are not intended to stand alone, but rather to be consulted as a whole. The papers provide direction on the preparation and processing of documents during the transportation planning, project programming, and project development stages of transportation facilities, to satisfy the intent/requirements of NEPA and section 404 of the Clean Water Act as related to aquatic resources. A list of acronyms and a glossary have also been included.

### **Purpose and Need**

The definition of purpose and need is critical because it justifies the sponsoring agency's actions, some of which will cause environmental impacts, and because it determines the spectrum of alternatives to be considered, and the ultimate choice of the final alternative. This paper shows how the purpose and need definition should be refined as one progresses through the three stages, but not made so specific that the range of alternatives is artificially constrained.

Problem  
↑

### **Alternatives Analysis / Aquatic Resource Avoidance**

Both NEPA and section 404 require that a range of alternatives be analyzed. The different perspectives of the two regulations on alternatives are discussed, and a selection process that should be followed through the three stages to meet NEPA and 404 requirements is described. The paper also discusses how to formulate alternatives that avoid and minimize impacts to aquatic resources.

### **Compensatory Mitigation**

Compensatory mitigation, that is, replacing functions and values of aquatic resources to the extent practical, is discussed in this paper. Compensatory mitigation is only appropriate for offsetting impacts that have been found to be unavoidable during the alternatives analysis.

### **Level of Data Needs/Threshold for Involvement**

This paper outlines the interagency process and the level of data needed (including information sources) at each stage.

These papers are to serve as working documents to provide uniformity and consistency in the format and content of the information and evaluations developed pursuant to the MOU. As working documents, they may be revised and/or supplemented as deemed appropriate by consensus of the signatory agencies to provide consistent interpretation and improved guidance. This guidance material should be integrated into each signatory agencies' guidance and procedures.

This material is not regulatory; nothing in these guidance papers is intended to diminish, modify, or otherwise affect the statutory or regulatory authorities of the agencies involved.



# PURPOSE AND NEED

## I. INTRODUCTION

"Purpose and need" is a critical element of the transportation planning, project programming, and project development stages because it performs two important functions:

- It establishes why the sponsoring agency is proposing an action while at the same time potentially causing environmental impacts, and
- It provides the basis for selecting reasonable and practicable alternatives for consideration; analyzing those alternatives in depth; and is an important factor in selecting the preferred alternative.

If the project purpose and need is defined to meet the above two functions, section 404 requirements related to defining the project purpose will be satisfied.

Under the National Environmental Policy Act (NEPA), "purpose" and "need" are closely linked but subtly different. "Need" may be thought of as the problem and "purpose" as an intention to solve the problem. Purpose and need statements should include increasing specificity as one progresses from transportation planning to project programming to project development. However, it is important to guard against premature specificity such that the range of alternatives considered becomes artificially limited.

Expressions of purpose and need must reflect statutory and regulatory requirements, fiscal and environmental resources, and community concerns. The identification of purpose and need (e.g., degree of congestion used as a goal in planning and designing transportation facilities) is an administrative process of high importance at all stages. Both the purpose and need, and the factors contributing to their identification, must be clearly documented in a manner acceptable to the owner/operator. If the purpose and need deviates from the usual and expected practice (i.e., from project performance and/or design criteria), the owner/operator may be called upon in the future to rely on this documentation to defend against tort liability actions.

For example, the degree of congestion that users are called upon to endure must reflect the available fiscal resources and a balancing of the desires of the users with the environmental/socioeconomic impacts of satisfying these desires. Freeways and arterials should normally be planned and designed to accommodate estimated traffic 20 years after completion of construction at a level of service at least equal to "C." However, a community based planning process may select a lower level of service goal in consideration of available fiscal resources and environmental impacts with appropriate documentation.

## II. PURPOSE AND NEED FOR THE TRANSPORTATION PLANNING STAGE

The regional transportation planning process, which includes systems, subarea, and corridor planning, should establish transportation goals and objectives for all major transportation investments. The transportation goals and objectives for systems and corridors are analogous to a statement of purpose under NEPA. A regional planning needs statement should clearly document a problem or short-fall in meeting goals and objectives.

Initially the purpose statement should be a general goal, such as to reduce congestion, improve safety, increase mobility, or to reduce pollutant emissions, so as to allow consideration of a range of alternative means to achieve the basic project purpose. The statement of purpose should not be so narrow as to preclude a reasonable range of alternatives from consideration. A narrow initial statement of purpose unnecessarily reduces the decision makers' flexibility to balance competing requirements.

The need for transportation projects should reflect the regional transportation plan's policies and should be expressed in terms of congestion, safety, or air quality, for example. Need should be quantified, providing a measure of the severity and geographic extent of the problem. For example, need could be expressed as a quantified short-fall in meeting defined regional objectives, such as those for mobility, accident frequency and air quality.

Documentation should be clearly summarized and referenced within the statement of need. Full documentation (in the form of studies, reports, etc.) should:

- include references in the statement of need,
- follow the project through the entire programming, development and construction process, and
- be readily available upon the request of reviewing agencies (transportation and resource agencies).

Products of the transportation planning process (such as reduction in vehicle-kilometers or vehicle-hours of travel, improvements in travel speeds on the system, reduction in traffic accidents, savings in energy consumption, enhanced economic development potential, increased tax base, improved access to public facilities, etc.) should be presented to support the need for the transportation investment.

This purpose and need will serve as the basis for establishing the range of alternatives (such as alternative modes and technologies) to be considered during the transportation planning process (which may include corridor or subarea studies). These studies will ultimately determine project design concept and scope for the emissions analysis of the regional transportation plan required by EPA conformity regulations.

Even though a need may be easily established one should also consider the constraints of meeting this need, such as the presence of section 4(f) protected property (49 U.S.C. § 303), *waters of the U.S.* (see glossary), floodplains, endangered species, and historical properties.

The purpose statement should guide the range of alternatives that will be considered to respond to the established need. For example, responding to the need for access to the downtown of a metropolitan area could generate alternatives such as transit and feeder projects. Likewise, the need to improve highway safety may result in alternatives to reroute truck traffic, improve geometrics, or bypass or widen existing facilities.

### III. PURPOSE AND NEED FOR THE PROJECT PROGRAMMING STAGE

When a project identified in a regional transportation plan (RTP) is about to undergo a preliminary study (i.e., project assessment in Arizona and Nevada; project study report in California), the goals, objectives, and policies of the RTP will provide the foundation for defining the project purpose and need statement. As information is developed and more is learned, the purpose and need statement would be refined. During this refinement process, some project alternatives could possibly drop out (see Alternatives Analysis / Aquatic Resource Avoidance Guidance), thereby permitting a more focused analysis of the remaining alternatives. Need must be defined more specifically at this stage to support project programming.

For those projects which are not part of a regional transportation plan or for which no purpose and need have previously been established, the guidelines discussed above under Transportation Planning should be followed before project programming.

### IV. PURPOSE AND NEED FOR THE PROJECT DEVELOPMENT STAGE

The need for a project must be very specific at this point in the process. Information gathered during the transportation planning and project programming stages should ensure that the project need is well defined. It is critical that the process which identified and quantified this specific need be explained clearly and concisely within the NEPA environmental document, with specific references to previous studies. If the need is modified, sufficient data to document the changed circumstances should be provided.

The purpose and need statement at this stage should provide the framework for considering the avoidance or minimization of environmental impacts and any enhancement of environmental resources in the project area. Sufficient information should be available at this stage to consider all reasonable alternatives that will satisfy the established need.

### V. REFERENCES

40 CFR § 230.10(a) Basic project purpose. (section 404)

40 CFR § 1502.1 Purpose. (NEPA)

40 CFR § 1502.13 Purpose and Need. (NEPA)

Federal Highway Administration. Guidance Paper: "The Importance of 'Purpose and Need' in Environmental Documents." September 18, 1990.

Federal Highway Administration. Technical Advisory T 6640.8A. October 30, 1987. "Guidance for Preparing and Processing Environmental Documents." Attachment, Section V.D. Pages 13-14.

Yocom, T.G., R.A. Leidy, and C.A. Morris. 1989. "Wetlands Protection Through Impact Avoidance: A Discussion of the 404(b)(1) Alternatives Analysis." *Wetlands*. Vol 9, No. 2, pages 283-297. (Guidance for preparing alternatives analyses. Focuses on residential, industrial, and commercial projects.)

Intermodal Surface Transportation Efficiency Act of 1991. Pub. L. 102-240—December 18, 1991. Section 3012 Metropolitan Planning (49 U.S.C. app. § 1607(f)).

Section 4(f) of the Department of Transportation Act of 1966 (49 U.S.C. § 303 ).

**EXAMPLES OF FACTORS TO CONSIDER  
IN DEVELOPING  
PURPOSE AND NEED DOCUMENTATION**

**I. TRANSPORTATION PLANNING STAGE**

**A. Purpose**

1. Ensure "purpose" is consistent with transportation goals and objectives (e.g., mobility, safety, capacity, and congestion relief)
2. Ensure "purpose" constitutes a reasonable expenditure of public funds (benefit:cost)
3. Ensure "purpose" is broad enough to allow consideration of a full range of alternative ways to meet the defined need

**B. Need**

1. **Social Demands or Economic Development**
  - a. Discuss existing land use plans
  - b. Identify projected land use plan changes
  - c. Identify growth management/control ordinances
2. **Modal Interrelationships**

Discuss project interface with airport, rail, port, and mass transit facilities
3. **Capacity, Transportation Demand, and Safety**
  - a. Describe existing capacity and level of service
  - b. List regional population/traffic forecasts
  - c. Identify projected capacity needs and level of service
  - d. Identify system safety needs
4. **Air Quality Improvements**
  - a. Identify transportation control measures (e.g., high occupancy vehicle lanes, ramp metering, bike lanes, park & ride facilities)
  - b. Identify transportation demand management (e.g., rideshare programs, mass transit subsidies)

**II. PROJECT PROGRAMMING STAGE**

- A. All of the project purpose and need information developed during the transportation planning stage must be carried forward, updated, and refined in the purpose and need discussion for the project programming stage (i.e., social demands or economic development, modal interrelationships, capacity and transportation demand, air quality improvements).

B. the following additional information should be provided:

1. Project Status
  - a. Describe the history of the project (adopted corridors, land use plans, regional transportation plans)
  - b. Describe the involvement of other agencies, including any previous planning, programming, or project concurrences/nonconcurrences
  - c. Identify the actions pending (e.g., NEPA, final design, right-of-way acquisition, and permits)
  - d. Provide the project schedule
2. System Linkage
  - a. Indicate whether the project is a "connecting link"
  - b. Describe how the project fits into the transportation system
3. Legislation

Describe any Federal, State, or local government mandates (e.g., demonstration projects, sales tax measure projects)
4. Safety
  - a. Describe the existing accident rate
  - b. Describe the projected accident rate with/without project
  - c. Compare the existing and projected accident rates to statewide average
  - d. Explain how the project will improve safety
5. Roadway Deficiencies
  - a. Describe operational deficiencies (substandard geometrics, inadequate cross-sections)
  - b. Identify structural limitations (load limits)
  - c. Discuss maintenance problems
  - d. Explain how the project will correct deficiencies

### III. PROJECT DEVELOPMENT STAGE

All of the project purpose and need information developed during the project programming stage must be carried forward, updated, and refined in the purpose and need discussion for the project development stage (e.g., project status, system linkage, legislation, social demands or economic development, modal interrelationships, capacity and transportation demand, safety, roadway deficiencies, and air quality improvements).

# ALTERNATIVES ANALYSIS AND AQUATIC RESOURCE AVOIDANCE GUIDANCE FOR TRANSPORTATION PROJECTS

## I. SUMMARY

For major Federal actions significantly affecting the human environment, the National Environmental Policy Act (NEPA) requires rigorously exploring and objectively evaluating "all reasonable alternatives" that meet the project purpose. NEPA requires a discussion of mitigation for adverse environmental impacts of alternatives, where mitigation is defined to include avoidance and minimization of impacts as well as restoration and creation of habitats. Section 404 of the Clean Water Act, which permits discharges of fill into the *waters of the United States* (see glossary), also requires consideration of practicable alternatives to avoid and minimize adverse environmental impacts, and further requires that these measures be exhausted before turning to restoration and creation of habitats.

### A. Alternative Selection

A reasonable range of options must be considered in the evaluation of alternatives. Alternatives can be eliminated, prior to detailed analysis, if they are not "reasonable" (under NEPA) or if they are not "practicable" (under 404). When evaluating alternatives, transportation agencies should give equal consideration to section 404 and Department of Transportation Act section 4(f) concerns, and select the alternative that would cause the least overall environmental harm.

### B. Transportation Planning Stage

Avoidance of large or valuable *aquatic resources* (see glossary) is best addressed at the systems planning stage. System or regional planning requires Metropolitan Planning Organizations (MPO's) to prepare Regional Transportation Plans (RTP's). The RTP and associated documentation (such as the environmental impact report in California), and corridor and subarea studies are appropriate vehicles in which to assess system design alternatives and their environmental effects. System design encompasses: system management strategies and the mode, general location, and capacity for the proposed regional transportation facilities; the purpose and need; the preliminary budget; and the design concept and scope. System design decisions related to the alternatives will be documented to support later project decisions. System design decisions, including design concept and scope, may be revisited if significant new information is discovered.

If the above documents are sufficiently detailed to address the information requirements of NEPA and section 404, and if the system planning decisions are responsive to the regulatory requirements of NEPA and 404, it is expected that the reviewing agencies will indicate their concurrence with these decisions.

### C. Project Programming Stage

Prior to programming, the project sponsor must develop adequate information on the environmental resources to analyze each alternative and to develop project cost

estimates for each alternative which includes the cost of avoiding or minimizing and compensating for the impacts to the environmental resources. The project sponsor should document earlier analyses, continue coordination with the regulatory and resource agencies (or initiate coordination if this project was in an RTP before the MOU was signed), identify potentially impacted aquatic resources, and develop an alternatives analysis adequate to identify funding needed for avoidance and/or mitigation. If adequately prepared, this should result in EPA and Corps preliminary agreement on the alternatives to be analyzed in the project development stage, including avoidance alternatives and conceptual mitigation.

#### **D. Project Development Stage**

If the agencies have not already agreed with decisions made at the planning and programming level, then the systems design and budget issues will need to be reviewed at this stage and concurrence obtained. More detailed analyses may be needed to evaluate location alternatives than were provided at earlier stages; these analyses should also consider design alternatives. To achieve concurrence from EPA and the Corps prior to the project decision, the project sponsors must follow the NEPA-404 Permit Concurrent Process (MOU Appendix A).

## **II. INTRODUCTION**

The goal of this paper is to provide guidance on conducting alternatives analyses to meet the requirements of both NEPA and section 404 of the Clean Water Act. This guidance is provided for project sponsors and the planning, regulatory, and resource agencies. It is to be used in the transportation planning, project programming, and project development stages. Although potential alternatives are evaluated at each of these three stages, it is not usually until the last stage (which includes NEPA and 404 permitting) that substantive determinations regarding the adequacy of alternatives development and analysis occur. This paper provides guidance on how to consider aquatic resource issues throughout all three stages of transportation planning. Also included for each stage is a summary of existing guidance, and examples to illustrate how the regulatory agencies view practicability.

The basic requirements of NEPA and section 404 of the Clean Water Act are described below.

#### **A. National Environmental Policy Act**

NEPA regulations require the preparation of an environmental impact statement (EIS) for major Federal actions which significantly affect the human environment. (An environmental assessment may need to be prepared to determine whether an impact is significant.) NEPA regulations (40 CFR Parts 1500-1508) require that an EIS rigorously explore and objectively evaluate all reasonable alternatives (See section III.A. below).

NEPA requires that mitigation measures be discussed as a part of each alternative or as a separate alternative applicable to the other alternatives. Mitigation pursuant to NEPA includes avoiding, minimizing, rectifying, reducing or eliminating over time, or compensating for the impact(s) (40 CFR § 1508.20).

B. Section 404 of the Clean Water Act

1. Alternatives Analysis

The Guidelines promulgated under section 404 of the Clean Water Act specify that a permit can be issued for a discharge of dredged or fill material to waters of the United States only if the discharge is determined to be the least environmentally damaging practicable alternative (LEDPA) (40 CFR § 230.10(a); section 404 sets out other requirements as well; see section II.B.2. below). When a proposed project requires an individual permit for filling waters of the United States, an analysis of alternatives must be carried out. For this analysis, the LEDPA generally is the practicable alternative that either avoids waters of the U.S. or impacts the smallest area of waters.

For non-water dependent projects (essentially all surface transportation projects) that require filling of wetlands or other *special aquatic sites* (see glossary), the Guidelines also *presume* that there are upland alternatives available and that these upland sites are less environmentally damaging. The burden to prove otherwise is on the project sponsor. In particular, the "no project" alternative, and projects that avoid or minimize fill must be carefully analyzed. An alternative with fewer impacts to aquatic resources than the preferred alternative may be eliminated by demonstrating that it has other overriding severe environmental impacts.

2. Other Requirements of Section 404

a. The Section 404(b)(1) Guidelines state at 40 CFR § 230.10:

Although all requirements in § 230.10 (including the alternatives analysis) must be met, the compliance evaluation procedures will vary to reflect the seriousness of the potential for adverse impacts on the aquatic ecosystems posed by specific dredged or fill material discharge activities.

b. In 40 CFR §§ 230.10(b)-(d), the Guidelines further state in part that:

(b) No discharge of dredged or fill material shall be permitted if it:

(1) Causes or contributes . . . to violations of any applicable State water quality standard;

(3) Jeopardizes the continued existence of species listed as endangered or threatened under the Endangered Species Act of 1973, as amended, or results in likelihood of the destruction or adverse modification of a habitat which is determined by the Secretary of Interior or Commerce, as appropriate, to be a critical habitat under the Endangered Species Act of 1973, as amended. If an exemption has been granted by the Endangered Species Committee, the terms of such exemption shall apply in lieu of this subparagraph;

...  
(c) . . . no discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States. . . .

(d) . . . no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem. . . .

### **C. Comparison of NEPA and Section 404**

The analysis requirements of NEPA and 404 as regards avoidance are slightly different but fully compatible. A 1990 Memorandum of Agreement between EPA and the Corps (reference listed in section VI.A. below) recognizes the value of each mitigation component defined under NEPA, and in addition ranks them to ensure that avoidance of impacts occurs first, before efforts to restore or create compensatory habitats. The impact analysis associated with alternatives should be formatted to reflect this priority.

Because a section 404 permit can only be issued for the LEDPA, section 404 compliance usually requires a more detailed and specific analysis of the aquatic impacts of each alternative than NEPA. NEPA documents should provide enough information on alternatives to determine if selection of the preferred alternative complies with the 404(b)(1) Guidelines.

## **III. ALTERNATIVE SELECTION**

### **A. Criteria for Identifying Reasonable Alternatives**

The evaluation of alternatives must consider a reasonable range of options that could fulfill the project sponsor's purpose and need. Reasonable alternatives are those that "are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant" (Council on Environmental Quality, 1981; see VI.A below for reference).

The range of alternatives to be considered should include at minimum: 1) alternative ways of meeting the project sponsor's purpose and need at the same location, 2) alternative locations, and 3) the "no action" alternative. The evaluation of the environmental impacts of all reasonable alternatives must be presented in comparative form to provide a clear basis for choosing among options. If alternatives are eliminated from further analysis, either the environmental document or a separate alternatives analysis must discuss the reasons for elimination.

### **B. Criteria for Identifying Practicable Alternatives**

For transportation projects, generally, an alternative is practicable if it: 1) meets the purpose and need; 2) is available and capable of being done (i.e., it can be accomplished within the financial resources that could reasonably be made available, and it is feasible from the standpoint of technology and logistics); and 3) will not creat

other unacceptable impacts such as severe operation or safety problems, or serious socioeconomic or environmental impacts.

Alternatives can be eliminated at any stage if they are not "reasonable" (NEPA), or if they are not "practicable" (404). However, the reasons for eliminating an alternative from detailed analysis need to be documented and discussed in the document prepared at that stage. Based on this information, the project sponsor must get EPA and the Corps of Engineers concurrence that there are no other less-environmentally damaging practicable alternatives than those identified.

### C. Consideration of Other Environmental Impacts

The Clean Water Act 404(b)(1) Guidelines require that the practicable alternative that would involve the least adverse impact to aquatic resources be chosen unless this alternative would have other significant environmental consequences (40 CFR § 230.10(a)). Similarly, section 4(f) of the Department of Transportation Act allows the transportation agency to reject an alternative as not feasible and prudent if "unacceptable adverse . . . environmental impacts" would result (FHWA, November 15, 1989). Thus, both regulations allow the potential for other significant environmental impacts to override either protection of aquatic resources (in the case of section 404), or preservation of public park and recreation lands, wildlife refuges and historic sites (in the case of section 4(f)).

Sometimes the only practicable alternatives that are available would either fill aquatic resources or impact section 4(f) resources. Thus, in some instances, it may be necessary to accept impacts to one resource in order to avoid or minimize impacts on another resource. The alternatives analysis should reflect the equal consideration of section 4(f) and section 404 concerns when evaluating alternatives. However, this equal consideration may change depending on specific project and community circumstances, and the magnitude of the impacts. The alternative that would result in the least overall environmental harm as determined through discussions with regulatory and resource agencies needs to be selected.

An important distinction to keep in mind when evaluating harm to non-aquatic (i.e., 4(f)) resources versus harm to waters of the U.S., is that, for the former, the alternatives selection process evaluates reasonable and prudent alternatives based on the "net harm" (after mitigation) of the alternative to 4(f) properties or other environmental resources. In contrast, for almost all section 404 alternatives analyses, the evaluation of practicable alternatives must consider the impact to waters of the U.S. that would result from the alternative before compensatory mitigation (see the "Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines" (February 6, 1990) for exceptions to this sequence). This MOA expressly states that "compensatory mitigation may not be used as a method to reduce environmental impacts in the evaluation of the least environmentally damaging practicable alternative." Therefore, if an alternative exists where the impacts to non-aquatic resources can be practicably mitigated, this alternative should generally be selected over one that would fill waters of the U.S.

#### IV. ALTERNATIVES ANALYSIS FOR TRANSPORTATION PLANNING STAGE

Transportation planning requires Metropolitan Planning Organizations (MPO's) to prepare Regional Transportation Plans (RTP's) and Transportation Improvement Programs, and State Departments of Transportation (DOT's) to adopt a State Transportation Improvement Program.

##### A. Existing Guidance

There is no specific, formal guidance on section 404 alternatives analysis for this stage of planning; however, the following documents serve as general guidance:

Intermodal Surface Transportation Efficiency Act of 1991. Pub. L. 102-240, December 18, 1991, 105 STAT. 1914.

Federal Highway Administration and Federal Transit Administration. Planning Assistance and Standards. 23 CFR Part 450 (FHWA); 49 CFR Part 613 (FTA).

##### B. Early Coordination

The MPO's that have formally agreed to follow the NEPA-404 integration process should request that the Corps of Engineers, Environmental Protection Agency (EPA), Fish and Wildlife Service, and National Marine Fisheries Service review and comment on RTP's and associated environmental analyses as specified in the MOU under Transportation Plan Stage (MOU pages 4-5). See Level of Data Needs / Threshold for Involvement Guidance section II.A. for details regarding agency involvement and information transmittal to the regulatory and resource agencies at the transportation planning stage.

##### C. Resource Identification

To meet the intent of section 404, it will be necessary for the MPO's to collect and analyze data on aquatic resources and listed and candidate species when preparing the RTP's. The MPO's should follow the Level of Data Needs / Threshold for Involvement Guidance specified for the planning stage. The MPO's may find it appropriate to develop, or request the project sponsors to develop, corridor or subarea studies focusing on system alternatives and environmental effects. The findings of these studies would be considered as the MPO's adopt the RTP.

##### D. Initial Selection of Alternatives

###### 1. Development of Alternatives

Once the basic project purpose has been agreed upon according to the Purpose and Need Guidance, all reasonable alternatives that meet the basic purpose should be identified, and objectively compared.

Alternatives analyses in the RTP can arise in two ways:

- a. from system alternatives considered in the RTP environmental analysis. These include: facilities, demand management, systems management and land use.
- b. from alternatives considered in corridor and subarea studies. These include modal choice, general alignment, and the development of the project concept and scope used in the emissions analysis.

Impacts to wetlands and other special aquatic sites can be most effectively avoided during Transportation Planning. Any reasonable actions or alignments which avoid adverse impacts to waters of the U.S. and *associated sensitive species* (see glossary) should be rigorously examined. If it is not possible to entirely avoid rivers, streams, and other linear waters of the U.S., crossings should be located to minimize impacts to aquatic resources. This could include such actions as shifting the alignment to reduce the footprint of the transportation facility on the aquatic resource.

## 2. Criteria for Identifying Practicable Alternatives

MPO's can eliminate from consideration project alternatives that are not practicable if they carefully document their reasons. The following practicability constraints may be used to carry out the initial selection of alternatives:

- a. Not meeting the project purpose and need (formulated according to Purpose and Need Guidance),
- b. Excessive cost of construction (including all mitigation),
- c. Severe operational or safety problems,
- d. Unacceptable adverse social, economic or environmental impacts,
- e. Serious community disruption,
- f. Unsuitable demographics (for mass transportation modes), and
- g. Logistical and technical constraints

The transportation agency must provide detailed documentation to demonstrate that rejected less-damaging alternatives considered are not practicable. Refer to section III.B. of this guidance paper.

## 3. Example

The following example illustrates the alternative selection process at the planning stage. An MPO has identified a need to reduce congestion. The objective is to achieve/maintain at least "satisfactory" operating conditions (level of service "D") and the resource and regulatory agencies have concurred with objective. The MPO is only able to reasonably identify approximately \$300 million with which to achieve this objective. Studies indicate that unless action is taken, operating conditions will deteriorate to "poor" (level of service "F"). The three alternatives identified by the MPO are described in the following chart.

HYPOTHETICAL ALTERNATIVES – TRANSPORTATION PLANNING STAGE

Alternative	No Build	Alt. A Highway Emphasis	Alt. B Transit Emphasis	Alt. C Highway/Transit Combination
Congestion (Level of Service)	poor ("F")	excellent ("A")	good ("B")	fair ("C")
Cost	none	\$200 million	\$450 million	\$275 million
Estimated Home/Business Displacement	none	low (30)	high (200)	intermediate (75)
Aquatic Resources Impacts	none	40+ hectares (~ 100+ acres), including vernal pools	< 2 hectares (~ 5 acres)	approx. 8 hectares (~ 20 acres), no vernal pools
Associated Sensitive Species Impacted	none	three, (two endangered)	none	one

In this example, the no-build alternative is rejected as not being practicable because the purpose of maintaining at least "satisfactory" operating conditions is not met.

Alternative B is also rejected as not practicable due to excessive cost. While Alternative B achieves the purpose, and would involve the least impact of all the alternatives to aquatic resources, its cost greatly exceeds the reasonably expected funds. Alternative B may also be considered not practicable due to unacceptable socioeconomic impacts. The displacement of 200 homes/businesses with Alternative B, as opposed to 30 or 75 for Alternatives A and C respectively, would likely be considered unacceptable.

Only Alternatives A and C are identified as practicable. At this point the MPO must determine if there is a practicable alternative that avoids impacts to aquatic resources. If so, it must be selected, so long as it does not result in other significant adverse environmental consequences. In this case, it was found that there was not a practicable avoidance alternative, so the practicable alternative that would cause the least impact to aquatic resources was selected. Alternative C was chosen because it would destroy around 32 fewer hectares (~80 acres) of aquatic resources than A, affect only one instead of three sensitive species (two of which are endangered), and not impact vernal pools, a wetlands habitat type that is very difficult to replace.

## V. ALTERNATIVES ANALYSIS FOR PROJECT PROGRAMMING STAGE

This stage identifies the budgets for project delivery. Efforts should be to set budgets which maximize flexibility when identifying reasonable alternatives. For projects potentially impacting waters of the U.S. and associated sensitive species, the project sponsors must identify the full range of reasonable alternatives (including a focused evaluation of avoidance alternatives), their costs (including mitigation), and general environmental implications.

### A. Existing Guidance

Army Corps of Engineers. General Regulatory Policies. 33 CFR Part 320.

Army Corps of Engineers. Nationwide Permit Program. 33 CFR Part 330.

California Department of Transportation. "Guidelines for the Preparation of Project Study Reports." September 12, 1991.

Environmental Protection Agency, Guidelines for Specification of Disposal Sites for Dredged or Fill Material. 40 CFR Part 230.

Federal Highway Administration. Timing of Administrative Actions. 23 CFR § 771.113.

### B. Early Coordination

The transportation agencies should consult with appropriate resource and regulatory agencies (i.e., the Corps, EPA, Fish and Wildlife Service, National Marine Fisheries Service, state water quality agency, state fish and game agency, and federal land management agencies, such as the Forest Service or Bureau of Land Management) early in the programming stage. This may include inviting the agency representatives to participate on the Technical Advisory Team. Field visits to the project area by project sponsor staff and resource agency personnel are invaluable for identifying resources of particular importance and potential project alternatives. Resource agencies should become involved in refining project-level alternatives and the selection criteria at this stage.

### C. Resource Identification

The actual programming documents do not include environmental documentation. Rather, the related pre-scoping information (e.g., project assessments and project study reports) will address the potential impacts to these resources (see the Level of Data Needs / Threshold for Involvement Guidance).

### D. Initial Selection of Project-Level Alternatives

This step should be carried out using the selection criteria and process outlined above under IV.D., if it has not been documented at the planning stage. Resource and regulatory agencies may disagree with the transportation agencies on what constitutes "excessive," "severe," "unacceptable," or "serious" in determining practicability (see list of selection criteria, IV.D.2.). Thus, for projects that will have a major adverse effect on aquatic resources, transportation agencies must work closely with the resource and

regulatory agencies to get agreement on the magnitude of constraints needed to render alternatives impracticable.

E. Example

A transportation agency is proposing to program a project described by the local MPO's long range plan. The plan identified the project for the purpose of reducing future congestion to at least "satisfactory" (level of service "D" operating conditions. The transportation and programming agencies are only able to reasonably identify approximately \$90 million to use for this purpose.

Three project alternatives have been identified by the transportation agency, and are described in the following chart.

HYPOTHETICAL ALTERNATIVES – PROJECT PROGRAMMING STAGE

Alternative	C1	C2	C3
Congestion (Level of Service)	fair ("C")	fair-good ("C"- "B")	good ("B")
Cost	\$82 million	\$87 million	\$90 million
Home/Business Displacements	19	10	10
Wetlands (Special Aquatic Site) Impacts	4 hectares (~ 10 acres)	10 hectares (~ 25 acres)	2 hectares (~ 5 acres)
Endangered Species Impacted	none	one	none

At the programming stage, the intent of the project sponsor should be to identify the full range of practicable avoidance or minimization alternatives, all of which should be formally considered at the project development stage.

In this example, all the alternatives are within the range of expected funds and meet the project purpose. However, Alternative C2 would impact the greatest amount of wetlands and adversely affect an endangered species. Other practicable alternatives (C1 and C3) exist that avoid impacts to these resources to a greater extent. Therefore, Alternative C2 is rejected.

F. Documentation of Earlier Analyses

For most mode and location (alignment) alternatives, the initial selection alternatives analysis probably occurred at the transportation planning stage. If so, the transportation agency must either:

1. Document these earlier decisions as described above under IV.D., and discuss how they meet the selection criteria listed at IV.D.2., or
2. Provide evidence that the regulatory and resource agencies already concurred at the planning stage.

For example, if one mode would be least damaging to aquatic resources but another mode was chosen during planning, the project sponsor should discuss in detail why the first mode is not practicable.

VI. ALTERNATIVES ANALYSIS FOR PROJECT DEVELOPMENT STAGE

The discussion below addresses how to satisfy the requirements of the section 404 alternatives analysis in the context of a NEPA document.

A. Existing Guidance

The following list includes guidance on section 404, NEPA, and section 4(f) of the Department of Transportation Act. A few of the entries are annotated to clarify how they pertain to section 404 analyses for transportation projects.

California Department of Transportation. December 27, 1990. "Project Alternative Assessment Process."

California Department of Transportation. June 7, 1991. "Mandatory Design Exception Procedures/Fact Sheet Outline." Division of State and Local Project Development, Office of Project Planning & Design.

Council on Environmental Quality. November 29, 1978. Regulations For Implementing the Procedural Provisions of the National Environmental Policy Act. 40 CFR Parts 1500-1508.

Council on Environmental Quality. March 16, 1981. "Questions and Answers About the NEPA Regulations."

Environmental Protection Agency. December 24, 1980. Guidelines for Specification of Disposal Sites for Dredged or Fill Material. 40 CFR Part 230.

Environmental Protection Agency and U.S. Army Corps of Engineers. February 6, 1990. "Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines."

Federal Highway Administration. October 5, 1987. "Section 4(f) Policy Paper." Director, Office of Environmental Policy, Washington D.C.

Federal Highway Administration. October 30, 1987. "Guidance for Preparing and Processing Environmental and Section 4(f) Documents." Director, Office of Environmental Policy, Washington D.C. (Guidance to FHWA field offices and project applicants on the preparation and processing of environmental and section 4(f) documents. Provides a good discussion of how alternatives should generally be developed for NEPA (EIS) purposes (Attachment pages 14–17). Also describes procedures that should be followed when wetland impacts will occur, and briefly states that the draft EIS should "evaluate alternatives which would avoid these wetlands" (Attachment page 27). However, it focuses on determining the impact to wetlands and demonstrating compliance with Executive Order 11990, not section 404, e.g., it lays out a procedure for a "Wetland Only Practicable Alternative Finding" to satisfy the Executive Order.)

Federal Highway Administration. November 15, 1989. "Alternatives Selection Process for Projects Involving Section 4(f) of the DOT Act." Director, Office of Environmental Policy, Washington D.C.

Yocom, T.G., R.A. Leidy, and C.A. Morris. 1989. "Wetlands Protection Through Impact Avoidance: A Discussion of the 404(b)(1) Alternatives Analysis." *Wetlands*. Vol 9, No. 2, pages 283–297. (Guidance for preparing alternatives analyses. Focuses on residential, industrial, and commercial projects.)

#### **B. Continued Interagency Coordination**

It is critical for transportation agencies to coordinate with the resource and regulatory agencies throughout all of the transportation stages. If agencies have not been approached at earlier stages, contact with the resource and regulatory agencies (see list under IV.B.) at the project development stage will help determine the depth of the alternatives studies needed based on project scale and impact.

As NEPA documentation is developed, the transportation agency sponsor should obtain interagency concurrence on the direction of the alternatives analysis. During the NEPA stage the project sponsor should:

1. Follow the steps outlined in the NEPA-404 Permit Concurrent Process for EIS's and EA's/CE's (MOU Appendix A). These processes require interagency concurrence on purpose and need, and alternative selection criteria and process at various milestones.
2. Describe the results of this and any other coordination with the agencies in the Alternatives Analysis Report (see below).

#### **C. Preparing the Alternatives Analysis**

For projects requiring alternatives analyses, both draft and final versions should be prepared in order to facilitate interagency input and concurrence. If a formal report is deemed unnecessary based on agency input, the project sponsor should determine from

the agencies which elements of the procedure below need to be informally transmitted. The components of each report are described below.

The 404 Alternatives Analysis should be presented in a separate section of the EA/ FONSI or EIS. However, if the outlined information is adequately discussed elsewhere in the document, these discussions can be referenced and summarized in the 404 alternatives analysis.

1. Draft Alternatives Analysis (to be included in the Draft NEPA document: see the NEPA-404 Permit Concurrent Process in MOU Appendix A)

a. Proposed Action

Describe the proposed action and explain the project purpose (see Purpose and Need Guidance).

b. Resource Identification

Follow the Level of Data Needs / Threshold for Involvement Guidance.

c. Documentation of Alternatives Considered But Rejected During the Initial Analysis

For most mode and location (alignment) alternatives, the initial selection of alternatives probably occurred at the transportation planning stage. If so, the transportation agency must either:

- (1) document these earlier decisions as described above at IV.D. and discuss how they meet the selection criteria listed at IV.D.2., or
- (2) provide evidence that the regulatory and resource agencies already concurred at the planning or programming stage.

d. Impacts of Each Alternative

The full range and scope of practicable alternatives need to be presented in comparative form, thus sharply defining the issues and providing a clear basis of choice among options. The impacts on the aquatic resources and associated sensitive species should be discussed for each alternative, such as the amount to be lost, functions and values affected, and indirect impacts (e.g., growth inducement) and cumulative impacts to aquatic resources. Where several alternatives would affect aquatic resources, a summary table comparing the various impacts of each alternative should be prepared.

For projects that would result in a significant impact to wetlands or sensitive species, the project sponsor will provide more documentation on the impracticability of wetlands minimization or avoidance alternatives than would normally be needed for the purposes of NEPA. Project sponsors will justify in detail how the cost, performance, socioeconomic impacts or other factors make the minimization or avoidance alternative impracticable.

Project sponsors should also avoid using ambiguous terms such as "slight," "insignificant," "adverse," or "substantial" in the NEPA document when discussing environmental impacts, or project cost or performance. For example, in a draft EIS for a route extension, a less environmentally damaging alternative was eliminated partly because traffic impacts were "unacceptable" to a local city with no further discussion of what this term meant. Existing levels of service in another draft EIS were described simply as "unacceptable" or "adverse" to justify the construction of a new roadway. If such terms are used, they must be quantified with traffic data and modelling assumptions.

e. Example

The project sponsor has identified two practicable alternatives (see table below) for analysis in the draft EIS.

HYPOTHETICAL ALTERNATIVES – PROJECT DEVELOPMENT STAGE

Alternative	C1	C3
Congestion (Level of Service)	fair ("C")	good ("B")
Cost	\$82 million	\$90 million
Home/Business Displacements	19	10
Wetlands (Special Aquatic Site) Impacts	4 hectares (~ 10 acres)	2 hectares (~ 5 acres)
Hazardous Waste Dump Disturbance	none	600 meters (~ 1970 feet) of frontage

It has been discovered that the construction of Alternative C3 would extensively disturb a hazardous waste dump, and seriously harm the underlying aquifer. Thus, even though it would fill less wetlands, Alternative C3 is the more environmentally damaging of the two alternatives. Alternative C1 is therefore the least environmentally damaging practicable alternative, and is designated as the preferred alternative in the final EIS.

f. Minimization of Impacts

Later analyses may consider location alternatives in more detail than the initial analysis and should also consider design variations. At this stage, enough detail on the project is known to make adjustments to avoid wetlands and associated sensitive species. In some cases, temporal measures (e.g., no construction during the breeding season) may avoid or minimize impacts to associated sensitive species.

Transportation agencies should consider, individually or in combination, design variations such as:

- (1) Minor alignment shifts,
- (2) Retaining structures,
- (3) Bridging,
- (4) Reduced cut and fill activity,
- (5) Changes in profile,
- (6) Changes in lane or median width,<sup>1</sup>
- (7) Variable slopes (to bring the toe of slope out of sensitive areas)
- (8) Specific construction methods

2. Final Alternatives Analysis

(To be included in the final NEPA document; see the NEPA-404 Permit Concurrent Process in MOU Appendix A)

The final 404 Alternatives Analysis should:

- a. Summarize the information from the draft Alternatives Analysis, and
- b. Clearly demonstrate that alternatives that would avoid aquatic resources to a greater extent than the preferred alternative are not practicable.
  - (1) If a practicable alternative that completely avoids aquatic resources exists, it must be selected unless that alternative has other significant adverse environmental consequences.
  - (2) If all the alternatives would result in some aquatic resource loss, the practicable alternative with least damage to aquatic resources must be selected unless that alternative has other significant adverse environmental consequences. The impacts to aquatic resources for each alternative must be evaluated **before** compensatory mitigation for this comparison (refer to section III.C. above).

3. Record of Decision (for EIS's only)

A record of decision must identify all alternatives considered and specify the alternative or alternatives which were considered to be environmentally preferable.

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<sup>1</sup> Exceptions to mandatory design standards should be identified prior to the completion of the programming document if possible.

The record of decision must state whether all practicable means to avoid or minimize environmental harm from the alternative have been adopted, and if not, why they were not.

**4. Corps Approval of Alternatives Analysis**

The Corps of Engineers through its permit process will determine compliance of the alternatives analysis with the Section 404(b)(1) Guidelines and the public interest.

# COMPENSATORY MITIGATION

## I. INTRODUCTION

The Clean Water Act (Section 404(b)(1) Guidelines) requires that no discharge of fill material be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem.

Mitigation is an action intended to reduce the effect of a specific activity. Mitigation includes: a) avoiding the impact altogether by not taking a certain action or parts of an action, b) minimizing impacts by limiting the degree or magnitude of the action and its implementation, c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment, d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action, and e) compensating for the impact by replacing or providing substitute resources or environments (40 CFR § 1508.20).

This guidance identifies the procedure for developing compensatory mitigation for unavoidable impacts to *aquatic resources* (see glossary). It includes mitigation categories (c) and (e) outlined in the previous paragraph. Compensatory mitigation is the replacement of functions and values to the extent practical. As clarified in the "Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines" (February 6, 1990), project sponsors must take a sequential approach to mitigation; first, avoid aquatic impacts, then minimize impacts (see Alternatives Analysis / Aquatic Resource Avoidance Guidance). Once the project has been evaluated under this process it will then be possible to explore other forms of mitigation.

## II. TRANSPORTATION PLANNING STAGE

Where avoidance and minimization of aquatic resource impacts are not practicable, the project sponsor will identify preliminary compensatory mitigation needs. Impact levels will be based upon information obtained following the Level of Data Needs / Threshold for Involvement Guidance. At the transportation planning stage mitigation banking can be evaluated following initial determination from Corps and EPA that conditions permitting banking are present, and where banking will provide for equivalent or higher quality replacement of functions and values.

Mitigation banking for aquatic habitats is defined as the creation, restoration, or enhancement of wetland or other aquatic habitats and their functional values expressly for the purpose of providing compensatory mitigation in advance of proposed discharges into *waters of the U.S.* (see glossary) permitted under the section 404 regulatory program. Banks are created for an unknown number of future project impacting waters of the U.S.

Mitigation banking may be appropriate for compensating cumulative impacts on aquatic resources identified at the transportation planning stage. Initial identification of mitigation bank sites should be coordinated with local resource planning efforts. The location of any mitigation bank site should augment or be compatible with regional and local planning efforts, such as watershed planning, natural community conservation planning (NCCP), special area

management plans (SAMP), habitat conservation plans (HCP), multiple species management, and open space preserves.

### III. PROJECT PROGRAMMING STAGE

At this phase, the project sponsor needs to describe proposed mitigation, including the expected functions and values anticipated to compensate for unavoidable impacts. Mitigation cost estimates must be incorporated in the various alternatives being considered.

Programs using a common funding source may be able to develop, where indicated appropriate by Corps, EPA, and FWS, a mitigation bank for anticipated compensation commitments for several projects.

### IV. PROJECT DEVELOPMENT STAGE

The project sponsor needs to develop a compensatory mitigation plan, including a feasibility study, conceptual mitigation plan, and final mitigation plan. A feasibility study of candidate mitigation site(s) will be completed prior to circulation of the draft EIS. The Corps will review candidate site(s) following their jurisdictional determination. Candidate mitigation site(s) will be identified in the conceptual mitigation plan and the draft EIS. Following issuance of the record of decision, the final mitigation plan will be developed and submitted to the Corps for approval.

Throughout the development and implementation of a mitigation plan, a mitigation project management structure is needed to identify the responsible agency, the implementing agency, the monitoring agency, and timing of implementation in relation to the proposed project.

The mitigation project management structure will:

1. Establish goals and develop objectives
2. Determine scope of mitigation project
3. Designate mitigation project management and responsibilities
  - a. Identify responsible agency
  - b. Identify implementing agency
  - c. Identify agency responsible for monitoring
4. Identify the timing of mitigation in relation to the proposed transportation project.
5. Identify a mechanism for preserving the mitigation area in perpetuity.

#### A. Draft Environmental Document Development

After addressing all reasonable efforts to avoid and minimize impacts, the remaining unavoidable impacts can be mitigated by rectifying and/or compensating impacts to the affected environment.

##### 1. Feasibility Study

The feasibility study is a preliminary investigation of candidate mitigation sites. The feasibility study information can be obtained by site visits, cursor investigations, record searches of existing databases, and referencing existing

plans and land use documents. The purpose is to quickly determine if conditions exist on site that will support the mitigation activity being proposed.

a. General Factors

- (1) Political considerations
- (2) Historical context
- (3) Hazardous waste site in area
- (4) Resource constraints—archaeology, threatened and endangered species
- (5) Human use patterns
- (6) Identify present internal and external stresses to the ecosystem
- (7) Ownership of the candidate area
- (8) Identify and address constraints on the land—easements, rights etc.
- (9) Proposed and existing land use for site and adjacent areas
- (10) Agricultural or quarantine issues, on, adjacent to site or in the vicinity

b. Existing Conditions

(1) Physical Factors

- (a) Define the candidate area—map, description
- (b) Landscape ecology considerations
- (c) Soil issues—suitability, disturbed, salinity, toxic
- (d) Groundwater hydrology—water table
- (e) Surface hydrology
- (f) Soil testing—texture, classification
- (g) Topography, elevation and drainage pattern
- (h) Water quality evaluation

(2) Biological Factors

- (a) Determine historical evolution of the existing vegetation
- (b) Identify existing habitat values and map habitat features
- (c) Determine the extent of degradation on site
- (d) Identify wildlife resources present
- (e) Conduct plant surveys
- (f) Determine if mitigation habitats conform to ecological situation on site
- (g) Determine the presence of sensitive species

Collection of the preceding information will lead to a conclusion or a determination of suitability—whether the site possesses favorable characteristics which would make a successful mitigation likely.

2. Conceptual Mitigation Plan

The conceptual mitigation plan includes information about the specific mitigation which further elaborates upon the ability to successfully execute the mitigation.

This plan also serves to identify in general terms the extent and nature of the mitigation and should include:

- Habitat types and approximate hectares of impact
- Plant communities and habitat to be replaced
- Functions and values enhanced or created by the mitigation
- Discussion of buffer areas and habitat linkages
- General discussion of hydraulic design considerations
- Listing of species to be used
- Cost estimate
- Mitigation success criteria
- Monitoring criteria for evaluation of the mitigation

The 404 application to the Corps will include the management structure, candidate sites, feasibility studies and a conceptual mitigation plan.

**B. Final Environmental Document Development**

The final document needs to carry forward the information contained in the draft EIS. The feasibility study conducted during the selection process will determine suitability. The basis for selection will be the adequacy of the site to compensate for the functions and values impacted for the preferred alternative or each alternative in the draft EIS. The Corps will review the final candidate mitigation site(s) as part of its normal review at this stage. Before approval of the final environmental document, the Corps, EPA, and FWS must provide written preliminary agreement on the mitigation site(s).

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*bio opinion on threatened or endangered spc.*

**C. FONSI / Record of Decision**

The final mitigation plan and specifications must be approved by Corps before a permit will be issued. The final mitigation plans and specifications will be completed following the FONSI or record of decision.

**Final Mitigation Plan**

Several approaches have been formulated for restoring or creating wetlands. Each site has its own circumstances or conditions which dictate the approach or procedure to follow. Each Corps District has developed habitat mitigation and monitoring guidelines which outline the items desirable in a project mitigation plan. These documents should be considered as guidelines with the appropriate level of information and the timing of development dictated by the specific circumstances of the site and mitigation project.

**V. REFERENCES**

Abell, D.L. 1989. Proceedings of the California Riparian Systems Conference: protection, management, and restoration for the 1990's; September 22-24, 1988; Davis, CA. Gen. Tech. Rep. PSW-110. Berkeley, CA: Pacific Southwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture; 544p.

Gore, J.A. 1985. *The Restoration of Rivers and Streams: Theories and Experience*. Butterworth Publishers, Boston. 280p.

Hammer, D.A. 1989. *Constructed Wetlands for Wastewater Treatment: Municipal, Industrial and Agricultural*. Lewis Publishers, Boca Raton. 831p.

Hammer, D.A. 1992. *Creating Freshwater Wetlands*. Lewis Publishers, Boca Raton. 298p.

"Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines," February 6, 1990.

Memorandum of Agreement between California Department of Transportation, Federal Highway Administration, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and the California Department of Fish and Game: "Early Mitigation Planning for Transportation Improvements in California," May 13, 1991.

Memorandum to the Field between the Environmental Protection Agency and the U.S. Army Corps of Engineers, dated August 23, 1993: "Establishment and Use of Wetland Mitigation Banks in the Clean Water Act Section 404 Regulatory Program."



## LEVEL OF DATA NEEDS / THRESHOLD FOR INVOLVEMENT

### I. SCOPE OF GUIDANCE

This guidance addresses the interagency process and level of data needed during transportation planning, programming and development for only waters of the U.S. and associated sensitive species (see glossary). This guidance does not cover the many other sensitive environmental resources and issues (such as threatened and endangered species not associated with aquatic habitats, recreation land, cultural resources, socioeconomic concerns, and air quality) that must also be addressed at these stages as required by the pertinent laws and regulations.

### II. TRANSPORTATION PLANNING STAGE

#### A. Agency Involvement

1. All MPO's who find the transportation system or action likely to require a Corps individual section 404 permit should inform the applicable offices of the Federal and State agency MOU signatories.

- a. The MPO and State DOT should consult with other potential sponsoring, regulatory, and resource agencies to determine whether impacts to aquatic resources are likely to be substantial. If so, more detailed studies should be conducted to evaluate potential impacts. This study may be included in a subarea or corridor study.

These studies and/or any RTP's that may contain these studies should be submitted to the regulatory and resource agencies for their input before the document is finalized.

- b. The State DOT's should determine on an annual basis which MPO's should meet directly with the resource and regulatory agencies to discuss the aquatic resource issues related to their RTP.

The review of the Overall Work Program provides a venue to determine if the budget and work plans of MPO's consider the requirements of the NEPA-404 integration MOU.

- c. MPO's should send a copy of the circulated draft RTP and any associated environmental documents to the appropriate signatory agency contacts as identified in Appendix A. The transmittal letter should indicate whether there are potential significant impacts to aquatic resources.

2. For MPO's that have formally agreed to follow the NEPA-404 integration process:

- a. During the development of the draft RTP, the State DOT's will "review and comment on the adequacy of information and avoidance of sensitive resources presented in the RTP's and associated environmental analyses"

and "request federal regulatory/resource agencies to review and comment on the RTP's and associated environmental analyses" (MOU, page 5).

- b. The Corps, EPA, FWS and NMFS will "provide input to draft RTP's (relating to waters of the U.S. and to associated sensitive species)" and "review and comment on RTP's and associated environmental analyses within the public review period: purpose and need, alternative selection, mode, environmental impacts including cumulative impacts" (MOU, page 5).
3. For MPO's that have no formal agreement:
    - a. During the development of the draft RTP, the State DOT's will "review and comment on the adequacy of information and avoidance of sensitive resources presented in the RTP's and associated environmental analyses" (MOU, page 5).
    - b. The State DOT may invite the regulatory and resource agencies to comment when it appears that an RTP will have unavoidable impacts to special aquatic sites. These agencies may then choose to become involved in estimating the extent of the resources at risk, and assessing the adequacy of the avoidance/minimization alternatives.

## B. Data Needs

The RTP and associated environmental documentation will contain sufficient information to assess potential impacts to aquatic resources.

### 1. Information Sources

- a. The extent and quality of existing resources must be assessed to determine if avoidance alternatives are needed. To accomplish this, information sources<sup>1</sup> that must be consulted at this stage are:
  - (1) FWS National Wetlands Inventory (NWI) maps,
  - (2) Natural Diversity Data Base (NDDDB) or other natural diversity databases (the State DOT's should assist the MPO's with obtaining and accessing NWI maps and the natural diversity databases),
  - (3) FWS Endangered Species office for associated sensitive species lists, maps, and/or Habitat Conservation Plans.<sup>2</sup>

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<sup>1</sup> Aquatic resources may exist, but not be depicted in these general information sources; any such occurrences will need to be addressed when identified at a later stage.

<sup>2</sup> The Sacramento Field Office of the FWS now requires a full two years of monitoring for certain sensitive species to establish presence or absence (other field offices may also require this). Thus, the sponsor should consult the FWS early to determine the level of monitoring needed. In any case, the project sponsor must strive to establish the location of associated sensitive species or their habitats within the project area if the FWS or NDDDB information indicates that they may be present.

- b. It is recommended that the MPO's also consult the following sources:
- (1) geographic information systems (GIS),
  - (2) USGS quadrangle maps,
  - (3) aerial photographs (check with the Corps, FWS, general plans, commercial sources),
  - (4) Soil Conservation Service soil survey maps,
  - (5) existing environmental documents,
  - (6) county and local general plans,
  - (7) individuals, including resource agency and/or academic personnel, who are familiar with the biological resources of the project area, and
  - (8) any other technical information provided by State DOT's.
2. Products
- a. At a minimum, the MPO's shall provide the State DOT's and regulatory and resource agencies the following:
- (1) The RTP and any associated environmental analyses.
  - (2) Maps at a scale no larger than USGS 15' quadrangles (1:48,000) of proposed projects or corridors in the RTP that potentially impact special aquatic sites and other waters of the U.S., and/or associated sensitive species. This mapping need not be of publishable quality (e.g., it could be a highlighted quadrangle map or NWI printout). The MPO should attach project descriptions or reference the RTP and/or the environmental analyses. NWI printouts or database printouts will also be attached if they are not otherwise summarized elsewhere.
  - (3) A quantification of purpose and need (i.e., goals and objectives) at a level of detail commensurate with the level of impacts (see Purpose and Need Guidance).
  - (4) A range of practicable alternatives that would avoid or minimize the impact to these resources (see Alternatives Analysis / Aquatic Resource Avoidance Guidance for information on determining practicability).
  - (5) An identification of preliminary mitigation needs (see Compensatory Mitigation Guidance).
  - (6) A discussion of cumulative impacts on special aquatic sites and other waters of the U.S., and associated sensitive species within the documentation.
- b. If the State DOT determines that a draft project assessment/PSR with a subarea, corridor, or other detailed study is needed (see A. Agency Involvement above), the MPO will provide the above information plus USGS

7.5' quadrangles (1:24,000) of the affected resources for each alternative (or an equivalent level of detail).

- c. The RTP will demonstrate that MPO's have (1) used the resource information noted above and integrated it with other planning level mapping, (2) considered alternatives that would avoid impacts to identified resources, and (3) explored opportunities to first, avoid, and then minimize impacts. The RTP documentation should also discuss systems management strategies, mode choices, general location, capacity, and preliminary budget.

### III. PROJECT PROGRAMMING STAGE

#### A. Agency Involvement

The MOU outlines the activities of each agency.

#### B. Data Needs

##### 1. Information Sources

The project sponsor should consult the information sources required and recommended for the **Transportation Planning** stage, above, if not done so earlier.

##### 2. Products

As part of the project study report or project assessment, the project sponsor shall provide the regulatory and resource agencies the following:

- a. A project description including purpose and need (see Purpose and Need Guidance).
- b. Maps that show project alternatives, the aerial extent of and impacts to aquatic resources.
  - (1) Maps will be no larger than a 1:2400 scale, and need not be of publishable quality (e.g., highlighted maps or NWI printouts).
  - (2) Maps will depict the general vegetative communities within the study site.
  - ★ (3) A 16-kilometer (~ten-mile) radius from the project site normally provides a useful frame of reference for developing a list of associated sensitive species to be considered during project studies. However, this will not be adequate in all cases. As a rule of thumb, the project sponsor shall consider all species associated with waters of the U.S. whose range includes the project site and whose life requirements may be met by the aquatic habitat types that are present within the survey area. Potential impacts to associated sensitive species need to be identified as accurately as possible.

- (4) The maps of special aquatic sites and other waters of the U.S. should be verified in the field (a windshield survey is adequate).
  - (5) Following field review, impacts to special aquatic sites should be known to approximately 0.4 hectare (~ one acre); impacts to other waters of the U.S. should be known to approximately 1.2 hectares (~ three acres).
- c. A discussion of the full range of reasonable alternatives including a focused evaluation of avoidance alternatives, their costs (including mitigation), and general environmental implications (see Alternatives Analysis / Aquatic Resource Avoidance Guidance).
  - d. A comparison (i.e., table or matrix) showing the relative impacts of the project alternatives on:
    - (1) the quantity (hectares) and general habitat quality of waters of the U.S. (showing special aquatic sites separately),
    - (2) the quantity (hectares) of associated sensitive species habitat,
    - (3) the magnitude of other significant environmental and socioeconomic resources.
  - e. The estimated functions and values of the proposed compensatory mitigation for unavoidable impacts of each alternative (see Compensatory Mitigation Guidance).
  - f. A discussion of cumulative impacts on aquatic resources.

#### IV. PROJECT DEVELOPMENT STAGE

##### A. Agency Involvement

1. The MOU outlines the activities of each agency. The process in the NEPA EIS-404 Permit Concurrent Process (MOU, Appendix A) should be used by project sponsors preparing EIS's. For EA's or CE's, the project sponsor should refer to the NEPA EA/CE-404 Permit Concurrent Process (MOU, Appendix A).
2. If sensitive species are identified in the project area, the project sponsor will need to coordinate with the FWS, NMFS, and the State Fish and Game Department to identify the full extent of the sensitive species habitat in the project area, the potential project impacts, and the appropriate avoidance, minimization, and compensatory mitigation measures (Fish and Wildlife Coordination Act).
3. Should the sensitive species involve listed, proposed, or candidate species or designated or proposed critical habitat, appropriate coordination under the Endangered Species Act will be required (e.g., early consultation, preliminary biological opinion, written request for species/habitat information, biological

assessment, informal consultation, formal consultation, biological opinion, conference, and/or conference opinion). Refer to 50 CFR Part 402 for the procedural regulations governing the interagency cooperation under section 7 of the Endangered Species Act of 1973, as amended.

**B. Data Needs**

Data requirements for the documents reference in the two NEPA-404 Permit Concurrent Process are described below.

**1. Pre-Scoping (EIS) or Pre-Assessment (EA/CE)**

- a. The "pre-scoping information" (see NEPA-404 Permit Concurrent Process) to be included in the project sponsor invitation letter to the regulatory and resource agencies is the information outlined in II.B.2, above and, in particular, should include a discussion of purpose and need (see Purpose and Need Guidance), criteria for selecting the range of alternatives, and the project alternatives to be evaluated in the draft EIS (see Alternatives Analysis / Aquatic Resource Avoidance Guidance). This information must be developed at this stage if not done so earlier.
- b. The "pre-assessment of waters of the U.S." will consist of the mapping information required at the Programming stage, as outlined above.

**2. Notice of Intent (EIS's only)**

The NOI should summarize the following information from the pre-scoping stage:

- a. Purpose and Need (see Purpose and Need Guidance).
- b. Potential Alternatives and their impacts to aquatic resources and other environmental resources (see Alternatives Analysis / Aquatic Resource Avoidance Guidance).
- c. Potential Mitigation (see Compensatory Mitigation Guidance).

**3. Draft Document Development/Corps Permit Application**

- a. The project sponsor should refine the purpose and need and alternatives analysis as outlined in the Purpose and Need and Alternatives Analysis / Aquatic Resource Avoidance Guidances for the Project Development stage. The project sponsor shall incorporate any information obtained during the scoping process on waters of the U.S. and associated sensitive species.
- b. The project sponsor shall include the following information on special aquatic sites and other waters of the U.S. in the draft EIS/EA/CE:
  - (1) A delineation of all wetlands which could be affected by the proposed project on 1:1200 scale maps using the following procedure:

(a) Agricultural Lands

In accordance with the terms and procedures of the January 6, 1994 "Memorandum of Agreement Among the Department of Agriculture, the Environmental Protection Agency, the Department of the Interior, and the Department of the Army Concerning the Delineation of Wetlands for Purposes of Section 404 of the Clean Water Act and Subtitle B of the Food Security Act," wetland delineations made by the Soil Conservation Service on "agricultural lands" (as defined in that MOA) will use the procedures described in the National Food Security Act Manual, Third Edition (NFSAM).

(b) Non-Agricultural Lands

For areas that are not "agricultural lands" (as defined in the above referenced MOA), the procedures described in the 1987 Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1, Department of the Army Waterways Experiment Station) will be used to make wetland delineations applicable to section 404.

Data forms supporting the delineation must be included.

(2) A delineation of other waters of the U.S. as follows:

(a) For tidal waters, the high tide line shall be determined as described at 33 CFR 328.3(d).

(b) For non-tidal waters, ordinary high water shall be determined as described at 33 CFR 328.3(e).

(3) Map units should be selected on the basis of a recognized classification system; for California it should be that of the CNDDDB (Holland, R. F., 1986, "Preliminary Descriptions of the Terrestrial Natural Communities of California," California Department of Fish and Game, Unpublished Report, 156 pages). (Other classifications may be used in California if site conditions make them more appropriate.) Descriptive information for each mapping unit shall include the distribution of the unit within the study area, an estimate of the total number of hectares present, the dominant plant species, and the relative sensitivity of the vegetation. All plant and animal taxa encountered during site visits shall be listed by vegetation type in an appendix to the draft EIS.

(4) A detailed assessment of the functions and values of wetlands and other waters of the U.S. Functions are the physical, chemical and biological attributes of a wetland/waters without regard to their importance to society. Examples of functions include flood storage, wildlife habitat, groundwater recharge, etc. Values are those wetland/waters functions which generally are regarded as beneficial to society. Examples include recreation, aesthetics, groundwater recharge, etc. The assessment should determine which functions are performed by

the wetland/waters, the value of those functions, and how the project will affect the continued performance of the identified functions.

The project sponsor may consult the following references for further information on conducting the functions and values assessment:

Adamus, P.R., E.J. Clairain, Jr., R.D. Smith, and R.E. Young. 1987. "Wetland Evaluation Technique (WET); Volume II: Methodology." Operational Draft Technical Report Y-87-\_, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

Brinson, M.M., et. al. "Developing an approach for assessing the functions of wetlands." *In* (W.J. Mitsch and R.E. Turner, eds.) *Wetlands of the World: Biogeochemistry, Ecological Engineering, Modeling and Management*. Elsevier Publishers, Amsterdam.

California Department of Transportation. 1990. "Guidance for Consultants—Procedures for Completing the Natural Environment Study and Related Biological Reports." Caltrans Office of Environmental Analysis.

The Wetland Evaluation Technique II (WET II) is a methodology for assessing wetland functions and values. It was designed primarily for conducting initial, rapid assessments of wetlands. WET II with professional judgement is the current FHWA-recommended methodology for evaluating wetlands. Wetland assessments need to rely heavily on the wetland biologist's professional judgement and field experience.

- (5) A detailed assessment of project impacts on special aquatic sites and other waters as follows:
  - (a) A discussion of the affected functions and values.
  - (b) A detailed description of project impacts, including the type of impact (e.g., habitat removal, fragmentation, introduction of exotic species), and its magnitude. These effects must be evaluated in the appropriate local or regional context. In most cases, a regional context will be appropriate. However, in some instances it may be more reasonable to evaluate the resource in a local context. For example, an aquatic habitat may be well represented in the region, but extremely scarce locally.
- (6) A detailed purpose and need statement (see Purpose and Need Guidance).

- (7) A draft Alternatives Analysis as described in the Alternatives Analysis / Aquatic Resource Avoidance Guidance (including both the "initial" and "refined" analyses).
  - (8) A feasibility study of candidate mitigation sites (see Compensatory Mitigation Guidance).
- c. If associated sensitive species will be affected, the draft document shall also contain the following information:
- (1) The biological assessment as described under A. Agency Involvement.
  - (2) Maps showing the occurrences of all associated sensitive species that have been identified within the survey area in relation to project features.
  - (3) The size(s) of the population(s) either in terms of numbers of individuals or habitat area occupied.
  - (4) The portion of the population(s) to be directly affected by each project alternative (expressed as a percentage of the total population in the survey area).
  - (5) The portion of the population(s) to be indirectly affected by each alternative (expressed as a percentage of the total population in the survey area).
  - (6) The amount of suitable habitat to be directly or indirectly affected under each alternative (e.g., will changes in habitat values caused by the project affect the long term survival of the population(s)? Are the anticipated effects adverse or beneficial?).
  - (7) The importance of project impacts within the context of the known distribution of the species (i.e., how many other populations are known to exist? What percentage of the total species numbers will be affected by the current project?).
- d. When the project sponsor is evaluating significant adverse effects in an EIS and there are gaps in relevant information or scientific uncertainty, the project sponsor shall make clear that such information is lacking or that uncertainty exists by following the procedures outlined in 40 CFR § 1502.22.
- e. For environmental assessments, the project sponsors need to state their preliminary determination regarding a FONSI within the draft EA.
- f. The 404 permit application package shall contain:
- (1) A completed section 404 permit application form.

- (2) Information from the environmental document which provides
          - (a) a description of the project and its alternatives;
          - (b) discussions of the impacts to aquatic resources and the proposed mitigation; and
          - (c) a draft section 404(b)(1) alternatives analysis.
4. Final EIS/EA/CE Development
  - a. The final document shall include:
    - (1) A final alternatives analysis identifying the NEPA preferred/404 least environmentally damaging practicable alternative (see Alternatives Analysis / Aquatic Resource Avoidance Guidance).
    - (2) The final feasibility study of mitigation sites, identification of the mitigation site location(s), and a conceptual mitigation plan (see Compensatory Mitigation Guidance).
5. Record of Decision/FONSI/CE
  - a. For environmental assessments, the basic decision would be either a finding that there are "significant" impacts to the human environment and an EIS will be prepared, or a finding of no significant impact.
  - b. A FONSI will include a discussion of alternatives and mitigation measures that are appropriate to reduce adverse environmental impacts.
  - c. A ROD will document the basic decision to carry out either one of the action alternatives or the no action alternative.
  - d. ROD's and FONSI's will both include summaries of:
    - (1) the basis for the decision on the least environmentally practicable alternative, and
    - (2) the mitigation measures that will be incorporated into the project.
  - e. Record of decision's and FONSI's are documents that are available to the public.
6. Corps Permit Decision

Prior to the permit decision, the project sponsor shall:

  - (1) Provide the final project design and mitigation plans and the mitigation schedule.
  - (2) Complete the final mitigation plan(s) and specifications (see Compensatory Mitigation Guidance).

## A c r o n y m s

4(f)	Section 4(f) of the Department of Transportation Act of 1966 (49 U.S.C. § 303)
404	Section 404 of the Clean Water Act
771	23 CFR Part 771, Environmental Impact and Related Procedures (FHWA)
AASHTO	American Association of State Highway and Transportation Officials
ADEQ	Arizona Department of Environmental Quality
ADOT	Arizona Department of Transportation
ADR	Alternative dispute resolution
AADT	Annual average daily traffic
ADT	Average daily traffic
BCDC	San Francisco Bay Conservation and Development Commission
BMP	Best management practices
CAA	Clean Air Act
Caltrans/CT	California Department of Transportation
CARB	California Air Resources Board
CCMP	County congestion management plan
CE	Categorical exclusion (NEPA) or categorical exemption (CEQA)
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CMA	Congestion management agency
CMP	Congestion management plan
CMS	Congestion management system
CNDDB	California Natural Diversity Database
Corps/COE	U.S. Army Corps of Engineers
CT/Caltrans	California Department of Transportation
CTC	California Transportation Commission
CWA	Clean Water Act (also known as the Federal Water Pollution Control Act (FWPCA)) Pub.L. 92-500, as amended by Pub.L. 95-217, 33 U.S.C. 1251, <i>et seq.</i>
CZM	Coastal zone management
CDFG	California Department of Fish and Game
DA	Department of the Army
DOI	Department of the Interior
DOT	Department of Transportation
EA	Environmental assessment
E.O.	Executive Order
EIR	Environmental impact report (under CEQA)
EIS	Environmental impact statement (under NEPA)
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FHWA	Federal Highway Administration
FONSI	Finding of no significant impact
FTA	Federal Transit Administration
FWS	U.S. Fish and Wildlife Service
HCP	Habitat conservation plan
HEP	Habitat evaluation procedure
HOV	High occupancy vehicle

IPG	Intermodal planning group
ISTEA	Intermodal Surface Transportation Efficiency Act
LEDPA	Least environmentally damaging practicable alternative
LOS	Level of service
MOA	Memorandum of agreement
MOU	Memorandum of understanding
MPO	Metropolitan planning organization
NCCP	Natural communities conservation planning
NDOT	Nevada Department of Transportation
ND	Negative declaration (CEQA)
NEPA	National Environmental Policy Act
NFSAM	National Food Security Act Manual, Third Edition
NHS	National highway system
NMFS	National Marine Fisheries Service
NDDDB	Natural Diversity Database
NOD	Notice of determination (CEQA)
NOI	Notice of intent (NEPA)
NOP	Notice of preparation (CEQA)
NPRM	Notice of proposed rule making
NPS	National Park Service
NWI	National Wetland Inventory
OST	Office of the Secretary of Transportation
PDT	Project development team
PN	Public notice
PR	Project report (Caltrans)
PS&E	Plans, specifications, and estimate
PSR	Project study report (Caltrans)
PSTIP	Proposed STIP
RGL	Regulatory guidance letter
ROD	Record of decision
ROW or R/W	Right-of-way
RTIP	Regional TIP
RTP	Regional transportation plan
R/W or ROW	Right-of-way
SCS	Soil Conservation Service
Section 4(f)	Section 4(f) of the Department of Transportation Act of 1966 (49 U.S.C. § 303)
Section 404	Section 404 of the Clean Water Act
Section 7	Section 7 of the Endangered Species Act
SHA	State highway agency
SIP	State implementation plan (air quality)
SOV	Single occupancy vehicle
STIP	State transportation improvement plan
STP	Surface transportation system
CSWRCB	California State Water Resources Control Board
TCM	Transportation control measure
TIP	Transportation improvement program
TSM	Transportation systems management
U.S.C.	United States Code (Federal law)
USCG	U.S. Coast Guard

USFS	U.S. Forest Service
USGS	U.S. Geological Service
V/C	Volume/capacity
VMT	Vehicle miles of travel
WET	Wetland evaluation technique



## Glossary<sup>1</sup>

**Action**—A highway or transit project proposed for FHWA or FTA funding. It also includes activities such as joint and multiple use permits, changes in access control, etc., which may or may not involve a commitment of Federal funds. 23 CFR § 771.107(b).

**Adjacent**—The term *adjacent* means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are *adjacent wetlands*. 33 CFR § 328.3(c).

**Annual element**—The portion of the transportation improvement program (TIP) which consists of projects proposed for implementation during the year. AASHTO.

**Aquatic resources**—All waters of the U.S. and associated sensitive species (both defined below).

**Associated sensitive species**—Sensitive species (defined below) which inhabit or depend on waters of the U.S. habitat for portions of their life cycle.

**Capacity**—(1) The maximum number of vehicles which has a reasonable expectation of passing over a given section of a lane or a roadway in one direction, or in both directions for a two-lane or three-lane highway, during a given time period under prevailing roadway and traffic conditions. (2) The number of passengers that can be transported over a given section of a transit line in one direction during a given time period (usually one hour) under prevailing traffic conditions. AASHTO.

**Categorical exclusion (CE)**—A category of actions/projects which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency implementing these regulations (771 for FHWA) and for which, therefore, neither an EA or EIS is required. 40 CFR § 1508.4.

**Certification**—Approval by the Federal Highway Administration and the Federal Transit Administration of a local transportation planning process with regard to compliance with legislative and regulatory requirements. AASHTO.

**Control of access**—The condition where the right of owners or occupants of abutting land or other persons to access, light, air, or view in connection with a highway is fully or partially controlled by public authority. AASHTO.

**Cooperating agency**—Any Federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or reasonable alternative) for legislation or other major Federal action/project significantly affecting the human environment. A State or local agency of similar qualifications or, when

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<sup>1</sup> This glossary includes definitions obtained from the American Association of State Highway and Transportation Officials (AASHTO) *Transportation Glossary* (1983), the Code of Federal Regulations, the California Resources Agency CEQA regulations, and the Caltrans "Project Development Procedures Manual." Where a definition from one of these sources is used, a citation is provided at the end of the definition. Permission was obtained from AASHTO for the use of definitions from the *Transportation Glossary*.

the effects are on a reservation, an Indian Tribe may by agreement with the lead agency become a cooperating agency. 40 CFR § 1508.5.

**Corridor**—A strip of land between two termini within which traffic, topography, environment, and other characteristics are evaluated for transportation purposes. AASHTO.

**Cumulative impact**—The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. 40 CFR § 1508.7.

**Demand**—The quantity of transportation desired. AASHTO.

**Design capacity**—The maximum number of vehicles that can pass over a lane or a roadway during one hour without operating conditions falling below a preselected design level. AASHTO.

**Design concept**—The type of facility identified by the project, e.g., freeway, expressway, arterial highway, grade-separated highway, reserved right-of-way rail transit, mixed-traffic rail transit, exclusive busway, etc. 40 CFR § 51.392.

**Design scope**—The design aspects which will affect the proposed facility's impact on regional emissions, usually as they relate to vehicle or person carrying capacity and control, e.g., number of lanes or tracks to be constructed or added, length of project, signalization, access control including approximate number and location of interchanges, preferential treatment for high-occupancy vehicles, etc. 40 CFR § 51.392.

**Design speed**—A speed determined for design and correlation of the physical features of a highway that influence vehicle operation. It is the maximum safe speed that can be maintained over a specified section of highway when conditions are so favorable that the design features of the highway govern. AASHTO.

**Design volume**—A volume determined for use in design, representing traffic expected to use the highway. Unless otherwise stated, it is an hourly volume. AASHTO.

**Design year**—Twenty years after the transportation facility is open to traffic.

**Discharge of dredged material**—Any addition of dredged material into the waters of the U.S. The term includes, without limitation, the addition of dredged material to a specified discharge site located in waters of the U.S. and the runoff or overflow from a contained land or water disposal area. Discharges of pollutants into waters of the U.S. resulting from the onshore subsequent processing of dredged material that is extracted for any commercial use (other than fill) are not included within this term and are subject to section 402 of the CWA even though the extraction and deposit of such material may require a permit from the Corps of Engineers. The term does not include plowing, cultivating, seeding and harvesting for the production of food, fiber, and forest products (See 33 CFR § 323.4 for the definition of these terms). The term does not include *de minimis*, incidental soil movement occurring during normal dredging operations. 33 CFR § 323.2(d).

**Discharge of fill material**—The addition of fill material into waters of the U.S. The term generally includes, without limitation, the following activities: placement of fill that is necessary for the construction of any structure in a water of the U.S.; the building of any structure or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; dams and dikes; artificial islands; property protection and/or reclamation devices such as riprap, groins, seawalls, breakwaters, and revetments; beach nourishment; levees; fill for structures such as sewage treatment facilities, intake and outfall pipes associated with power plants and subaqueous utility lines; and artificial reefs. The term does not include plowing, cultivating, seeding and harvesting for the production of food, fiber, and forest products (See 33 CFR § 323.4 for the definition of these terms). 33 CFR § 323.2(f).

**Dredged material**—Material that is excavated or dredged from waters of the U.S. 33 CFR § 323.2(c).

**Easement**—A right to use or control the property of another for designated purposes. AASHTO.

**Effects**—*Effects* include:

- (1) Direct effects, which are caused by the action and occur at the same time and place.
- (2) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

*Effects and impacts* are synonymous. *Effects* includes ecological, aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. *Effects* may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial. 40 CFR § 1508.8.

**Environmental assessment (EA)**—A concise public document for which a Federal agency is responsible that serves to:

- (1) Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.
- (2) Aid an agency's compliance with NEPA when no environmental impact statement is necessary.
- (3) Facilitate preparation of an EIS when one is necessary.

An EA shall include brief discussions of the need for the proposal, the alternatives considered, and the environmental impacts of the proposal and alternatives, and include a listing of agencies and persons consulted. 40 CFR § 1508.9.

**Environmental impact report (EIR)**—A detailed statement prepared under CEQA describing and analyzing the significant environmental effects of a project and discussing ways to mitigate or avoid the effects. California Resources Agency, Title 14, section 15362.

**Environmental impact statement (EIS)**—A detailed written statement as required by section 102(2)(C) of NEPA. 40 CFR § 1508.11.

**Expressway**—A divided arterial highway for through traffic with full or partial control of access and generally with grade separations at major intersections. AASHTO.

**Fill material**—Any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a waterbody. The term does not include any pollutant discharged into the water primarily to dispose of waste, as that activity is regulated under section 402 of the CWA. 33 CFR § 323.2(e).

**Finding of no significant impact (FONSI)**—A document by a Federal agency briefly presenting the reasons why an action/project will not have a significant effect on the human environment and for which an environmental impact statement will not be prepared. It shall include the environmental assessment or a summary of it and shall note any other environmental documents related to it (1501.7(a)(5)). If the assessment is included, the finding need not repeat any of the discussion in the assessment but may incorporate it by reference. 40 CFR § 1508.13.

**Freeway**—An expressway with full control of access. AASHTO.

**Headwaters**—*Headwaters* means non-tidal rivers, streams, and their lakes and impoundments, including adjacent wetlands, that are part of a surface tributary system to an interstate or navigable water of the U.S. upstream of the point on the river or stream at which the average annual flow is less than five cubic feet per second. The Corps may estimate this point from available data by using the mean annual area precipitation, area drainage basin maps, and the average runoff coefficient, or by similar means. For streams that are dry for long periods of the year, the Corps may establish the point where headwaters begin as that point on the stream where a flow of five cubic feet per second is equaled or exceeded 50 percent of the time. 33 CFR § 330.2(d).

**High tide line**—The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm. 33 CFR § 328.3(d).

**Human environment**—*Human environment* shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment. 40 CFR § 1508.14.

**Intermodal planning group (IPG)**—A regional organization of Federal agencies set up to oversee transportation planning activities in the states of that region. It may include representatives of the Federal Highway Administration, Coast Guard, Federal Aviation Administration, Federal Railroad Administration, Federal Transit Administration, Department of Housing and Urban Development, Environmental Protection Agency, and other Federal agencies. AASHTO.

**Isolated waters**—Those non-tidal waters of the U.S. that are: (1) not part of a surface tributary system to interstate or navigable waters of the U.S.; and (2) not adjacent to such tributary waterbodies. 33 CFR § 330.2(e).

**Jurisdiction by law**—*Jurisdiction by law* means agency authority to approve, veto, or finance all or part of the proposal. 40 CFR § 1508.15.

**Latent travel demand**—The potential number of trips that could be made by people who cannot now travel because of the inconvenience or unavailability of present modes or inability to use them.

AASHTO.

**Lead agency**—The agency or agencies preparing or having taken primary responsibility for preparing the environmental impact statement. 40 CFR § 1508.16.

**Level of service (LOS)**—(1) A qualitative rating of the effectiveness of a highway in serving traffic, measured in terms of operating conditions. Note: the Highway Capacity Manual identifies operating conditions ranging from "A" for free flow operations to "F" for forced or breakdown flow (see-glossary appendix). (2) The quality and quantity of transportation service provided, including characteristics that are quantifiable (safety, travel time, frequency, travel cost, number of transfers) and those that are difficult to quantify (comfort, availability, convenience, modal image). AASHTO.

**Match**—State or local funds required by the Federal government to complement Federal funds for a project. AASHTO.

**Metropolitan planning organization (MPO)**—That organization designated as being responsible, together with the State, for conducting the continuing, cooperative, and comprehensive planning process under 23 U.S.C. 134 and 49 U.S.C. 1607. It is the forum for cooperative transportation decisionmaking for the metropolitan planning area. 40 CFR § 51.392; 23 CFR § 450.104.

**Metropolitan transportation plan**—The official intermodal transportation plan that is developed and adopted through the metropolitan transportation planning process for the metropolitan planning area. 23 CFR § 450.104.

**Mitigation**—*Mitigation* includes:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impact by replacing or providing substitute resources or environments. 40 CFR § 1508.20.

**Mode**—A means of transportation. Automobile travel, buses, light rail, dial-a-ride, etc., are different modes of travel. AASHTO.

**Navigable waters of the U.S.**—Navigable waters of the United States are those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the

past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the waterbody, and is not extinguished by later actions or events which impede or destroy navigable capacity. 33 CFR § 329.4.

**Network**—(1) A system of links and nodes that describes a transportation system. (2) The configuration of highways or transit routes and stops that constitutes the total system. AASHTO.

**Notice of intent**—A notice that an environmental impact statement will be prepared and considered. The notice shall briefly: (1) Describe the proposed action and possible alternatives; (2) Describe the agency's proposed scoping process including whether, when, and where any scoping meeting will be held; and (3) State the name and address of a person within the agency who can answer questions about the proposed action and the environmental impact statement. 40 CFR § 1508.22.

**Ordinary high water mark**—That line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. 33 CFR § 328.3(e).

**Owner/operator**—A state, regional, or local transportation or transit agency or authority having primary responsibility for the operation and maintenance of a specific transportation facility.

**Peak period**—That time during which the maximum amount of travel occurs; may be specified as the morning peak hour or the afternoon or evening peak hour or as both combined. AASHTO.

**Performance standard**—A formally established criterion for special activity which (a) outlines the work involved; (b) describes work methods and composition of efficient crews; and (c) lists the expected accomplishments or productivity rate. AASHTO.

**Pipeline project**—A transportation project that was extant on the date the "National Environmental Policy Act and Clean Water Act Section 404 Integration Process for Surface Transportation Projects in Arizona, California, and Nevada" MOU was signed.

**Practicable**—The term *practicable* means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. 40 CFR § 230.3(q).

**Preliminary study**—A generic term referring to the project assessment prepared in Arizona and Nevada and the project study report prepared in California. These documents provide preliminary project engineering and environmental information at the project programming stage.

**Public hearing**—A public proceeding conducted for the purpose of acquiring information or evidence which will be considered in evaluating a proposed transportation project and/or a DA permit action and which affords the public an opportunity to present their views, opinions, and information on such projects and permit actions. See 33 CFR § 327.3(a).

**Reevaluation**—(1) A written evaluation of a draft or final EIS prepared by the project sponsor in cooperation with FHWA/FTA for the purpose of determining whether or not a supplemental or new draft EIS is needed, (2) consultation between the project sponsor and FHWA/FTA after FHWA/FTA approval of an EIS, FONSI, or CE designation to establish whether or not the approved environmental document or CE designation remains valid. 23 CFR §§ 771.129 and 771.130.

**Record of decision (ROD)**—A concise public document prepared by the Federal agency at the time of its decision or recommendation to Congress which: (1) states what the decision was; (2) identifies all alternatives considered by the agency in reaching its decision, specifying the alternative or alternatives which were considered to be environmentally preferable; (3) identifies and discusses relevant factors including economic and technical considerations, agency statutory missions, and any essential considerations of national policy which were balanced by the agency in making its decision, and states how those considerations entered into its decision; (4) states whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not; and (5) adopts and summarizes monitoring and enforcement programs where applicable for any mitigation. 40 CFR § 1505.2.

**Regional transportation plan (RTP)**—See metropolitan transportation plan.

**Regulatory agency**—An agency which has jurisdiction by law.

**Resource agency**—An agency which has special expertise with respect to any environmental issue.

**Responsible agency**—A CEQA term for a public agency which proposes to carry out or approve a project, for which a lead agency is preparing or has prepared an EIR or negative declaration. For the purposes of CEQA, the term *responsible agency* includes all public agencies other than the lead agency which have discretionary approval power over the project. California Resources Agency, Title 14, section 15381.

**Right-of-way (ROW)**—A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes. AASHTO.

**Section 4(f)**—Refers to 49 U.S.C. 303 and 23 U.S.C. 138. 23 CFR §§ 771.107(e) and 771.135.

**Section 404 Permit**—A Department of the Army (DA) permit to authorize the discharge of dredged or fill material into waters of the U.S. pursuant to section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344).

**Individual permit**—A DA authorization that is issued following a case-by-case evaluation of a specific project involving the proposed discharge(s) in accordance with the procedures of 33 CFR Parts 323 and 325 and a determination that the proposed discharge is in the public interest pursuant to 33 CFR Part 320. 33 CFR § 323.2(g).

**General permit**—A DA authorization that is issued on a nationwide or regional basis for a category or categories of activities when:

- (1) Those activities are substantially similar in nature and cause only minimal individual and cumulative environmental impacts; or
- (2) The general permit would result in avoiding unnecessary duplication of regulatory control exercised by another Federal, state, or local agency provided it has been determined that the environmental consequences of the action are

individually and cumulatively minimal. (See 33 CFR § 325.2(e) and 33 CFR Part 330.) 33 CFR §§ 322.2(f) and 323.2(h).

**Regional permit**—Regional permits are a type of general permit. They may be issued by a division or district engineer after compliance with the other procedures of the section 404 permit regulations. If the public interest so requires, the issuing authority may condition the regional permit to require a case-by-case reporting and acknowledgement system. However, no separate applications or other authorization documents will be required. 33 CFR §§ 325.2(e)(2) and 325.5(c)(1).

**Nationwide permit**—Nationwide permits are a type of general permit and represent DA authorizations that have been issued by the regulation (33 CFR Part 330) for certain specified activities nationwide. If certain conditions are met, the specified activities can take place without the need for an individual or regional permit. 33 CFR § 325.5(c)(2).

**Letter of permission (LOP)**—Letters of permission are a type of permit issued through an abbreviated processing procedure which includes coordination with Federal and state fish and wildlife agencies, as required by the Fish and Wildlife Coordination Act, and a public interest evaluation, but without the publishing of an individual public notice. 33 CFR § 325.2(e)(1).

**Sensitive species**—Plant or animal species which are (1) Federal listed or proposed threatened or endangered species, or candidate species; (2) bird species protected under the Migratory Bird Treaty Act; (3) species protected under State endangered species laws and regulations, plant protection laws and regulations, Fish and Game codes, or species of special concern listings and policies, or (4) species recognized by national, state, or local environmental organizations (e.g., the California Native Plant Society).

**Sight distance**—The length of highway visible to the driver. AASHTO.

**Special aquatic sites**—Those sites identified in 40 CFR 230 Subpart E (i.e., sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes). They are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region. 40 CFR § 230.3(q-1).

**Special expertise**—*Special expertise* means statutory responsibility, agency mission, or related program experience. 40 CFR § 1508.26.

**State transportation improvement program (STIP)**—A staged, multiyear, statewide, intermodal program of transportation projects which is consistent with the statewide transportation plan and planning processes and metropolitan plans, TIP's, and processes. 23 CFR § 450.104.

**Tidal waters**—Those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects. 33 CFR § 328.3(f).

**Tiered EIS**—*Tiering* refers to the coverage of general matters in broader environmental impact statements (such as national program or policy statements) with subsequent narrower

statements or environmental analyses (such as regional or basinwide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared. Tiering is appropriate when the sequence of statements or analyses is:

- (1) From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis; or
- (2) From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation).

Tiering in such cases is appropriate when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe. 40 CFR § 1508.28.

**Traffic**—The vehicles or persons passing a specified point during a given period.

**Annual average daily traffic (AADT)**—Daily traffic that is averaged over a calendar year.

**Average daily traffic (ADT)**—The average number of vehicles that passes a specified point during a 24-hour period. Unless otherwise stated, the period is a year.

**Generated traffic**—New traffic that develops as a result of an improvement or land use change.

**Induced traffic**—Traffic that is increased on a facility or route not by normal growth but solely by an improvement or change in the facility. AASHTO.

**Transportation improvement program (TIP)**—A staged, multiyear, intermodal program of transportation projects which is consistent with the metropolitan transportation plan. 23 CFR § 450.104.

**Transportation systems management (TSM)**—A part of the transportation planning process which identifies short-range, low-cost improvements for the urban transportation system (including both roads and public transportation). Its goal is to insure the most efficient use of the present transportation system, and it may identify improvements such as better fare structures for buses, traffic engineering changes, and new management systems for public transportation. AASHTO.

**Vehicle miles of travel (VMT)**—A measurement of the total miles traveled by all vehicles in an area. AASHTO.

**Volume**—The number of vehicles passing a given point during a specified period of time. AASHTO.

**Waters of the U.S.**—The term *waters of the United States* means

- (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all water which are subject to the ebb and flow of the tide;
- (2) All interstate waters including interstate wetlands;
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
  - (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

- (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - (iii) Which are used or could be used for industrial purposes by industries in interstate commerce;
- (4) All impoundments of waters otherwise defined as waters of the United States under this definition;
  - (5) Tributaries of waters identified in paragraphs (1)–(4);
  - (6) The territorial seas;
  - (7) Wetlands adjacent to waters (other than waters that are themselves wetland) identified in paragraphs (1)–(6).

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR § 123.11(m) which also meet the criteria of this definition) are not waters of the United States. 33 CFR § 328.3(a); 40 CFR § 230.3(s).

**Weaving**—The crossing of traffic streams moving in the same general direction accomplished by merging and diverging. AASHTO.

**Weaving section**—A length of one-way roadway at one end of which two one-way roadways merge and at the other end of which they separate. AASHTO.

**Wetlands**—The term *wetlands* means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. 33 CFR § 328.3(b); 40 CFR § 230.3(t).



# **SOCTIIP**

## **Section 404 of the Clean Water Act “The 404(b)(1) Guidelines and the Public Interest Review”**

February 2004

**Prepared by:  
U.S. Army Corps of Engineers  
Los Angeles District, Regulatory Branch**

**In consultation with:  
U.S. Environmental Protection Agency  
Region IX**

**For:  
SOCTIIP Collaborative discussion purposes only**

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## *I. Introduction*

This paper is intended to facilitate open dialogue among the South Orange County Infrastructure Improvement Project (SOCTIIP) Collaborative members on the following regulatory-related issues: the Corps' Section 404 of the Clean Water Act (CWA) permitting process; the roles and responsibilities of the applicant, the federal resource agencies, and the public during the regulatory decision-making process; and the interrelationship of SOCTIIP with the California NEPA/404 Integration Process Memorandum of Understanding (MOU) (1994).

## *II. The Basics of the NEPA/404 MOU*

As a matter of context, the MOU outlines several key milestones in the environmental review and permitting process that require federal agency concurrence before moving forward to the next step. These formal concurrence points generally correlate in timing with the major National Environmental Policy Act (NEPA) procedural steps and are as follows:

- Pre-Scoping – no formal concurrence points
- Scoping – no formal concurrence points
- Draft EIS Development -- final concurrence required on:
  - The NEPA purpose and need/404 basic and overall project purpose;
  - Criteria for alternative selection; project alternatives to be evaluated in the draft EIS;
  - Corps verification of jurisdictional determination;
- Draft EIS Circulation/Section 404 Public Notice of EIS Document – no formal concurrence points
- Final EIS Development – preliminary agreement required on:
  - Preferred alternative compliance with the Guidelines;
  - Written USFWS agreement in the project mitigation plan
  - Non-jeopardy biological opinion from USFWS/NMFS
  - Section 401 certification from RWQCB(s)
  - Corps and EPA preliminary agreement that the final EIS NEPA preferred/section 404 LEDPA
  - Corps and EPA preliminary agreement project will not significantly degrade the aquatic environment
  - Corps and EPA preliminary agreement the project mitigation plan and implementation schedule is adequate
- Final EIS Circulation/Section 404 Public Notice of Proposed Permit – no formal concurrence points

- Development of Record of Decision – no formal concurrence points
- Corps Permit Decision – no formal concurrence points.

Achieving concurrence at each of these checkpoints is intended to streamline the environmental evaluation processes by providing a higher degree of assurance that substantive issues identified by resource and regulatory agencies under their respective statutory purviews are addressed within an appropriate and timely manner such that they will not be revisited later in the process. The MOU also helps to ensure that both the procedural aspects of the National Environmental Policy Act (NEPA) and the substantive requirements of the CWA are fulfilled through one integrated process. The mechanics of this integration are relevant in that the 404(b)(1) Guidelines (“Guidelines”) alternatives analysis can often be more stringent (i.e., more rigorous) a process than the NEPA procedural requirements of consideration and public disclosure. For this reason, the MOU recommends the draft Environmental Impact Statement (DEIS) contain a separate chapter on the 404(b)(1) alternatives analysis. The resultant effect of the implementation of the MOU is an efficient, expeditious, and fiscally responsible decision-making process that optimizes the protection and enhancement of aquatic resources. In all cases, the MOU does not diminish, modify, or otherwise affect the statutory or regulatory authorities of the agencies involved. Accordingly, the Corps remains responsible for controlling every aspect of the 404(b)(1) analysis, while the U.S. Environmental Protection Agency (EPA) retains their advisory role, 404(q) elevation options, and 404(c) veto authority under section 404 of the CWA.

### ***III. The Corps Mandate under the Clean Water Act***

The Corps’ mandate under the CWA is to maintain and restore the physical, chemical, and biological integrity of the nations waters. To this end, the Corps is responsible for ensuring full compliance with its own implementing regulations as well as the Guidelines for all applicable Department of the Army (DA) section 404 of the CWA permits. As part of this statutory compliance, any project that proposes to discharge dredged or fill material into waters of the United States (“WofUS”) and requires a standard individual permit, the Corps is required to: define the basic project purpose (i.e., water dependency); establish the overall project purpose; solicit public comments; select the least environmentally damaging practicable alternative (LEDPA); and assure that the proposed action is not contrary to the public interest. The following sections, IV through IX, offer additional discussion on these key requirements.

#### *IV. The Substantive Requirements of the 404(b)(1) Guidelines*

The fundamental precept of the EPA's Guidelines is that discharges of dredged or fill material into WofUS, including wetlands, should not occur unless it can be demonstrated that such discharges, either individually or cumulatively, will not result in unacceptable adverse effects on the aquatic ecosystem. The Guidelines specifically require that **"no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences."** [40 CFR 230.10(a)] The applicant bears the burden of proof for all the tests of 40 CFR 320.10 to demonstrate to the Corps that his project, or any part of it, should be built in the WofUS. The Corps will evaluate the applicant's evidence and determine, independently of the applicant's wishes, whether all the requirements of the Guidelines have been satisfied (Dept. of the Army, 1993; 1989).

The following excerpts are taken verbatim from the EPA's final rule for the Guidelines for Specification of Disposal Sites for Dredged or Fill Material published in the Federal Register (dated December 24, 1980). These four criteria are viewed as the "guts" of the Guidelines and must be satisfied in order for the Corps to determine that a proposed activity is compliant with the Guidelines.

- "Alternatives Analysis" 40 CFR 230.10(a): Except as provided under 404(b)(2), no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant, which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered.
- "Environmental Restrictions/Violations of Law" 40 CFR 230.10(b): No discharge of dredged or fill material shall be permitted if it: (1) causes or contributes, after consideration of disposal site dilution and dispersion, to violations any applicable State water quality standard; (2) violates any applicable toxic effluent standard or prohibition under section 307 of the Act; (3) jeopardizes the continued existence of species listed as endangered or threatened under the Endangered Species Act (ESA) of 1973, or results in likelihood of the destruction or adverse modification of a habitat which is determined ...[to] be critical habitat under the ESA; (4) violates any requirement imposed by the Secretary of Commerce to protect any marine sanctuary designated under Title III of the Marine Protection, Research, and Sanctuaries Act of 1972.

- “No Significant Degradation” 40 CFR 230.10(c): Except as provided under 404(b)(2), no discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the WofUS.
- “Minimizing Adverse Effects” 40 CFR 230.10(d): Except as provided under 404(b)(2), no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem.

## *V. Defining Project Purposes & Rebuttable Presumption Test*

The **basic project purpose** defines the project purpose in its most simplistic terms and is determined to establish whether a proposed action is water dependent. For example, the proposed development of a marina is considered a water dependent activity; whereas, construction of a residential development is not—its basic project purpose is shelter. For SOCTIIP, the basic project purpose is regional vehicular transportation, which is not a water dependent activity. Therefore, it is presumed that practicable alternatives are available that would result in less adverse impacts to special aquatic sites, including wetlands. Specifically, because the placement of fill materials is proposed in wetlands and the activity or action is not water dependent, the Guidelines require that practicable alternatives are presumed to exist that have less adverse impacts on the special aquatic site, unless demonstrated otherwise (a **rebuttable presumption test**), provided that the alternative does not have other adverse environmental impacts. To rebut this presumption, the applicant is usually required to examine both off-site and on-site alternatives. Section VII further addresses the rebuttable presumption test in the context of the LEDPA.

The **overall project purpose** is the basic project purpose in consideration of the general objectives of the applicant, cost, logistics, and existing technology. It provides for a more specific definition of the purpose and need of an applicant’s project. The overall project purpose must be specific enough to define the applicant’s needs, but not so restrictive as to preclude all discussion of alternatives. The overall project purpose is used for evaluating practicable alternatives under the Guidelines. The Guidelines require that if the overall purpose of a project is practicably met through several alternatives, the Corps can only authorize the LEDPA. In the case of SOCTIIP, the signatory agencies to the MOU provided formal concurrence on the overall project purpose as part of the Phase I Collaborative process. Formal agreement was also reached on the range of project alternatives, including the No Federal Action that would undergo further analysis during the Phase II Collaborative process.

## *VI. “Practicability” as part of the LEDPA*

The Guidelines define the concept of **practicable alternative** as one which is available<sup>1</sup> and capable of being done<sup>2</sup> after taking into consideration cost, existing technology, and logistics in light of the overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered [40 CFR 230.10(a)(2)]. In the context of section 404 of the CWA, the term “practicable” takes on a very specific meaning. Often, applicants will incorrectly conclude an alternative is not practicable because it meets with strong public opposition, it neglects to garner local political support, or it fails to result in the highest profit or greatest transportation benefit. Practicability is not defined by thresholds or degrees; that is, an alternative is either practicable or it is not practicable.

Based on its definition, the Corps considers three basic factors when determining practicability: costs, logistics, and existing technology. While acknowledging that “practicability” is not specifically defined in regulation, its ambiguity affords flexibility in the decision-making process to account for varied conditions and circumstances on a project-by-project basis. Each proposed action that falls under the Corps’ section 404 regulatory purview can be unique in its purpose, use type, cost, and scope, as well as in the magnitude of impacts, the scarcity of natural resources (e.g., wetlands) affected by the proposed action, and the functions and values of the aquatic ecosystem being impacted. The specific criteria and/or metrics used to assess and substantiate these three factors are likely to vary from project to project. Since there is no prescribed formula for determining practicability that can be applied unilaterally to all projects, it is especially important to ensure the decision making process is transparent to both the applicant as well as the public, and is conducted in a manner which protects the Corps’ independent and unbiased regulatory decisions. While the Corps should consider the views of the applicant regarding the project’s purpose and practicability of alternatives, the Corps must determine if the range of alternatives is sufficient and evaluate these matters of practicability with no control or direction from the applicant, and without undue deference to the applicant’s wishes (Dept. of the Army, 1993; 1989).

Cost. While the applicant’s preference to minimize project costs is a factor the Corps may consider, cost alone must not be allowed to control or unduly influence the Corps’ definition of project purpose or “practicable alternative,” or any other part of the 404(b)(1) evaluation. The preamble to the Guidelines states the following on this point: “The mere fact that an alternative may cost somewhat more does not necessarily mean it is not practicable.” However, as the Guidelines’ preamble further states: “If an alleged

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<sup>1</sup> “Available” means obtainable for meeting the project purpose. Available sites may include property already owned by a permit applicant, as well as properties that could be obtained, utilized, expanded, or managed.

<sup>2</sup> “Capable of being done” means that it is possible to achieve the basic project purpose on a given site, after considering cost, existing technology, and logistics.

alternative is unreasonably expensive to the applicant, the alternative is not 'practicable'."

Furthermore, the preamble clarifies how cost is to be considered in the determination of practicability:

Our intent is to consider those alternatives which are reasonable in terms of the overall scope/cost of the proposed project. The term economic [for which the term "cost" was substituted in the final rule] might be construed to include consideration of the applicant's financial standing, or investment, or market share, a cumbersome inquiry which is not necessarily material to the objectives of the Guidelines.

Existing Technology. In their discussion, Yocom and others (1989) provided an example of a project alternative that would not meet the standard of "capable of being done". This example entails the construction of a dam at a specific location that is determined to be seismically unsound. Despite it being physically possible to construct the structure at that particular site in a cost-effective manner, it is not technically sound or technically feasible to do so. Therefore, in this example, the alternative located at the seismically unsound site would be determined impracticable.

## ***VII. "Least Environmentally Damaging" as part of the LEDPA***

As mentioned previously, the Guidelines state no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge, which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. For non-water dependent projects that affect wetlands or other special aquatic sites, there is a presumption that must be rebutted by the applicant. This presumption is that practicable alternatives that do not involve special aquatic sites are presumed available, unless clearly demonstrated otherwise. In addition, where a discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge, which do not involve a discharge into a special aquatic site, are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise by the applicant (EPA, 1980). As with "practicability", the specific criteria and/or metrics used to assess and substantiate the "least environmentally damaging" alternative are likely to vary from project to project. Based on information furnished for the SOCTIIP, the scope, intensity, and permanence of its resultant environmental consequences on the aquatic ecosystem, sensitive wildlife habitats, and threatened and endangered species will likely merit a rigorous and comprehensive assessment of environmental factors/criteria when determining the "least environmentally damaging" alternative. Through this process, the environmental effects, including the net overall environmental harm, of the proposed action for SOCTIIP will be examined holistically and not necessarily sequentially or in isolation.

When it is determined that no identifiable or discernable difference in adverse impact on the environment exists between the applicant's proposed alternative and all other practicable alternatives, then the applicant's alternative is considered as satisfying the requirements of Section 230.10(a). Even where a practicable alternative exists that would have less adverse impact on the aquatic ecosystem, the Guidelines allow it to be rejected if it would have "other significant adverse environmental consequences." As explained in the preamble to EPA's Guidelines, this allows for consideration of "evidence of damages to other ecosystems in deciding whether there is a 'better' alternative." Hence, in applying the alternatives analysis required by the Guidelines, it is not appropriate to select an alternative where minor impacts on the aquatic environment are avoided at the cost of substantial impacts to other natural environmental values (Department of Army, 1993; 1989; EPA, 1980).

### ***VIII. The Public Interest Determination***

The public interest determination involves much more than an evaluation of the impacts to wetlands. Once the project has satisfied the Guidelines, the project must also be evaluated to ensure that it is not contrary to the "public interest" (33 CFR 320.4). There are 20 public interest factors listed in 33 CFR 320.4. A project may have an adverse effect, a beneficial effect, a negligible effect or no effect on any or all these factors. The Corps must evaluate the project in light of these factors, other relevant factors, and the interests of the applicant to determine the overall balance of the project with respect to the public interest. The following general criteria of the public interest review must be considered in the evaluation of every permit application:

- a. The extent of the public and private need for the project;
- b. Where unresolved conflicts exist as to the use of a resource, whether there are practicable alternative locations or methods that may be used to accomplish the objective of the proposed project;
- c. The extent and permanence of the beneficial or detrimental effects the proposed project is likely to have on the private and public uses to which the project site is suited.

The decision whether to authorize or deny the permit application is determined by the outcome of this evaluation. The specific weight that each factor is given is determined by its relevance to the particular proposal/project. Accordingly, how important a factor is and how much consideration it deserves will vary with each proposal. A specific factor may be given great weight on one proposal, while it may not be present or as important on another. However, the Corps regulations require full consideration and appropriate weight be given to all comments, including those of federal, state, and local agencies, and other experts on matters within their expertise. In addition to the needs and welfare of the people, the other public interest review factors are:

- Conservation
- Economics
- Aesthetics
- General Environmental Concerns
- Wetlands
- Fish and wildlife values
- Flood hazards
- Floodplain values
- Land use
- Navigation
- Shoreline erosion and accretion
- Recreation
- Water supply and conservation
- Water quality
- Energy needs
- Safety
- Food and fiber production
- Mineral needs
- Property ownership
- Historic and cultural resources

In general, the Corps' public interest review for SOCTIIP is expected to occur in two phases: 1) during the 60-day public review of the DEIS/DSEIR and the concurrent 30-day public review of the Corps' Public Notice, which will identify the full range of alternatives being considered for a DA permit; and 2) during the 30-day review of the FEIS/FSEIR and the Corps' final Public Notice which will address the applicant's preferred alternative/preliminary LEDPA. Public comments received during these review periods will be considered and incorporated, as appropriate, into the Corps' final DA permit decision.

## ***IX. Conclusion***

The selection of the LEDPA and the Corps' public interest determination can involve a rather elaborate process that entails a balanced approach of evaluating the environmental consequences of a proposed project in consideration of the interest of the public and the applicant. An extensive review process is especially relevant for large, controversial, and potentially environmentally damaging projects. In many cases, the Corps must evaluate a trade-off analysis between impacts to aquatic resources and other substantial adverse environmental effects. Each alternative must be weighed carefully and in consideration of the criteria set forth in the Guidelines. It is incumbent upon the applicant to demonstrate the LEDPA; however, the final decision rests solely with the Corps.

In sum, for a proposed activity that would result in the discharge of dredged or fill material into WofUS to be permitted by the Corps, it must be found to be the LEDPA and in the public's interest. A proposed project that may be determined to be the LEDPA, but is found to be contrary to the public interest must be denied. Conversely, a project that is determined to be in the public interest, but is not the LEDPA, similarly must be denied. The burden of proof to demonstrate compliance with Guidelines rests with the applicant. In such cases where insufficient information is provided for the Corps and EPA to determine whether an alternative complies with the Guidelines (and NEPA), the Guidelines explicitly require that no Section 404 permit be issued [40 CFR 230.12(a)(3)(iv)].

## *X. References Cited*

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- U.S. Department of the Army. 1993. Regulatory Guidance Letter 93-02, Guidance on Flexibility of the 404(b)(1) Guidelines and Mitigation Banking, August 23, 1993.
- U.S. Department of the Army. 1989. CECW-ZA Memorandum Thru Commander, U.S. Army Engineer Division, Lower Mississippi Valley, Regarding Permit Evaluation, Plantation Landing Resort, Inc., dated April 21, 1989
- Yocom, Thomas G., Robert A. Leidy, and Clyde A. Morris. 1989. "Wetlands Protection Through Impact Avoidance: A Discussion of the 404(b)(1) Alternatives Analysis", *Wetlands*, Volume 9, No. 2, pages 283-297.

## Notes re NEPA /404 MOU

For response to Col. Magness statement that "SOCTIIP collaborative is intended to garner varying viewpoints on technical and policy matters, and openly discuss such issues in an effort to streamline multi-agency decision-making." (page 4 of April 7 letter)

### White Paper prepared by USACOE in consultation with EPA, February 2004 (SOCTIIP Section 404 of the Clean Water Act "The 404(b)(1) Guidelines and the Public Interest Review")

#### Purpose of MOU and Collaborative

"Achieving concurrence at each of these checkpoints is intended to streamline the environmental evaluation processes by providing a higher degree of assurance that substantive issues identified by resource and regulatory agencies under their respective statutory purviews are addressed within an appropriate and timely manner such that they will not be revisited later in the process." (page 2)

"The MOU also helps to ensure that both the procedural aspects of ...NEPA ...and the substantive requirements of the CWA are fulfilled through one integrated process." (page 2)

#### Selection of Preferred Alternative/LEDPA

"When it is determined that no identifiable or discernable difference in adverse impact on the environment exists between the applicant's proposed alternative and all other practicable alternatives, then the applicant's alternative is considered as satisfying the requirements of Section 230.10(a)." (p. 7)

"In many cases, the Corps must evaluate a trade-off analysis between impacts to aquatic resources and other substantial adverse environmental effects. Each alternative must be weighed carefully and in consideration of the criteria set forth in the Guidelines. **It is incumbent upon the applicant to demonstrate the LEDPA**; however, the final decision rests solely with the Corps." (emphasis added) (p. 8)

"The burden of proof to demonstrate compliance with (sic) Guidelines rests with the applicant." (p. 8)

"No predetermined formula for determining the LEDPA could be identified in the Guidelines to reflect these various conditions. Instead, the Guidelines rely on the applicant, the regulatory and resource agencies, and the public to provide the best information on project related impacts. This information provides the basis of the evaluation criteria against which alternatives can be compared and which informs the Corps' best professional judgment in, ultimately, making the LEDPA determination." (Recommendation for a Multi-dimensional Evaluation to Arrive at a "Permittable" Project" following the White Paper)

See paragraph on possible process, referencing the “opportunity to the SOCTIP Collaborative to facilitate the Corps LEDPA determination” and the use of the agency’s expertise to “define the evaluation criteria, including specific parameters and the measure (the metric) for each parameter.” (Recommendation for a Multi-dimensional Evaluation)

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9/12/03

Table 1.0

SOCTIIP Preliminary Environmental Impact Matrix  
(Updated 9/18/03)

Evaluation Criteria	Measured Parameter	CANDIDATE ALTERNATIVES FOR ELIMINATION										ALTERNATIVES TO BE CARRIED FORWARD IN DRAFT EIS/SEIR								
		FEC Alternatives (Initial and Ultimate)	FEC-APV Alternatives (Initial and Ultimate)	FEC-TV Alternatives (Initial and Ultimate)	A7C-FECV Alternatives (Initial and Ultimate)	A7C Alternatives (Initial and Ultimate)	CC-ORV Alternatives (Initial and Ultimate)	A7C-ISV Alternatives (Initial and Ultimate)	A7C-ORV Alternatives (Initial and Ultimate)	FEC-ORV Alternatives (Initial and Ultimate)	AIP Alternative	FEC-W Alternatives (Initial and Ultimate)	FEC-V Alternatives (Initial and Ultimate)	A7C-FECW Alternatives (Initial and Ultimate)	CC Alternatives (Initial and Ultimate)	CC-ALPV Alternatives (Initial and Ultimate)	A7C-ALPV Alternatives (Initial and Ultimate)	CC-ORV Alternatives (Initial and Ultimate)	FEC Alternatives (Initial and Ultimate)	No Project
Direct Impacts: Waters of U.S. and Riparian Ecosystem Impacts (1)	Acres of riparian ecosystems directly impacted by the corridor footprints.	I = 107.2 U = 160.1 (19)	I = 87.0 U = 123.6 (18)	I = 53.8 U = 66.1 (17)	I = 59.5 U = 65.2 (16)	I = 25.5 U = 34.5 (7)	I = 35.8 U = 42.7 (11)	I = 27.6 U = 36.3 (9)	I = 18.2 U = 35.5 (8)	I = 22.6 U = 33.7 (6)	I = 21.6 U = 21.6 (4)	I = 38.7 U = 40.3 (10)	I = 49.0 U = 53.4 (13)	I = 42.9 U = 45.6 (12)	I = 53.7 U = 60.2 (15)	I = 49.9 U = 57.4 (14)	I = 23.1 U = 32.0 (5)	I = 9.2 U = 9.2 (2)	I = 13.7 U = 13.7 (3)	I = 0 U = 0 (1)
Direct Impacts: Waters of U.S. and Riparian Ecosystem Impacts (2)	Normalized rank scores for all criteria for corridor footprints.	I = 6.43 U = 6.41 (19)	I = 4.66 U = 4.82 (17)	I = 5.78 U = 5.42 (18)	I = 3.31 U = 2.89 (12)	I = 1.78 U = 1.62 (7)	I = 2.58 U = 2.25 (10)	I = 1.89 U = 1.71 (8)	I = 0.9 U = 1.09 (4)	I = 1.71 U = 1.80 (9)	I = 1.60 U = 1.21 (5)	I = 3.2 U = 2.4 (11)	I = 3.5 U = 2.9 (13)	I = 3.4 U = 2.9 (14)	I = 5.51 U = 4.70 (16)	I = 5.06 U = 4.42 (15)	I = 1.41 U = 1.35 (6)	I = 1.05 U = 0.81 (3)	I = 0.58 U = 0.42 (2)	I = 0 U = 0 (1)
Future Traffic Demand (Year 2025) (5)	Congested percent of daily traffic on I-5 in year 2025 (a)	4.4% (5)	9.6% (14)	3.7% (6)	4.2% (7)	3.5% (4)	15.3% (16)	3.5% (4)	15.3% (16)	15.9% (18)	2.7% (2)	4.4% (9)	4.4% (9)	4.2% (7)	3.4% (3)	8.8% (12)	8.8% (12)	12.1% (15)	1% (1)	16.7% (19)
Traffic Flow and Congestion - Systemwide Travel Time Saving (6)	Total Hours of Vehicle Travel Time Savings Per Day (expressed in thousands) (b)	20 (3)	9 (12)	17 (10)	21 (1)	18 (7)	1 (17)	18 (7)	1 (17)	3 (16)	10 (11)	20 (3)	20 (3)	21 (1)	18 (7)	8 (13)	8 (13)	5 (15)	20 (3)	0 (19)
Project Cost In Millions (9)	Total Costs (\$ in millions)	I = \$870 U = \$1,162 (12)	I = \$515 U = \$667 (7)	I = \$1,167 U = \$1,413 (14)	I = \$1,678 U = \$1,954 (16)	I = \$1,594 U = \$1,871 (15)	I = \$233 U = \$290 (2)	I = \$1,791 U = \$2,139 (17)	I = \$341 U = \$410 (4)	I = \$215 U = \$330 (3)	\$2,143 (18)	I = \$711 U = \$884 (8)	I = \$770 U = \$928 (10)	I = \$729 U = \$896 (9)	I = \$1,122 U = \$1,379 (13)	I = \$512 U = \$628 (6)	I = \$962 U = \$1,020 (11)	\$522 (5)	\$2,401 (19)	I = \$0 U = \$0 (1)
Project Cost Effectiveness In Thousands (10)	Cost per Hour Travel Time Saved (\$ in thousands)	I = \$43.5 U = \$58.1 (5)	I = \$57.2 U = \$74.1 (6)	I = \$68.6 U = \$83.1 (9)	I = \$79.9 U = \$93.0 (10)	I = \$88.6 U = \$104 (11)	I = \$233 U = \$290 (18)	I = \$99.5 U = \$119 (13)	I = \$341 U = \$410 (19)	I = \$71.7 U = \$110 (12)	\$214 (17)	I = \$35.6 U = \$44.2 (3)	I = \$38.5 U = \$46.4 (4)	I = \$34.7 U = \$42.7 (2)	I = \$62.3 U = \$76.6 (7)	I = \$64 U = \$78.5 (8)	I = \$120 U = \$128 (15)	\$140 (16)	\$120 (14)	I = \$0 U = \$0 (1)
Impacts to Residences (7)	Number of residential structures within ROW (takings)	I = 0 U = 0 (1)	I = 0 U = 0 (1)	I = 685 U = 703 (16)	I = 32 U = 56 (11)	I = 701 U = 704 (17)	I = 0 U = 0 (1)	I = 593 U = 602 (14)	I = 0 U = 0 (1)	I = 0 U = 0 (1)	898 (19)	I = 0 U = 0 (1)	I = 0 U = 0 (1)	I = 0 U = 0 (1)	I = 593 U = 602 (14)	I = 2 U = 14 (10)	I = 82 U = 92 (12)	263 (13)	838 (18)	I = 0 U = 0 (1)
Community Disruption (8)	Physically divides an established community	I = No U = No	I = Yes U = Yes	I = Yes U = Yes	I = No U = No	I = Yes U = Yes	I = No U = No	I = Yes U = Yes	I = No U = No	I = No U = No	No	I = No U = No	I = No U = No	I = No U = No	I = Yes U = Yes	I = Yes U = Yes	I = Yes U = Yes	No	Yes	No
Direct Impacts: Ecosystem / Habitat (3)	Acres of Venturan-Diegan Coastal Sage Scrub directly impacted by corridor footprints.	I = 387 U = 520 (19)	I = 180 U = 257 (13)	I = 222 U = 315 (14)	I = 402 U = 499 (18)	I = 197 U = 224 (11)	I = 112 U = 140 (6)	I = 203 U = 232 (12)	I = 76 U = 108 (5)	I = 118 U = 198 (9)	58 (4)	I = 371 U = 388 (16)	I = 402 U = 424 (17)	I = 347 U = 348 (15)	I = 169 U = 185 (8)	I = 161 U = 178 (7)	I = 190 U = 217 (10)	42 (3)	19 (2)	I = 0 U = 0 (1)
Direct Impacts: Ecosystem / Habitat (4)	Coastal California gnatcatcher - Number of use areas directly impacted by the corridor footprints.	I = 16 U = 21 (17)	I = 9 U = 13 (13)	I = 16 U = 21 (17)	I = 15 U = 22 (19)	I = 13 U = 15 (15)	I = 3 U = 5 (5)	I = 13 U = 15 (15)	I = 3 U = 7 (6)	I = 7 U = 10 (10)	3 (3)	I = 9 U = 9 (8)	I = 10 U = 10 (10)	I = 11 U = 11 (12)	I = 8 U = 9 (8)	I = 6 U = 7 (6)	I = 11 U = 13 (14)	3 (3)	0 (1)	I = 0 U = 0 (1)
Indirect Impacts: Waters of U.S. and Riparian Ecosystem Impacts	Alters existing surface water volumes in a manner that would result in substantial erosion or siltation on or off site; or	I = No U = No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	No	No	I = No U = No
	Creates or contributes runoff water that would exceed MEP (Maximum Extent Practicable).	I = No U = No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	I = No U = No	No	No	I = No U = No

(1) Direct impacts to Waters of the United States and Riparian Ecosystems, measured in acres of riparian ecosystems within the disturbance limits.  
(2) The normalized rank scores were calculated for two groups of Alternatives: (1) All initial corridors, AIO, AIP and I-5 Action Alternatives and (2) all ultimate corridor alternatives, AIO, AIP and I-5 Alternatives. Therefore, for the AIO, AIP and I-5 Alternatives, normalized rankings when compared to the initial (I) and the ultimate (U) corridor alternatives are provided.  
(3) Defined as the number of acres of coastal sage scrub within the disturbance limits of the Alternative. Rankings are shown in ( ). The lower the ranking number, the better the performance of the Alternative for this measure.  
(4) Defined as the number of areas within the disturbance limits of the alternatives documented as gnatcatcher "use areas". This number may represent an individual, pair, or occasionally family groups. Rankings are shown in ( ). The lower the ranking number, the better the performance of the Alternative for this measure.  
(5) Defined as the percent of each day that traffic on I-5 operates under congested conditions in 2025. Rankings are shown in ( ). The lower the ranking number, the better the performance of the Alternative for this measure.  
(6) Defined as the total hours of vehicle travel time saved per day, expressed in thousands of hours. Rankings are shown in ( ). The lower the ranking number, the better the performance of the Alternative for this measure.  
(7) Defined as the number of residential units within the disturbance limits that would be displaced by the alternative. Rankings are shown in ( ). The lower the ranking number, the better the performance of the Alternative for this measure.  
(8) Defined as the creation of new infrastructure across a community and acquisition of residential units in that community resulting in disruption of an existing community. Rankings are shown in ( ). The lower the ranking number, the better the performance of the Alternative for this measure.  
(9) Project costs include right-of-way, mobilization, clearing/erosion control, grading, roadway, structures, drainage, utilities and other development costs including final design and estimated mitigation costs based on past mitigation costs for other TCA corridor projects. Rankings are shown in ( ). The lower the ranking number, the better the performance of the Alternative for this measure.  
(10) Total project costs divided by total hours of vehicle time savings. Rankings are shown in ( ). The lower the ranking number, the better the performance of the Alternative for this measure.  
(11) There are no project costs and no travel time savings for the No Action Alternative.

**TABLE 1.1  
EVALUATION MATRIX FOR DETERMINATION OF  
PREFERRED ALTERNATIVE/LEAST ENVIRONMENTALLY DAMAGING PRACTICABLE ALTERNATIVE  
SUMMARY OF ADVERSE IMPACTS BEFORE MITIGATION**

Parameter	FEC-M	FEC-W	CC	CC-ALPV	A7C-FEC-M	A7C-ALPV	AIO	I-5	No Action
<b>TRAFFIC CONDITIONS</b>									
<b>TRAFFIC</b>									
Future Traffic Demand (Year 2025). Congested percent of daily traffic on I-5 in year 2025	3.4%	3.4%	2.4%	7.8%	3.2%	7.8%	11.3%	1%	15.9%
Traffic Flow and Congestion - System wide Travel Time Saving. Total Hours of Vehicle Travel Time Savings Per Day (expressed in thousands).	20	20	18	8	21	8	5	20	0
Project Cost Effectiveness in Thousands <sup>1</sup> . Cost per hour travel time saved. (expressed in thousands)	I = \$38.5 U = \$46.4	I = \$35.6 U = \$44.2	I = \$62.3 U = \$76.6	I = \$64 U = \$78.5	I = \$34.7 U = \$42.7	I = \$120 U = \$128	\$104	\$120	Not applicable.
Operations: intersections, freeway segments and ramps that experience peak hour beneficial effects <sup>2,3</sup> .	33 locations (21 intersections, six freeway segments and six ramps).	33 locations (21 intersections, six freeway segments and six ramps).	32 locations (20 intersections, six freeway segments and six ramps).	18 locations (12 intersections, three freeway segments and three ramps).	32 locations (20 intersections, six freeway segments and six ramps).	18 locations (12 intersections, three freeway segments and three ramps).	Six locations (five intersections and one ramp).	38 locations (19 intersections, 10 freeway segments and nine ramps).	Not applicable.
Operations: direct adverse peak hour impacts to intersections and ramps <sup>2,3</sup> .	None.	None.	One intersection and two ramps.	Seven intersections and three ramps.	None.	Seven intersections and three ramps.	15 intersections and nine ramps.	12 intersections and seven ramps.	Not applicable.
Operations: indirect adverse peak hour impacts to I-5 ramps and intersections <sup>2,3</sup> .	One I-5 ramp intersection and five I-5 ramps.	One I-5 ramp intersection and five I-5 ramps.	One I-5 ramp intersection and four I-5 ramps.	One I-5 ramp intersection and three I-5 ramps.	One I-5 ramp intersection and five I-5 ramps.	One I-5 ramp intersection and three I-5 ramps.	One I-5 ramp.	None.	NA
<b>AIR QUALITY</b>									
Is the project consistent with the regional air quality emissions budget.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Operations: increases in emissions which exceed the SCAQMD thresholds assuming the committed road system and RMV at 14,000 dus compared to the No Action Alternative, in pounds per day during operations <sup>4</sup>	Yes: NO <sub>x</sub> - 136.	Yes: NO <sub>x</sub> - 136.	Yes: NO <sub>x</sub> - 127.	Yes: NO <sub>x</sub> - 127.	Yes: NO <sub>x</sub> - 119.	Yes: NO <sub>x</sub> - 119.	No exceedances.	Yes: NO <sub>x</sub> - 308.	No exceedances.
Construction: exceedance of SCAQMD thresholds for the initial alternatives, in pounds per	Yes: CO: 29,641 HC: 1,243	Yes: CO: 29,792 HC: 1,265	Yes: CO: 38,511 HC: 1,741	Yes: CO: 38,511 HC: 1,741	Yes: CO: 27,868 HC: 1,205	Yes: CO: 40,326 HC: 1,863	Yes: CO: 19,139 HC: 868	Yes: CO: 45,824 HC: 2,069	Not applicable.

<sup>1</sup> Total project cost divided by total hours of vehicle time savings.

<sup>2</sup> Compared to the No Action Alternative.

<sup>3</sup> The number of locations identified is a summation of the beneficial effects, direct adverse impacts or indirect adverse impacts that occur in the four circulation and land use scenarios analyzed.

<sup>4</sup> SCAQMD operations threshold for NO<sub>x</sub> is 55 pounds per day (lbs/day).

<sup>5</sup> SCAQMD construction thresholds are:

CO: 550 lbs/day.

HC: 75 lbs/day.

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Parameter	FEC-M	FEC-W	CC	CC-ALPV	A7C-FEC-M	A7C-ALPV	AIO	I-5	No Action
day during construction <sup>5</sup>	NO <sub>x</sub> : 5,195 SO <sub>x</sub> : 449 PM <sub>10</sub> : 944	NO <sub>x</sub> : 5,656 SO <sub>x</sub> : 478 PM <sub>10</sub> : 994	NO <sub>x</sub> : 7,754 SO <sub>x</sub> : 721 PM <sub>10</sub> : 1,554	NO <sub>x</sub> : 7,754 SO <sub>x</sub> : 721 PM <sub>10</sub> : 1,554	NO <sub>x</sub> : 6,036 SO <sub>x</sub> : 482 PM <sub>10</sub> : 1,006	NO <sub>x</sub> : 11,526 SO <sub>x</sub> : 971 PM <sub>10</sub> : 2,274	NO <sub>x</sub> : 5,560 SO <sub>x</sub> : 405 PM <sub>10</sub> : 727	NO <sub>x</sub> : 13,261 SO <sub>x</sub> : 915 PM <sub>10</sub> : 1,683	
<b>AQUATIC RESOURCES (Including compliance with Section 404 of the Clean Water Act/CDFG Streambed Alteration Program)</b>									
<b>Wetlands/Waters of U.S.</b>									
Acres of riparian ecosystems directly impacted by the corridor footprints <sup>6</sup>	I = 49.0 U = 53.4	I = 38.7 U = 40.3	I = 53.7 U = 60.2	I = 49.9 U = 57.4	I = 42.9 U = 45.6	I = 23.1 U = 32.0	I = 9.2 U = 9.2	I = 13.7 U = 13.7	Not applicable.
Waters of the United States (WoUS): Acres of impact to WoUS Corps jurisdiction pursuant to Section 404 of the Clean Water Act.	I = 15.71 U = 18.06	I = 15.71 U = 16.04	I = 41.42 U = 42.55	I = 38.95 U = 40.93	I = 17.77 U = 18.85	I = 10.46 U = 17.56			Not applicable.
Wetland: Acres of impact to wetland Corps jurisdiction pursuant to Section 404 of the Clean Water Act <sup>7</sup>	I = 11.04 U = 11.06	I = 11.04 U = 11.13	I = 21.53 U = 22.18	I = 19.54 U = 21.06	I = 9.24 U = 9.41	I = 5.16 U = 11.27			Not applicable.
Sum of normalized impact scores for all criteria for corridor footprints. Lower number represents less impact. (Number in parenthesis represents the normalized total impact score).	I = 5.3 (0.7) U = 5.3 (0.7)	I = 4.5 (0.6) U = 4.3 (0.5)	I = 8.0 (1.0) U = 8.0 (1.0)	I = 7.1 (0.9) U = 7.7 (0.96)	I = 5.0 (0.6) U = 4.9 (0.6)	I = 2.4 (0.3) U = 2.9 (0.4)	I = 1.5 (0.2) U = 1.4 (0.2)	I = 1.0 (0.1) U = 0.9 (0.1)	Not applicable.
Impacts to 303 (d) list of impaired waters or tributary of 303 (d) list of impacts waters (measures: numbered of tributaries/number of impaired waters impacted).  NI = Not Impaired I = Impaired	1 San Onofre (NI) 2 Cañada Gobernadora-Tributary to San Jan Creek (I) 3 San Juan Creek (I) 4 Cristianitos Creek (NI) 5 San Mateo Creek (NI) Summary: 2 crossings of Impaired Waterbodies.	1 San Onofre (NI) 2 San Juan Creek (I) 3 San Mateo Creek (NI) Summary: 1 crossing of Impaired Waterbodies.	1, 2 Cañada Chiquita - Tributary to San Juan Creek (I) 3 San Juan Creek (I) 4. Seguna Deshecha Cañada (I) Summary: 4 crossings of Impaired Waterbodies	1, 2 Cañada Chiquita - Tributary to San Juan Creek (I) 3 San Juan Creek (I) 4 Segunda Deshecha Cañada (I) Summary: 4 crossings of Impaired Waterbodies	1 San Onofre Creek (NI) 2 San Juan Creek (I) 3 San Mateo Creek (I) Summary: 2 crossings of Impaired Waterbodies	1 San Juan Creek (I) 2, 3 Segunda Deshecha Cañada (I) 4 Cañada Chiquita (I) Summary: 3 crossings of Impaired Waterbodies	1 San Juan Creek (I) 2 Segunda Deshecha Cañada (I) Summary: 2 crossings of Impaired Waterbodies	1 Aliso Creek (I) 2 La Paz Creek (NI) 3 Oso Creek (NI) 4 Trabuco Creek (NI) 5 Horno Creek Tributary to San Juan Creek (I) 6 San Juan Creek (I) 7 Prima Deshecha Cañada Creek (I) 8 Segunda Deshecha Cañada (I) Summary: 5 crossings of Impaired Waterbodies	Not applicable.

NO<sub>x</sub>: 100 lbs/day.  
SO<sub>x</sub>: 150 lbs/day.  
PM<sub>10</sub>: 150 lbs/day.

<sup>6</sup> The potential impact of the initial and ultimate alternative corridor alignments on Waters of U.S. and riparian ecosystems was accomplished by simulating the changes that could be expected to occur in each riparian reach as a result of the direct impacts associated with each alternative corridor. Acreage represents the acreage of riparian ecosystem. (Smith 2003)

<sup>7</sup> This metric represents those acres that have been determined to be Corps jurisdictional wetlands and are included in WoUS acreages (column above). The impact numbers are "draft" – have not been verified by the Corps.

**TABLE 1.1  
EVALUATION MATRIX FOR DETERMINATION OF  
PREFERRED ALTERNATIVE/LEAST ENVIRONMENTALLY DAMAGING PRACTICABLE ALTERNATIVE  
SUMMARY OF ADVERSE IMPACTS BEFORE MITIGATION**

Parameter	FEC-M	FEC-W	CC	CC-ALPV	A7C-FEC-M	A7C-ALPV	AIO	I-5	No Action
<b>WATER QUALITY</b>									
Erosion/Sedimentation/Floodplain Encroachment  Metric: Increase of 0.3 meter (1 foot) or more, encroachment into a regulated floodway.	No adverse impacts.	No adverse impacts.	Cañada Chiquita (2 locations). South of Tesoro High School there is an adverse impact to base flood elevation and erosion/sedimentation. In addition, just north of the confluence with San Juan Creek there is a longitudinal encroachment of Canada Chiquita, which also results in adverse floodplain and erosion/sedimentation impacts.  Segunda Deshecha Cañada (1 location). Adverse impact to base flood elevation and erosion/sedimentation at Vista Hermosa Interchange.	Cañada Chiquita (2 locations). South of Tesoro High School there is an adverse impact to base flood elevation and erosion/sedimentation. In addition, just north of the confluence with San Juan Creek there is a longitudinal encroachment of Canada Chiquita, which also results in adverse floodplain and erosion/sedimentation impacts.  Segunda Deshecha Cañada (1 location). Adverse impact to base flood elevation and erosion/sedimentation at Vista Hermosa Interchange.	No adverse impacts.	Cañada Chiquita. (1 location). Adverse impact to the base flood elevation at the East-West Connector.	No adverse impacts.	No adverse impacts.	No adverse impacts assuming other projects developed include similar water quality protection assurances.
Surface Water Quality  Metric: Meets RWQCB water quality standards to the maximum extent practicable.	No adverse impacts with full implementation of Project Design Features (PDFs).	No adverse impacts with full implementation of PDFs.	No adverse impacts with full implementation of PDFs.	No adverse impacts with full implementation of PDFs.	No adverse impacts with full implementation of PDFs.	No adverse impacts with full implementation of PDFs.	No adverse impacts with full implementation of PDFs.	No adverse impacts with full implementation of PDFs.	No adverse impacts assuming other projects developed include similar water quality protection assurances.
<b>ENDANGERED SPECIES (including compliance with Section 7 of the Endangered Species Act)</b>									
<b>BIOLOGICAL – Direct impacts to Threatened and Endangered Species</b>									
Direct impact to thread leaved brodiaea (measure: # of plants).	54 (I) 94 (U)	23 (I) 56 (U)	0 (I) 0 (U)	0 (I) 0 (U)	23 (I) 56 (U)	76 (I) 76 (U)	0 (I) 0 (U)	0 (I) 0 (U)	Not applicable.
Number of Populations (a) Cristianitos Canyon (b) San Onofre State Park	2 (a), 3(b) 3 (a), 3(b)	3 (b) 3 (b)	0	0	3 (b) 3 (b)	2 (b) 2 (b)	0	0	
Direct impact to tidewater goby <sup>8</sup> (measure: presence/absence).	Potential Presence.	Potential Presence.	0 (I) 0 (U)	0 (I) 0 (U)	Potential Presence.	0 (I) 0 (U)	0 (I) 0 (U)	0 (I) 0 (U)	Not applicable.
Per USFWS request, area of potential direct impact to	San Mateo Creek = .13 acres (I) .20 acres (U)	San Mateo Creek = .13 acres (I) .20 acres (U)			San Mateo Creek = .13 acres (I) .20 acres (U)				

<sup>8</sup> Impact to tidewater goby defined as 4% of the area of intersection between the bridge deck and the designated critical habitat excluding the area underlain by Interstate 5. Four percent represents best professional approximation for direct impact of bridge bents.

TABLE 1.1  
 EVALUATION MATRIX FOR DETERMINATION OF  
 PREFERRED ALTERNATIVE/LEAST ENVIRONMENTALLY DAMAGING PRACTICABLE ALTERNATIVE  
 SUMMARY OF ADVERSE IMPACTS BEFORE MITIGATION

Parameter	FEC-M	FEC-W	CC	CC-ALPV	A7C-FEC-M	A7C-ALPV	AIO	I-5	No Action
habitat(s) that may support tidewater goby is identified. Presumption is that the direct impact is mainly due to stream crossings.	San Onofre Creek = 0.08 acres (I) 0.11 acres (U)  The tidewater goby occupies San Mateo and San Onofre lagoon in the San Diego County portion of the study area. The impacts to a specific number of tidewater goby cannot be quantified because the population numbers change markedly between years.	San Onofre Creek = 0.08 acres (I) 0.11 acres (U)  The tidewater goby occupies San Mateo and San Onofre lagoon in the San Diego County portion of the study area. The impacts to a specific number of tidewater goby cannot be quantified because the population numbers change markedly between years.			San Onofre Creek = 0.08 acres (I) 0.11 acres (U)  The tidewater goby occupies San Mateo and San Onofre lagoon in the San Diego County portion of the study area. The impacts to a specific number of tidewater goby cannot be quantified because the population numbers change markedly between years.				
Direct impact to southern steelhead trout <sup>9</sup> (measure: presence/absence).  Per USFWS request, area of potential direct impact to habitat(s) that may support southern steelhead trout is identified. Presumption is that the direct impact is mainly due to stream crossings.	Potential Presence  San Juan Creek = 0.04 acres (I) 0.08 acres (U)  San Mateo Creek = .07 acres (I) .12 acres (U)  San Onofre Creek = 0.01 acres (I) 0.02 acres (U)  Steelhead may occupy the San Juan, San Mateo and San Onofre drainages crossed by this alternative. The impacts to a specific number of steelhead have not been quantified because of the uncertainty of whether the steelhead will be present.	Potential Presence  San Juan Creek = 0.02 acres (I) 0.02 acres (U)  San Mateo Creek = .07 acres (I) .12 acres (U)  San Onofre Creek = 0.01 acres (I) 0.02 acres (U)  Steelhead may occupy the San Juan, San Mateo and San Onofre drainages crossed by this alternative. The impacts to a specific number of steelhead have not been quantified because of the uncertainty of whether the steelhead will be present.	Potential Presence  San Juan Creek = 0.26 acres (I) 0.30 acres (U)  Steelhead may occupy the San Juan drainage crossed by this alternative. The impacts to a specific number of steelhead have not been quantified because of the uncertainty of whether the steelhead will be present.	Potential Presence  San Juan Creek = 0.26 acres (I) 0.30 acres (U)  Steelhead may occupy the San Juan drainage crossed by this alternative. The impacts to a specific number of steelhead have not been quantified because of the uncertainty of whether the steelhead will be present.	Potential Presence.  San Juan Creek = 0.05 acres (I) 0.05 acres (U)  San Mateo Creek = .07 acres (I) .12 acres (U)  San Onofre Creek = 0.01 acres (I) 0.02 acres (U)  Steelhead may occupy the San Juan, San Mateo and San Onofre drainages crossed by this alternative. The impacts to a specific number of steelhead have not been quantified because of the uncertainty of whether the steelhead will be present.	Potential Presence  San Juan Creek = 0.09 acres (I) 0.12 acres (U)  Steelhead may occupy the San Juan drainage crossed by this alternative. The impacts to a specific number of steelhead have not been quantified because of the uncertainty of whether the steelhead will be present.	Potential Presence  San Juan Creek = 0.07 acres (I) 0.07 acres (U)  Steelhead may occupy the San Juan drainage crossed by this alternative. The impacts to a specific number of steelhead have not been quantified because of the uncertainty of whether the steelhead will be present.	Potential Presence  San Juan Creek = 0.02 acres (I) 0.02 acres (U)  Steelhead may occupy the San Juan drainage crossed by this alternative. The impacts to a specific number of steelhead have not been quantified because of the uncertainty of whether the steelhead will be present.	Not applicable
Direct impact to arroyo toad	1 (I)	1 (I)	0 (I)	0 (I)	1 (I)	0 (I)	0 (I)		Not applicable.

<sup>9</sup> Impact to southern steelhead trout defined as 4% of the area of the intersection between the bridge deck and the designated critical habitat excluding the area underlain by Interstate 5. Four percent represents best professional approximation for direct impact of bridge bents.

**TABLE 1.1  
EVALUATION MATRIX FOR DETERMINATION OF  
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SUMMARY OF ADVERSE IMPACTS BEFORE MITIGATION**

Parameter	FEC-M	FEC-W	CC	CC-ALPV	A7C-FEC-M	A7C-ALPV	AIO	I-5	No Action
(measure: # of individuals).	2 (U)	2 (U)	0 (U)	0 (U)	2 (U)	0 (U)	0 (U)	1	
Direct impact to least Bell's vireo (measure: # individuals).	0 (I) 0 (U)	0 (I) 0 (U)	1 (I) 1 (U)	1 (I) 1 (U)	0 (I) 0 (U)	1 (I) 1 (U)	2	0	Not applicable.
Direct impact to California gnatcatcher (measure: # use areas).	13 (I) 13 (U)	12 (I) 12 (U)	10 (I) 11 (U)	7 (I) 8 (U)	15 (I) 16 (U)	11 (I) 13 (U)	6	1	Not applicable.
Direct impact to pacific pocket mouse (measure: # of individuals).	0 (I) 0 (U)	0 (I) 0 (U)	0 (I) 0 (U)	0 (I) 0 (U)	0 (I) 0 (U)	0 (I) 0 (U)	0	0	Not applicable.
Per USFWS request, assessment of impact to suitable habitat for Pacific pocket mouse.							0	0	Not applicable.
Direct impact to coastal sage scrub (measure: acres).	426 (I) 444 (U)	410 (I) 423 (U)	193 (I) 202 (U)	177 (I) 188 (U)	380 (I) 391 (U)	190 (I) 217 (U)	74	21	Not applicable.
<b>May affect designated critical habitat or proposed critical habitat<sup>10</sup> (measure: acres (ac) or linear miles (mi)).</b>									
Critical Habitat: Tidewater goby <sup>11</sup> San Onofre Creek	7.73	7.73	0	0	7.73	0	0	0	Not applicable.
Critical Habitat: Tidewater goby <sup>11</sup> San Mateo Creek	22.93	22.93	2.35	0	22.93	0	0	2.35	Not applicable.
Critical Habitat: Arroyo Toad <sup>12</sup> San Juan Creek	47.33	56.57	104.18	104.19	34.2	68.02	23.55	12.94	Not applicable.
Critical Habitat: Arroyo Toad <sup>12</sup> San Mateo Creek	236.12	192.95	2.94	0	193.04	0	0	3.55	
Critical Habitat: California gnatcatcher									Not applicable.
Proposed (04/04/03)	14.54	14.19	111.55		14.19		1.29	21.45	
Final (10/10/00)	1103.62	1085.94	789.16	776.61	1114.44	818.04	466.71	44.91	
<b>Total (Acres)</b>	<b>1118.16</b>	<b>1100.13</b>	<b>900.71</b>	<b>776.61</b>	<b>1128.63</b>	<b>818.04</b>	<b>468</b>	<b>66.36</b>	
Critical Habitat: San Diego fairy shrimp <sup>13</sup>	1.68	1.68	0	0	1.68	0	0	0	Not applicable.
Critical Habitat: Riverside fairy shrimp <sup>14</sup>	152.31	152.31	41.12	41.14	194.73	140.64	0	0	Not applicable.
<b>May affect habitat fragmentation/ wildlife corridors</b>									
Wildlife habitat loss and fragmentation (measure: acres of habitat west of alternatives).	18,400 ac (7,446 ha)	17,483 ac (7,075 ha)	11,261 ac (4,557 ha)	7,540 (3,051 ha)	15,793 (6,391 ha)	10,004 (4,048 ha)	5,129 (2,075 ha)	0 (0)	Not applicable.
	The FEC-M Alternative traverses drainages, ridgelines and canyons that	The FEC-W Alternative traverses drainages, ridgelines and canyons that	The CC Alternative also traverses drainages, ridgelines and canyons that restricts wildlife	The CC-ALPV Alternative also traverses drainages, ridgelines and canyons that restricts	The A7C-FEC-M Alternative traverses drainages, ridgelines and canyons that	The A7C-ALPV Alternative also traverses drainages, ridgelines and canyons	The AIO Alternative also traverses some, more limited drainages, ridgelines and canyons	The I-5 Alternative traverses existing developed areas.	

<sup>10</sup> Potential impacts to critical habitat are provided for "initial" alternatives disturbance limits.

<sup>11</sup> Final designation, November 20, 2000

<sup>12</sup> Proposed designation, April 28, 2004

<sup>13</sup> Final designation, April 22, 2004

<sup>14</sup> Proposed designation, April 27, 2004

**TABLE 1.1  
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SUMMARY OF ADVERSE IMPACTS BEFORE MITIGATION**

Parameter	FEC-M	FEC-W	CC	CC-ALPV	A7C-FEC-M	A7C-ALPV	AIO	I-5	No Action
	restricts wildlife movement and reduces connectivity. This Alternative fragments the highest acreage of existing habitat. The inclusion of the RMV development, along with the FEC-M Alternative, will result in the creation of further fragmentation and remaining viable habitat available to wildlife.	restricts wildlife movement and reduces connectivity. This Alternative fragments the second-highest acreage of existing habitat. The inclusion of the RMV development, along with the FEC-W Alternative, will result in the creation of further fragmentation of remaining viable habitat available to wildlife.	movement and reduces connectivity. However, this Alternative does not fragment habitat to the extent of the FEC-M, FEC-W or A7C-FEC-M Alternatives. Still, the inclusion of the RMV development, along with the CC Alternative, will result in the creation of further fragmentation and remaining viable habitat available to wildlife.	wildlife movement and reduces connectivity. However, this Alternative does not fragment habitat to the extent of the FEC-M, FEC-W or A7C-FEC-M Alternatives, and even to a lesser extent that the CC Alternative. Still, the inclusion of the RMV development, along with the CC Alternative, will result in the creation of further fragmentation and remaining viable habitat available to wildlife.	restricts wildlife movement and reduces connectivity. This Alternative fragments the third highest acreage of existing habitat. The inclusion of the RMV development, along with the A7C-FEC-M Alternative, will result in the creation of further fragmentation and remaining viable habitat available to wildlife.	that restricts wildlife movement and reduces connectivity. However, this Alternative does not fragment habitat to the extent of the FEC-M, FEC-W or A7C-FEC-M Alternatives. Still, the inclusion of the RMV development, along with the A7C-ALPV Alternative, will result in the creation of further fragmentation and remaining viable habitat available to wildlife.	that restricts wildlife movement and reduces connectivity, but not nearly to the extent of the other alternatives. Still, the inclusion of the RMV development, along with the AIO Alternative, will result in the creation of further fragmentation and remaining viable habitat available to wildlife.		
Wildlife movement corridor maintained (measure: YES/NO, number of wildlife bridges/undercrossings (UC) provided <sup>15</sup> ).	YES 5 bridges 8 UC	YES 5 bridges 6 UC	YES 1 bridge 2 UC	YES 1 bridges 2 UC	YES 4 bridges 6 UC	YES 1 bridge 3 UC	YES 1 bridge 1 UC	Not Applicable	Not applicable.
<b>SOCIOECONOMIC CONDITIONS (Including Social Infrastructure)/ LAND USES IMPACTS (Including Impacts to Surrounding Communities)</b>									
<b>SOCIOECONOMICS and ENVIRONMENTAL JUSTICE</b>									
Residential units displaced based on build out of the Talega Master Planned Community (including recently constructed areas and subdivided areas currently undergoing grading). (Numbers in parenthesis represent data as stated in Draft EIS/SEIR – based on Nov 2002 information).	I: 0 (0) U: 0 (0)	I: 0 (0) U: 0 (0)	I: 763 (593) U: 808 (602)	I: 172 (2) U: 220 (14)	I: 0 (0) U: 0 (0)	I: 112 (80) U: 238 (92)	263 (263)	838 (838)	None
Residents displaced. (Numbers in parenthesis represent data as stated in Draft EIS/SEIR – based on Nov 2002 information).	I: 0 (0) U: 0 (0)	I: 0 (0) U: 0 (0)	I: 1,914 (1,380) U: 2,050 (1,405)	I: 541 (7) U: 691 (44)	I: 0 (0) U: 0 (0)	256 (I) 293 (U)	827 (827)	1,970 (1,970)	None
Businesses, institutional and non-profit uses displaced.	0	0	106 (I and U)	0	0	0	17	382	0
Affects community cohesion/division.	No.	No.	Yes; Talega Planned Community and San Clemente.	Yes; Talega Planned Community.	No.	Yes; Talega Planned Community.	Yes; Ladera Ranch Planned Community and Talega Planned Community.	Yes – Additional disruption beyond that which currently exists as a result of the I-5 corridor in the cities of Dana Point, Laguna	No.

<sup>15</sup> Undercrossing may represent a concrete arch culvert, multi-plate arch culvert, or box culvert.

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PREFERRED ALTERNATIVE/LEAST ENVIRONMENTALLY DAMAGING PRACTICABLE ALTERNATIVE  
SUMMARY OF ADVERSE IMPACTS BEFORE MITIGATION**

Parameter	FEC-M	FEC-W	CC	CC-ALPV	A7C-FEC-M	A7C-ALPV	AIO	I-5 Hills, Laguna Niguel, Lake Forest, San Clemente, San Juan Capistrano.	No Action
<b>MILITARY IMPACTS ON CAMP PENDLETON</b>									
Encroachment: reduces future military use of existing Camp Pendleton land (measure: acres).	Yes. 406 acres <sup>16</sup>	Yes. 406 acres <sup>16</sup>	Not Applicable.	Not applicable.	Yes. 406 acres <sup>16</sup>	Not applicable.	Not applicable.	Yes. 6 acres.	Not applicable.
Consistent with Department of Navy (DON) and Marine Corps agreement to allow evaluation of single corridor alignment on Camp Pendleton (1988)	Yes.	Yes.	Not Applicable	Not applicable.	Yes.	Not applicable.	Not applicable.	No.	Not applicable.
<b>EARTH RESOURCES</b>									
Construction: estimated cut in 1000s of cubic meters (cubic yards)	I: -14,307 (-18,714) U: -16,732 (-21,885)	I: -12,771 (-16,704) U: -14,993 (-19,610)	I: -11,600 (-15,173) U: -19,400 (-25,375)	I: -6,700 (8,764) U: -10,500 (-13,734)	I: -12,149 (-15,891) U: -14,192 (-18,563)	I: -33,300 (-43,556) U: -34,500 (-53,628)	-4,800 (-6,278)	-6,600 (-8,633)	0
Construction: estimated fill in 1000s of cubic meters (cubic yards)	I: 11,008 (14,398) U: 13,712 (17,935)	I: 13,062 (17,085) U: 15,864 (20,750)	I: 8,900 (11,641) U: 14,600 (19,097)	I: 7,000 (9,156) U: 10,800 (14,126)	I: 13,530 (17,697) U: 16,503 (21,586)	I: 33,800 (44,210) U: 34,000 (55,851)	3,700 (4,840)	2,300 (3,008)	0
<b>CULTURAL AND HISTORIC RESOURCES (Including Compliance with Section 106 of the National Historic Preservation Act)</b>									
<b>HISTORIC AND ARCHEOLOGICAL RESOURCES</b>									
Total recorded archeological resources potentially impacted.	20	21	19	15	19	13 (I) 14 (U)	13	18	0
Total recorded historic resources potentially impacted.	0	0	8	0	0	0	0	12	0
<b>RECREATIONAL RESOURCES (Including Compliance with Section 4(f) of the Department of Transportation Act)</b>									
Existing Section 4 (f) resources affected by permanent acquisition of property (publicly owned).  -- Indicates resource is not impacted by that alternative	SOSB Cristianitos Subunit 1.	SOSB Cristianitos Subunit.	SOSB Cristianitos Subunit 1.	--	SOSB Cristianitos Subunit 1.	--	--	SOSB Cristianitos Subunit 1.	Not applicable.
	SOSB Trestles Subunit 2.	SOSB Trestles Subunit 2.	--	--	SOSB Trestles Subunit 2.	--	--	--	Not applicable.
	--	--	San Juan Capistrano Open Space and Trails.	San Juan Capistrano Open Space and Trails.	--	--	San Juan Capistrano Open Space and Trails.	--	Not applicable.
	--	--	San Clemente High School Sports Fields.	--	--	--	--	San Clemente High School Sports Fields.	Not applicable.
	--	--	Ole Hanson Elementary School Sports Field.	--	--	--	--	Ole Hanson Elementary School Sports Fields.	Not applicable.
	--	--	San Clemente State Beach.	--	--	--	--	--	Not applicable.
	--	--	--	--	--	--	--	Las Flores Elementary School.	Not applicable.
	--	--	--	--	--	--	--	Ladera Ranch Open Space.	Not applicable.

<sup>16</sup> An additional 424 acres of base land will be permanently segmented west of the SOCTIIP Alternative right-of-way. Thus, the total area on base affected by SOCTIIP Alternative would be 830 acres. However, no military training routinely occurs within this area of the base since it has been leased to the State of California Department of Parks since 1971.

**TABLE 1.1  
EVALUATION MATRIX FOR DETERMINATION OF  
PREFERRED ALTERNATIVE/LEAST ENVIRONMENTALLY DAMAGING PRACTICABLE ALTERNATIVE  
SUMMARY OF ADVERSE IMPACTS BEFORE MITIGATION**

Parameter	FEC-M	FEC-W	CC	CC-ALPV	A7C-FEC-M	A7C-ALPV	AIO	I-5	No Action
	--	--	--	--	--	--	--	Cavanaugh Gowdy Park.	Not applicable.
	--	--	--	--	--	--	--	Aegean Park.	Not applicable.
	--	--	--	--	--	--	--	Mission Viejo High School Sports Fields.	Not applicable.
	--	--	--	--	--	--	--	Mission Viejo Golf Course.	Not applicable.
	--	--	--	--	--	--	--	Serra Park.	Not applicable.
	--	--	--	--	--	--	--	Buccheim Fields.	Not applicable.
	--	--	--	--	--	--	--	San Geronio Park.	Not applicable.
Proposed Section 4 (f) resources affected by permanent acquisition of property (publicly owned).	Proposed San Juan Creek Regional Park.	--	Not applicable.						
	--	--	Proposed Prima Deshecha Regional Park.	Proposed Prima Deshecha Regional Park.		Proposed Prima Deshecha Regional Park.	Proposed Prima Deshecha Regional Park.	--	Not applicable.
	--	--	--	--	--	--	--	Proposed Northwest Open Space.	Not applicable.
Existing recreation resources affected by permanent acquisition of property (privately owned, not Section 4(f)).	Donna O'Neill Land Conservancy	Donna O'Neill Land Conservancy	--	--	Donna O'Neill Land Conservancy		--	--	Not applicable.
	--	--	--	--	--	Talega Golf Course.	--	--	Not applicable.
	--	--	--	--	--	--	--	Rancho Capistrano Recreation Fields (Schuller).	Not applicable.
	--	--	--	--	--	--	--	Shorecliffs Golf Course.	Not applicable.
Proposed recreation resources affected by permanent acquisition of property (privately owned; not Section 4(f)).	--	--	--	--	--	--	Proposed Ladera Ranch Open Space.	None.	Not applicable.
<b>PROJECT COST</b>									
Project Cost In Millions. Right-of-way, relocation, mobilization, clearing/erosion control, grading, roadway, structures, drainage, utilities and other development costs including final design and estimated mitigation costs based on past mitigation costs for other TCA corridor projects.	I: \$763 U: \$912	I: \$706 U: \$870	I: \$1,124 U: \$1,382	I: \$513 U: \$628	I: \$715 U: \$873	I: \$963 U: \$1,020	\$543	\$2,424	0
<b>FACTORS CONSIDERED BUT WHICH ARE NOT DISCRIMINATORS</b>									
<b>COASTAL ZONE RESOURCES (Including Compliance with the Coastal Zone Management Act)</b>									
Project lies in Coastal Zone requiring a coastal development permit and a federal consistency finding (measure: yes/no).	Yes.	Yes.	Yes.	No.	Yes.	No.	No.	Yes.	No.
<b>ENVIRONMENTAL POLICY (Including Compliance with the NEPA/Section 404 Integration Process MOU)</b>									
Development and evaluation of	Yes.	Not Applicable							

**TABLE 1.1  
EVALUATION MATRIX FOR DETERMINATION OF  
PREFERRED ALTERNATIVE/LEAST ENVIRONMENTALLY DAMAGING PRACTICABLE ALTERNATIVE  
SUMMARY OF ADVERSE IMPACTS BEFORE MITIGATION**

Parameter	FEC-M	FEC-W	CC	CC-ALPV	A7C-FEC-M	A7C-ALPV	AIO	I-5	No Action
Alternatives through NEPA/Section 404 Integration Process MOU									
<b>GROWTH INDUCEMENT</b>									
Potential to induce or facilitate growth.	Yes; relatively greater potential to facilitate growth because alignment passes through undeveloped areas.	Yes; relatively greater potential to facilitate growth because alignment passes through undeveloped areas.	Yes; relatively greater potential to facilitate growth because alignment passes through undeveloped areas.	Yes; relatively greater potential to facilitate growth because alignment passes through undeveloped areas.	Yes; relatively greater potential to facilitate growth because alignment passes through undeveloped areas.	Yes; relatively greater potential to facilitate growth because alignment passes through undeveloped areas.	Yes; relatively lower potential to facilitate growth because alignments of existing and MPAH roads pass primarily through developed areas.	Yes; relatively lower potential to facilitate growth because alignment passes primarily through developed areas.	No
<b>SOCIOECONOMICS and ENVIRONMENTAL JUSTICE</b>									
Impacts environmental justice population.	No.	No.	No.						

I: Initial.  
 U: Ultimate.  
 NA: Not applicable.  
 LOS: Level, levels of service.  
 RMV: Rancho Mission Viejo.

SOSB: San Onofre State Beach.  
 SCAQMD: South Coast Air Quality Management District.  
 WoUS: Waters of the United States.  
 SWMP: Storm Water Management Plan.  
 SWPPP: Storm Water Pollution Prevention Plan

PDFS: Project Design Features  
 CO: Carbon Monoxide  
 NO<sub>x</sub>: Nitrogen oxides.  
 HC: Hydrocarbons.  
 PM<sub>10</sub>: Particulate matters.



## ACTION ITEMS – April 19, 2004

	WHO	WHAT	Done
1	Larry Vinzant	Send TCA (4/19) the federal distribution list for the DEIS/SEIR.	X
2	Nova Blazej	Let FHWA (Mahfoud) know (and copy TCA) what EPA HQ needs, after notice has been published in the Federal Register.	
3	Macie	Will look into differentiation between erosion/sedimentation and floodplain encroachment and how to express this on the Matrix. TCA will identify the metrics that are used for this parameter.	
4	TCA	Review the Matrix and clarify whether the impact measure for species is the individual, the species, or the presence/absence of the species.	
5	TCA	Talk with Jill Terp about including coastal sage scrub acreages as a parameter on the Matrix, how and whether to include wildlife movement as a parameter, and how valuable would be information n numbers of bridges versus box culverts (under "wildlife movement corridor maintained").	
6	TCA	Delete parameter on wildlife refuges.	
7	TCA	Ask FHWA what measures can be used for community cohesion.	
8	TCA	Check with Jill Terp to find out : <ul style="list-style-type: none"> <li>• which are the parameters she wants for species (should they indicate individuals or species?)</li> <li>• what type of measurement will reflect the value of habitat to those species?</li> <li>• Whether coastal sage scrub should be included as a surrogate for habitat for the gnatcatcher</li> <li>• Whether and how to include wildlife movement as a parameter</li> <li>• Whether indicating numbers of bridges versus numbers of box culverts would be valuable information on the Matrix</li> </ul>	
9	TCA	Correct the reversed data in Military Impacts for FEC and CC.	
10	TCA	List names of individual impacted recreational resources for each alternative.	
11	TCA	In revising the Matrix, create a separate section for parameters that were considered but that were not discriminators. This section will include: growth inducement, Operations-Exceedance of SCAQMD thresholds, Construction: Exceedance of SCAQMD thresholds, Impacts to 303(d) list, and the environmental policy parameter, and perhaps the coastal zone parameter.	
12	Chris Keller	Go through the meeting summaries and other documents and will send an email to the Collaborative, referencing those documents which address this issue.	X
13	TCA, FHWA, EPA, USACE	Hold a meeting to address the wetlands delineation issue. To be held in Los Angeles.	X

## Collaborative Decisions/Agreements, April 19, 2004<sup>1</sup>

1	If there is no difference among the alternatives related to the construction/air quality parameter, then move this parameter to an area of the matrix that shows factors which were considered but which are not discriminators. The operations/air quality parameter should include the information from the EIR that does differentiate among the alternatives.
2	Macie will look into the wording in the Dan Smith report, relevant to the first wetlands parameter, and will call Susan if the wording isn't in line with Susan's suggested wording, "Waters of the U.S. including riparian ecosystems." TCA will include a footnote to define the parameter.

**Next Collaborative Meeting: May 17 and 18, 2004**

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<sup>1</sup> These are agreements reached during the meeting among those present. They do not represent agency concurrence. They are a basis for moving forward procedurally from one meeting to the next, and they are documented to help the group avoid backtracking.

**DRAFT MEETING SUMMARY  
SOCTIIP COLLABORATIVE  
April 19, 2004 (Conference Call)**

Participating in Conference Call:

FHWA: Mahfoud Licha, Larry Vin Zandt, Stephanie Stoermer  
Caltrans: Lisa Ramsey, Smita Deshpande, Ryan Chamberlain  
EPA: Nova Blazej, Liz Varnhagen, Steven John, Mike Schulz  
USACE: Susan DeSaddi, Mark Durham (briefly), David Castanon  
TCA: Macie Cleary-Milan, Maria Levario, Paul Bopp, Rob Thornton (Nossaman  
Consultants:  
    CDR Associates: Louise Smart  
    Viewpoint West: Chris Keller  
    P&D Environmental Services: Christine Huard-Spencer, Michael Benner

I. Update on the status of the DEIS/SEIR

- A. Macie Cleary-Milan reported that TCA met on April 6 with the Camp EIRB environmental review board. Larry Rannals and Bob Taylor made presentations, and TCA fielded questions. The Board voted to approve the document without comments. On April 13 and 15, Larry Rannals presented the DEIS/SEIR in Washington. The Secretary of the Army and a headquarters board decided that the Draft was ready for approval with "a couple of changes in wording" relative to Camp Pendleton. On April 15, Larry briefed a staff member from the office of the Secretary of the Department of the Navy. Larry Rannals will put together a letter this week saying that the Draft is ready for distribution.
- B. TCA is working hard to get the Draft ready for distribution, including release on CDs.
- C. Next steps
  1. 4/29 TCA will be circulating the document. [you might want to note here that the actual distribution date is 5/7]
  2. 4/30 The Federal Register will announce circulation. [you might want to note here that the actual publication date is 5/7]
  3. 4/30 The 60-day review period will begin.
  4. TCA will distribute the public notice for the Army Corps, which will be sent separately from TCA's notice. TCA has been coordinating this with Susan DeSaddi.
  5. The public hearing will be held on Saturday, June 19 from 10:00-6:00 at Tesoro High School. The Collaborative agencies are invited to attend. During the hearing, there will be presentations and an opportunity for the public to comment to a moderator as well as having their comments recorded by a court reporter. [Maria: is this true; will there be a moderator to listen to comments?]

6. Larry Vinzant said that FHWA has a fairly extensive federal distribution list. He will send it (4/19) to TCA.
7. Nova Blazej will let FHWA (Mahfoud) know (and will copy TCA) what EPA HQ needs, after notice has been published in the Federal Register.
8. Stephanie Stoermer said that changes were needed in the 106 and 416 sections in order to use terminology consistently. Macie said that those changes will be made in the final document.

## II. Participation by USFWS

- A. Mike Schulz told the Collaborative that he had spoken with Jim Bartel at USFWS, who had told him that USFWS was continuing to spend 100% of staff time on the Riverside project. Jim had told him USFWS recognized that it would have been ideal to offer their views at an early time, but that they have been unable to do so. However, USFWS does expect to offer their comments "later on." There was no definition of "later on" or what those comments would include.
- B. Macie said that TCA had gone to USFWS offices with Paul Bopp, Valarie McFall [check spelling; it should be McFall], Margot Griswold, and Ann Johnston. They briefed Jill Terp and Ken Corey for two hours in a "mini-Collaborative" and had reviewed the maps of the alternatives. Macie said that (1) she left the meeting feeling that USFWS was "plugged in" to the project, (2) that Jill had complimented her sister federal agencies on how they have represented USFWS interests, and (3) that Ken Corey was well aware of the alternatives and where the Collaborative was in the process.
- C. Louise said she had spoken with Jill who said she didn't know when she would be able to participate in the Collaborative and sent her apologies for not having been available.

## III. Review of the Evaluation Matrix for Determination of Preferred Alternative/Least Environmentally Damaging Practical Alternative: Summary of Adverse Impacts before Mitigation (April 2, 2004)

The Collaborative reviewed the Matrix and commented on the following questions:

- Are there any missing parameters that should be included?
- Are there any parameters that should not be included?
- Are the measures/metrics appropriate and useful?
- Can the matrix, once revised as suggested at this meeting, be used as the basis for the multi-dimensional evaluation discussion to give input to the Army Corps decision on the LEDPA?

### A. Traffic

1. Larry Vinzant asked whether there were any safety issues included in the parameters. A: The alternatives are designed to Caltrans standards. Therefore there are no safety issues associated with any of the alternatives.
2. Chris Keller asked about the operations issues of the Central Corridor (CC) alternative. A: As a mitigation measure, TCA added a configuration of the CC alternative that could work if that alternative were selected. This configuration of the CC will be included in the environmental document as a mitigation

measure that would be used if this alternative were selected. This configuration of the CC alternative would impact a large number of properties. These displacements are not currently reflected in the socio-economics impacts parameter for the CC alternative.

3. Nova Blazej asked why the parameter, "Operations: indirect adverse peak hour impacts to I-5 ramps and intersections," is broken out from the parameter on "Operations: direct adverse peak hour impacts to intersections and ramps," and whether the indirect impacts are a subset of the direct impacts parameter. A: The indirect impacts parameter is not a subset of the direct adverse impacts parameter. In addition, it was noted that all beneficial impacts are direct impacts.
4. The facilitator polled the participants, who indicated that all the traffic parameters are acceptable.

#### B. Air quality

1. Nova reported that Orange County has been designated as a severe non-attainment area for the 8-hour ozone standard and is likely to be a non-attainment area for PM2.5, which is a relatively new standard. The PM2.5 non-attainment areas will be announced in December of this year. She said that the new information will need to be included in the Final EIS.
2. Larry Vinzant noted that the last two air quality parameters, "Operations: Exceedance of SCAQMD thresholds" and "Construction: Exceedance of SCAQMD thresholds," do not provide discrimination among the alternatives. Macie explained that the construction parameter is related to temporary air quality impacts during construction. **The Collaborative agreed: If there is no difference among the alternatives related to the construction/air quality parameter, then move this parameter to an area of the matrix that shows factors which were considered but which are not discriminators. They also agreed that the operations/air quality parameter should include the information from the EIR that does differentiate among the alternatives.**

#### C. Aquatic resources

1. Susan DeSaddi said the title of the "Wetland Resources" section should be changed to "Aquatic Resources," since the study looked at wetlands and non-wetland waters of the U.S. In addition, she said that the title of the first parameter ("Acres of riparian ecosystems . . .") should instead be "Acres of waters of the U.S. including riparian ecosystems" and should include a footnote of explanation. Macie explained that TCA wants to be consistent with the wording of Dan Smith's report. Macie will look into the wording in the Dan Smith report and will call Susan if the wording isn't in line with Susan's suggested wording. TCA will include a footnote to define the parameter. Mike Schulz added that the purpose of the Matrix is to gather into one place all the information that is needed to make the multiple determinations in order to select the preferred alternative/LEDPA. The need is to ensure that the data connects to compliance with the Clean Water Act.

2. The group discussed the timing and extent of jurisdictional wetlands delineation. (Please see IV. below.)
3. Larry Vinzant asked about the significance of the "Impacts to 303(d) list." Mike Schulz explained that the 303(d) list is the basis in California on which EPA assesses compliance with the Clean Water Act. However, since the parameter is not a high-priority discriminator, it can be moved to another section of the Matrix if desired. Macie explained that "I" means impaired, while "NI" means not impaired.
4. Mike Schulz said that it will be difficult to persuade EPA that the direct and indirect effects of the alternatives have no bearing on water quality, despite the use of BMPs.
5. Steven John requested that TCA add to the Matrix the normalized ranking information from the Dan Smith functional assessment. TCA agreed to do this.

#### D. Water quality

1. Nova said that she wants to be sure that the Erosion/Sedimentation parameter reflects the disagreement between EPA and TCA regarding the finding of no adverse impacts. She would like to see reporting on what would be the erosion and sedimentation impacts if there were no BMPs. She referred to the Earth Resources parameter that shows cut and fill. Macie explained that the BMPs are project design features, which are required under the Caltrans permit, and which are designed to eliminate adverse impacts due to erosion and sedimentation. She said that identification of such impacts in the absence of BMPs would be speculation. Nova asked how TCA determined the earth resources impacts. Michael Benner and Paul Bopp explained that the design of the stream crossings and the interchanges would result in the indicated earth resources impacts. Macie noted that the impacts are related both to erosion control and to floodplain encroachment. She said that TCA will look into this. Susan DeSaddi requested that TCA identify the metric that is used to determine the quantification of impacts for the erosion/sedimentation/floodplain encroachment parameter. TCA agreed to do this.

#### E. Biological – Direct impacts to Threatened and Endangered Species

1. Nova asked whether there is meaning that should be drawn from the information about steelhead trout, other than that this is potentially viable habitat. Macie said TCA will summarize the information better to identify potential habitat and presence or absence of the trout.
2. The question was raised about whether the direct impacts listed for the species indicate individuals or species. Nova suggested that TCA check in with Jill Terp to find out which are the parameters she wants used and what type of measurements will reflect the value of habitat to those species. TCA will review the Matrix and clarify whether the measure is the individual or the species or the presence/absence of the species. TCA will coordinate with Jill Terp on which parameters she wants used.
3. Larry Vinzant noted that there are a lot of species listed on the Matrix, which gives the impression that species are a more important parameter than the other parameters. Macie explained that all of these species will be addressed

in a biological opinion and that therefore it is appropriate to include them in the Matrix.

4. Susan DeSaddi reported that it had been helpful to include in the earlier Matrix (for elimination of alternatives prior to the DEIS/SEIR) coastal sage scrub as a placeholder for habitat for endangered species. She suggested that the coastal sage scrub acreages be carried forward to this Matrix. Rob Thornton said that coastal sage scrub is used as a surrogate for yet-to-be-described habitat for the gnatcatcher. Macie agreed that coastal sage scrub really is the target and is an important consideration for USFWS. She will ask Jill to comment on this issue.
5. Nova suggested that the parameter about wildlife habitat loss may be a good place to talk about habitat fragmentation. She said that the current measure is awkward and that it may be more useful to talk about how many wildlife movement corridors would be impacted by each of the alternatives and, as a separate measure, to identify what mitigation measures would be implemented. Macie said that in some areas, the information about wildlife movement is unknown and that she doesn't know how the wildlife movement factor could be quantified. Macie will talk with Jill about how and whether to include wildlife movement as a parameter.
6. Nova suggested that for the "wildlife movement corridor maintained" parameter, TCA indicate numbers of bridges versus numbers of box culverts. Macie said she would check with Jill on her views related to how valuable this information would be to her.
7. Susan suggested that TCA eliminate the parameter on wildlife refuges since there are none in the study area and since this information would ordinarily be covered under 4(f) information. Macie agreed to delete this.

#### F. Socio-economics

1. It was agreed to move environmental justice impacts to the separate, non-discriminator, part of the Matrix since there are no environmental justice impacts for the alternatives. Keeping this in a separate section shows that environmental justice was considered.
2. Nova said it was useful to include the numbers of residential units displaced. Although she at first questioned the accuracy of number of residents displaced, since people may have moved since the original estimate, she accepted this information as a useful indicator.
3. Nova asked why the I-5 showed impacts to community cohesion, since the I-5 already divides the community. Macie explained that implementation of the I-5 alternative will encroach further on the communities. Steven John suggested including a footnote that reports that these are already divided communities or neighborhoods. Nova suggested asking FHWA what they use to measure community cohesion. Macie said that TCA would look into this.
4. Mike Schulz asked about growth inducement. Macie said that this parameter has been dropped because it is not a discriminator. Macie agreed to put growth inducement into the separate section of the Matrix that shows factors that were considered but are not discriminators.

#### G. Military impacts

1. TCA will fix the Matrix where the Far East Crossover and the Central Corridor data are reversed.
2. Nova asked for and received confirmation that (a) for the I-5, there are 6 acres of impacts to military uses because of widening and (b) this impact is not consistent with the Department of the Navy agreement, because the agreement never contemplated widening. [Maria: I don't remember this conversation; I-5 does not take any land at Camp Pendleton so this information is wrong.]

H. Recreational resources

1. Nova suggested that this parameter would be more meaningful if the specific impacted recreational resources were listed for each alternative. Macie said that TCA would list the names of the recreational resources for each alternative.
2. Macie said that the coastal zone parameter may get moved to the group of parameters that were considered but that are not discriminators.

I. Project Cost

1. Susan DeSaddi said that the explanation of what the project costs parameters reflects is very helpful. The Army Corps will still need to see and review the actual cost estimates that were built into the bottom line costs. The Corps reviews that information because cost is a factor in their decision-making process. The Corps will not re-do the calculations. They just need to be able to defend this information, especially if one of these alternatives is rejected based on the cost factor.

J. Environmental Policy

1. TCA will move this parameter to the non-discriminator section of the Matrix. TCA is not moving forward with any alternatives that do not comply with environmental policy.

K. Overall assessment of the sufficiency of the Matrix.

The agencies expressed overall satisfaction with and appreciation of the Matrix, expressed in the following specific comments:

- FHWA – We're happy with it at this point.
- Caltrans – We're happy, except we believe that earth resources can be eliminated from the table. EPA disagreed about removing earth resources, as this parameter describes the different degrees to which the alternatives require earth movement, which could be a significant potential impact and could relate to PM requirements for Orange County.
- EPA – This Matrix is clearly off to a good start. There is additional work, but will be useful in putting us in the right direction.
- Army Corps – Hats off to TCA

IV. Jurisdictional wetlands delineation discussion

- A. At this point, no jurisdictional wetlands delineation has been conducted on any of the alternatives. The planning level delineation data developed by Dan Smith forms the basis for the wetlands parameter that is listed on the Matrix. TCA has planned on conducting a jurisdictional wetlands delineation on the LEDPA/preferred alternative for permitting purposes, once that alternative has

been selected. The Dan Smith acreage calculations are larger than the acreage anticipated in the jurisdictional wetlands delineation.

B. Concerns related to this approach included:

1. Where the comparative numbers of acres are fairly close among the alternatives, there is a desire to have more certainty in order to make an accurate comparison of the alternatives. There is less certainty in the functional assessment. The planning-level delineation includes both wetlands and non-wetland waters of the U.S and does not separate out wetland acreage. It had been agreed that the planning-level delineation information could be used to eliminate alternatives from detailed evaluation in the DEIS/SEIR. However, additional delineation work is needed before a LEDPA decision can be made. [this last sentence should be attributed to whoever said it; as written, it implies that it was agreed that this was the case and I know this was not agreed to]
2. TCA's understanding from prior discussion with the Collaborative was that there was agreement that delineation would be conducted on the LEDPA and that this analysis would serve as a check on the planning-level delineation.
3. Conducting jurisdictional wetlands delineation on all the alternatives will create delays in the schedule and was not anticipated by TCA. This would be especially cumbersome given the expectation that significant problems with some of the alternatives may result in their elimination, separate from the issue of wetlands impacts.
4. Dan Smith's planning-level delineation has normalized ranking, which may be useful comparative factors. Dan Smith's work needs to be ground-truthed through some field work. Dan Smith did not consider any case law or SWANC in his calculations. Dan Smith's planning-level delineation [last is not a complete sentence]
5. The Army Corps believes that they communicated with TCA regarding the need for delineation in order to select the LEDPA, especially in Susan DeSaddi's December 2003 email suggesting that the spring of 2004 would be a good time to do the delineation.
6. Although the field work could be conducted in a fairly short time, it might take several months to obtain the access needed to conduct delineation on all the alternatives.
7. It is helpful for the Army Corps regulators to be out in the field with TCA. Dan Smith's work does not account for on-the-ground calls in terms of isolated waters of the U.S.

C. Options to consider regarding wetlands delineation:

1. When delineation is performed on RMV land, that information can be used to assess the accuracy of the planning-level delineation data. However, analysis in that study area will only provide information relevant to the refined alternatives.
2. Activities could be undertaken to ground-truth Dan Smith's work. This effort could be undertaken within the project schedule leading to the FEIS prior to selection of the LEDPA and would not need to delay the issuance of the DEIS.

3. A three-parameter delineation could be done for those alternatives that remain as contenders after assessing the practicability of the alternatives. Although the least-environmentally-damaging evaluation and the practicability evaluation are usually done in parallel, the Collaborative could begin by looking at the parameters on the matrix that are related to practicability.
4. TCA could set priorities for its three-parameter delineation by beginning the delineation work on those alternatives that are most likely to become the LEDPA/preferred alternative, in order to make comparisons among them.
5. TCA could prioritize the delineation work on the alternatives and report back the delta between the delineation and Dan Smith's analysis on one of the alternatives and apply that difference to the existing data on the other alternatives. (This option was rejected because the delta is anticipated to be different for all the alternatives. Because there are different mixes of aquatic resources, there would be different error factors for the different types of resources.)

D. Next steps regarding the delineation issue

1. Chris Keller will go through the meeting summaries and other documents and will send an email to the Collaborative, referencing those documents which address this issue.
2. A meeting will be held to specifically address this issue. It will be in Los Angeles with TCA, the Army Corps, EPA, and FHWA and respective agency attorneys.

V. Chris Keller's review of the Executive Summary.

- A. Nova asked whether Chris's comments are being considered and incorporated in the DEIS/SEIR. Macie told the Collaborative that TCA had included the minor changes that had been suggested, but that TCA had been unable to make changes related to substantive issues, since the draft had already gone to Camp Pendleton for review. These will be reflected in the Final document.
- B. Similarly, the changes made by the Collaborative in the Matrix will be reflected in the Final document. [I'm not sure what this is saying? In the final draft EIS/SEIR or in the FINAL EIS/SEIR? May want to clarify this]

VI. May 17-18 Collaborative meeting

- A. In response to a request for a tour of the alternatives, TCA will hold a tour on May 17.
- B. Collaborative discussion will occur in a meeting on May 18.

VII. Next Steps

- A. TCA will send out the DEIS/SEIR packages on Wednesday 4/28, and will let the Collaborative know if that date is changing. [should note actual distribution date is 5/7]
- B. EPA, USACE, FHWA, and TCA will hold a meeting regarding wetlands delineation.





MEMORANDUM FOR: The Transportation Corridor Agencies (TCA), Attention  
Ms. Macie Cleary-Milan, Deputy Director, Environmental and Planning

SUBJECT: *FHWA, Caltrans, and TCA Draft Practicability Proposal*, dated August 3, 2004 for the South Orange County Transportation Infrastructure Improvement Project (SOCTIIP), Permit No. 200000392-SAM, Orange and San Diego Counties, California

1. The purpose of this memorandum is to provide feedback to the TCA, FHWA, and Caltrans ("Transportation Agencies") on their draft practicability proposal, which was developed to address the applicant's perspective on the "practicability" of the eight build alternatives studied in the May 2004 Draft Environmental Impact Statement/Subsequent Environmental Impact Report ("EIS/SEIR") for the SOCTIIP.

2. As a matter of background and context, the applicant bears the burden of proof for all tests of the 404(b)(1) Guidelines to demonstrate to the Corps that the project, or any part of it, should be built in waters of the U.S. Accordingly, the explicit goal of the subject proposal is for the applicant to substantiate why specific alternatives evaluated in the public Draft EIS/SEIR are not practicable and consequently are not viable for purposes of being selected as the least environmentally damaging *practicable* alternative ("LEDPA"). Procedurally, to accomplish this goal the SOCTIIP Collaborative agreed to two basic and sequential steps: 1) first identify alternatives that are impracticable; 2) and then from what remains as practicable alternatives, identify the one that would result in the least overall environmental harm. The Transportation Agencies' draft practicability proposal attempts to fulfill this first step.

3. The U.S. Environmental Protection Agency ("EPA") and the U.S. Army Corps of Engineers ("Corps") reviewed the August 2004 practicability proposal and acknowledge the Transportation Agencies put forth considerable effort in the development of the practicability arguments. Because of the Corps regulatory responsibility to determine the LEDPA and the EPA's Section 404 oversight responsibility, it was decided to offer the Transportation Agencies joint comments on this practicability proposal. The following comments respond to each of the salient points raised in the draft document and reflect our legal interpretation and application of pertinent regulations and policies pertaining to the 404(b)(1) alternatives analysis.

a. General. In light of the stated goal for this practicability analysis, the "environmentally damaging" arguments need to be separated from the "practicability" arguments and addressed separately. The application of criteria such as aquatic resources impacts, community disruption, and social impacts is not germane to justifying practicability, which is defined in regulation as *available and capable of being done after*

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*taking into consideration costs, logistics, and existing technology in light of the overall project purposes*<sup>1</sup>. Although these environmental factors are misplaced in this particular proposal, they may be relevant when establishing whether any alternative has significant adverse environmental consequences and/or when determining which alternative is least environmentally damaging to the aquatic ecosystem. In other words, deliberation of aquatic resources impacts as well as other significant adverse environmental effects should be deferred until such matters are ripe for consideration. Paragraph 3(g) below elaborates on this point. In the end, the 404(b)(1) alternatives analysis must succinctly bring together all arguments for why the applicant's preferred alternative is the LEDPA.

b. Basic and Overall Project Purpose. To provide context, we suggest the practicability proposal include verbatim the formally agreed upon language of the NEPA and Section 404 overall project purpose statement: "To provide improvements to the transportation infrastructure system that would help alleviate future traffic congestion and accommodate the need for mobility, access, goods movement, and future traffic demands on the I-5 freeway and arterial network in the study area." Inclusion of the overall project purpose will aid the discussion on page 3 regarding the elimination of alternatives based upon one or more of the alternatives not meeting the overall project purpose. While it has been mutually determined that all the build alternatives analyzed in the Draft EIS/SEIR meet the overall project purpose, this information may be helpful towards justifying why the two No Action alternatives may be impracticable.

The basic project purpose is used to determine whether the proposed action is water dependent. If a project is non-water dependent, presumptions exist that there are practicable alternatives and that such alternatives have less adverse environmental impact (40 C.F.R. § 230.10(a)). The applicant must rebut these presumptions in order to comply with the 404(b)(1) Guidelines. Non-water dependent activities that propose to discharge dredged or fill material into special aquatic sites are required to rebut the presumptions that: 1) there are alternatives available to the applicant which do not involve impacts to special aquatic sites<sup>2</sup>; and 2) that alternatives which do not involve special aquatic sites are less damaging to the aquatic ecosystem. These rebuttals are requirements of the 404(b)(1) alternatives analysis and must be rigorously addressed by the applicant, given the scope, complexity, and magnitude of project impacts. In the case of SOCTIP, the basic project purpose is regional vehicular transportation, a non-water dependent activity.

c. MOU Guidance on Alternatives Analysis. Both the MOU and accompanying Guidance Papers are structured to provide sequential steps, concurrence points, examples,

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<sup>1</sup> 40 C.F.R. § 230.10(a)(2)

<sup>2</sup> Special aquatic sites are defined at 40 C.F.R. § 230.3(q-1) and include sanctuaries, refuges, wetlands, mud flats, vegetated shallows, coral reefs, riffle and pool complexes.

and general guidance based upon three stages: 1) Transportation Planning, 2) Transportation Programming, and lastly 3) Transportation Project Development. With each stage, the breadth and precision of information relating to existing environmental resources, resultant impacts, and project/engineering design is expected to correspondingly increase. The MOU Guidance Papers provide suggestions for Metropolitan Planning Organizations (MPOs) to use during the *initial transportation planning* stage to help guide and document decisions made around the elimination of *preliminary* alternatives. The Guidance Papers offer seven 'practicability constraints' that may be used to carry out the *initial selection* of alternatives (p. 15, Guidance Paper, February 1994). However, given that the Phase II SOCTIIP is well beyond the initial selection of alternatives, the direct application of these 'practicability constraints' during the detailed project development stage is inappropriate. At the project development stage, alternatives that have undergone a co-equal and rigorous analysis within the public Draft EIS can only be eliminated on the basis of the Section 404 practicability factors of overall project purpose, cost, logistics and existing technology.

d. Project Costs. The practicability proposal must include a robust and substantive discussion relating to the bonds and funding sources/mechanisms for the toll roads as a means to offer the applicant's perspective on the issue of "excessive costs". Specifically, the document needs to explain why an overall project cost is deemed unreasonably expensive for *this type* of transportation project. That is, at what point does the project become too costly or unable to repay its bond debt? Or, is there such a threshold, given the funding sources are generated from the sale of non-resource bonds sold to cover construction costs, which are backed by the future toll revenue, not by any government entity. Most important, *the determination of what constitutes an unreasonable expense should generally consider whether the project cost is substantially greater than the costs normally associated with the particular type of project under consideration.*<sup>3</sup> Therefore, the applicant must offer an appropriate standard of comparison for this type of project (i.e., a linear surface transportation facility/highway) and/or include reference to FHWA regulations or policy to justify why certain SOCTIIP project costs are deemed unreasonably expensive and therefore impracticable. It is simply not germane to compare the costs of alternatives to each other in attempting to assess whether any of the alternatives are impracticable based on cost.

In addition, the draft proposal inappropriately selects one or two specific line items in an overall project cost to use as the common denominator or basis of comparison amongst the alternatives. For instance, when explaining why the CC and A7C-ALPV alternatives are too costly, the document highlights the subtotals for right-of-way and remedial grading as the metric of comparison to justify these alternatives as being excessively high in cost. This is misleading and erred. It is strictly the merits of the

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<sup>3</sup> 40 C.F.R. § 230, 404(b)(1) Guidelines preamble, "Economic Factors", page 85339, December 1980

*overall* project costs that are considered, not select subtotals or individual line items within overall project costs.

e. Cost Effectiveness. Some points presented in the practicability proposal are not relevant to the factor of "cost" or other elements of practicability as defined by regulation. For example, the text on page 5 indicates "...Project costs for the A7C-ALPV alternative are disproportionately high given that this Alternative is only 8.7 miles long." Such references to cost-effectiveness should be removed. For an alternative to be "practicable" it must achieve the applicant's project purpose. Therefore, to that extent, an alternative must be "effective" to be practicable. However, for alternatives that have been determined sufficiently effective to be practicable (i.e., achieves the applicant's project purpose), costs are assessed using the analysis set forth above. The degree to which a project is effective in achieving project purposes is not balanced against its cost to determine whether it is practicable.

The bottom line is that cost-effectiveness is not a valid practicability factor nor is it typically considered when selecting the LEDPA. 33 C.F.R. § 325, Appendix B, explicitly prohibits the Corps from considering a benefit-cost analysis. The regulation indicates: "the Corps shall not prepare a cost-benefit analysis for projects requiring a Corps permit. As promulgated at 40 C.F.R. § 1502.23 the Council on Environmental Quality states the weighing of the various alternatives need not be displayed in a cost-benefit analysis and should not be when there are important qualitative considerations. The EIS should, however, indicate any cost considerations that are likely to be relevant to a decision."

It is important to clarify that "economics" can be a factor considered in the Corps public interest review process (e.g., cost of project; tax gain; short- and long-term employment gain; private v. public gain). The Corps is expected to perform an independent review of the public need for a project from the perspective of the overall public interest. In the public interest review, the Corps has the responsibility to balance public interest need or benefits against public interest detriments. The decision whether to authorize a proposed project, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of this general balancing process (33 C.F.R. § 320.49(a)(1)).

f. Severe Operational or Safety Problems. The discussion on page 5 regarding the severe operational and safety problems relating to the CC alternative appears to be misplaced. As explained, a design variation was precipitated by FHWA's concern over operational deficiencies with this alternative. If implemented, the design variation would correct the operational problems, but also would result in the additional 'taking' of private properties, estimated at \$56 million. Consequently, the net result of this re-design is an issue of cost, not of safety or operations. In other words, if necessary, the CC

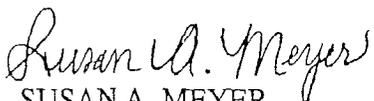
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alternative could be re-designed to overcome the existing operational deficiencies with the trade-off being an additional \$56 million in project costs. (Note: \$56 million would represent an approximate 5% increase in the estimated \$1.1 billion project cost for the CC alternative).

g. Aquatic Resources, Social Impacts & Community Disruption. Aquatic resources are not a "practicability" issue and therefore need not be considered in this practicability proposal. Similarly, social impacts, socioeconomics, and community disruption, per se, are not practicability issues except to the extent that the 'taking' of residences and businesses associated with right-of-way impacts translate into overall project costs. The argument as presented in this discussion is not relevant to "practicability", but rather may be more appropriately discussed in the "least adverse impact on the aquatic ecosystem and other significant adverse environmental consequences" elements [40 C.F.R. § 230.10(a)].

4. In summary, the salient points articulated by the Transportation Agencies in the draft practicability proposal have been thoroughly considered and coordinated with our management and legal counsel. The co-legal interpretation and advice upholds the opinion that all SOCTIP build alternatives, except for the I-5 Widening and AIO, appear to be practicable based upon the information presented by the applicant. [Note: as explained in our Collaborative conference call of August 10, 2004 we deem the I-5 Widening and AIO alternatives to be unavailable to the applicant and therefore not practicable. The reason why these alternatives are not available to the applicant is that the TCA does not possess the legislative authority to obtain (e.g., buy), utilize (e.g., rent), expand or manage non-toll public roads].

5. In addition to these comments, the Corps has furnished sample documents and guidance papers to further assist the TCA with the 404(b)(1) alternatives analysis, as well as to facilitate the preparation of the draft Habitat Mitigation and Monitoring Plan (HMMP) that is expected to accompany the forthcoming Department of Army Section 404 permit application. Should you have any questions relating to these comments or documents, please feel free to contact the undersigned, Ms. Susan A. Meyer and/or Mr. Steven John, at (213) 452-3412 or (213) 244-1804, respectively.

  
SUSAN A. MEYER  
Senior Project Manager  
Regulatory Branch  
U.S. Army Corps of Engineers

  
STEVEN JOHN  
U.S. Environmental Protection Agency  
Region IX  
Southern California Field Office

CESPL-CO-R (1145)

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for the SOCTIIP, Permit No. 200000392-SAM, Orange and San Diego Counties, California

CF:

Federal Highway Administration (Mr. Maiser Kahled; Mr. Tay Dam)

California Department of Transportation (Ms. Smita Deshpande)

Environmental Protection Agency, Region IX (Mr. Hugh Barroll)

CESPL-OC (Ms. Tiffany Troxel)

CESPL-CO-R (Mr. David Castanon; reader file)



## ACTION ITEMS – December 13, 2004

	WHO	WHAT	Done
1	Collab.	The Collaborative agencies should check to make sure they received TCA's draft responses to Collaborative agencies' comments.	
2	TCA	TCA will send to the Collaborative TCA's responses to the comments from Shute Mihaly (in a few days), the State Parks Department, Camp Pendleton, and the Attorney General's office, in that order. TCA will also send their responses to the Fish and Game comments to the Collaborative.	
3	TCA	TCA will ensure that Matt Lakin is included in the distribution list for responses to comments.	
4	TCA, USFWS	Macie will send to Jill a copy of the letter from NOAA/NMFS stating that NOAA/NMFS will rely on USFWS to conduct consultation on their behalf. Upon the consultation initiation request from TCA, USFWS will coordinate with NOAA/NMFS, especially on the steelhead in San Mateo Creek.	
5	Mary Gray and Susan Meyer	Mary Gray will send to the Collaborative a copy of the FHWA legal memorandum regarding Section 7 consultation which reviews statutory requirements and case law. Susan Meyer will email the name and phone number of the Army Corps counsel to Mary. Mary will consult with the FHWA attorney. If there is an issue about the Army Corps' expectation of a Corps recirculation of the FEIS and a Corps ROD to adopt the FEIS, Mary will contact Susan.	
6	TCA, FHWA, and Caltrans	TCA will ask FHWA for assistance on comparative socio-economic data. Smita Desphande said that Caltrans will help provide this information. Susanne Glasgow will provide TCA with residential relocation data on some other projects, particularly in the San Diego area.	
7	Collab.	Collaborative members will provide comments on the flowchart, Environmental Permitting Process for NEPA-404 Integration, to Macie by December 27.	
8	USFWS	USFWS will try to estimate what it will take to accomplish the Section 7 consultation process and provide this input to TCA for the flowchart.	
9	TCA	Macie will send to the Collaborative hard copies of the map showing approved RMV development with the SOCTIIP alternatives.	
10	Collab.	Collaborative members will put these dates on their calendars and hold them for Collaborative meetings: February 1, March 1, April 5, May 3, June 7	

## Collaborative Decisions/Agreements, December 13, 2004<sup>1</sup>

1	The Collaborative agencies agreed that they would consider receipt of the responses to their comments and to comments from Shute Mihaly, the State Parks Department, Camp Pendleton, the Attorney General's office and Fish and Game Department sufficient for them to proceed with their next steps.
2	The Collaborative agreed that TCA and FHWA should identify an alternative for the purpose of initiating Section 7 consultation.
3	The Collaborative agreed to focus the flowchart on the NEPA-404 process and to not incorporate processes of state resource/permitting agencies into the flowchart.

<sup>1</sup> These are agreements reached during the meeting among those present. They do not represent agency concurrence. They are a basis for moving forward procedurally from one meeting to the next, and they are documented to help the group avoid backtracking.

**Next Collaborative Meeting:**

**Tuesday, February 1**

**Schedule for the first half of 2005 (please reserve each of these dates):**

**Tuesday, February 1**

**Tuesday, March 1**

**Tuesday, April 5**

**Tuesday, May 3**

**Tuesday, June 7**

**DRAFT MEETING SUMMARY  
SOCTIIP COLLABORATIVE  
December 13, 2004  
(held at USFWS Carlsbad office)**

In attendance:

FHWA: Mary Gray  
Caltrans: Smita Deshpande, Susanne Glasgow (by phone)  
EPA: Mike Schulz (by phone), Matt Lakin  
USFWS: Jill Terp  
USACE: Susan Meyer (by phone)  
TCA: Macie Cleary-Milan  
Pendleton: Larry Rannals  
Consultants:  
CDR Associates: Louise Smart

Handouts

- Draft Environmental "Checklist" for NEPA-404 Integration (prepared by Susan Meyer and sent by facilitator to Collaborative in advance of the meeting)
- Environmental Permitting Process for NEPA-404 Integration (chart prepared by TCA, based on the draft "Checklist")

I. Discussion of Next Steps in Completing the SOCTIIP Process

- A. The facilitator asked each participant to identify their desired outcome from this discussion
1. Larry Rannals – To get an understanding of what the process is, especially from the USFWS perspective
  2. Jill Terp – To understand when the agencies might receive the information that Susan Meyer outlined in her draft "Checklist," since that information will play into the agencies' decisions.
  3. Smita Deshpande – To be clear about who is responsible for what and the timeline for the next steps
  4. Macie Cleary-Milan – To fill in gaps in the flowchart, clarify certain items, and understand how the elements fit together
  5. Mary Gray – To learn more about the SOCTIIP process
  6. Matt Lakin – To get the process solidified and on a timeline
  7. Susan Meyer – To fill in gaps and get clear about sequence and how things need to come together
  8. Mike Schulz – To identify all the various processes that need to be completed; to understand the critical path – what things can happen at the

same time and what things need to happen in sequence; to put together the details of mitigation for the project

- B. Macie Cleary-Milan provided an overview of the chart for the participants on the phone who could not see the chart.
  - 1. Using Susan Meyer's checklist as a basis, TCA put together an initial road map of how the elements are related.
  - 2. TCA began with Susan's list of information that is needed and then created paths showing the relationships between each of the processes (the path for the Army Corps decision on the LEDPA, the path for the TCA Board decision on the locally preferred alternative, and the path for Section 7 consultation and the FEIS to the FHWA ROD).
- C. Role of Marine Corps as a Cooperating Agency. The Marine Corps will weigh in:
  - 1. During preparation of the Final EIS/SEIR. The Marine Corps will review and concur with the document before it is released for public review.
  - 2. During preparation of the ROD.
- D. TCA response to comments.
  - 1. Formal circulation of responses to comments. Before TCA takes action on the EIR, TCA will circulate their comments to the commenters. TCA is considering the best way(s) to do this – whether to respond individually to commenters, whether to post responses to the comments on the website and refer commenters to this document, etc. The Administrative Record will reflect that FHWA formally circulated the final responses to comments.
  - 2. Circulation of draft responses to the Collaborative agencies in the context of the Collaborative process. TCA sent their draft responses to Collaborative agencies' comments to these agencies last week. **Action Item: The agencies should check to make sure they received them. Action Item: TCA will send to the Collaborative TCA's responses to the comments from Shute Mihaly (in a few days), the State Parks Department, Camp Pendleton, and the Attorney General's office, in that order.** TCA explained that the responses to comments from the Collaborative agencies, Shute Mihaly, State Parks, and the Attorney General's office will encompass all the substantive issues. **Agreement:** The Collaborative agencies agreed that, with the addition of TCA responses to Fish and Game comments, they would consider receipt of the above-listed responses to comments sufficient for them to proceed with their next steps. **Action Item: TCA will send their responses to Fish and Game comments to the Collaborative. Action Item: TCA will ensure that Matt Lakin is included in the distribution list for responses to comments.** TCA will send one hard copy of the comments to each Collaborative agency as each set of comments is completed. When all sets are complete, TCA will consolidate them and send a CD of consolidated comments to each Collaborative agency.

3. Coordination with NOAA Fisheries/NMFS. Jill Terp requested to see comments from NOAA/NMFS. TCA received a letter from NOAA/NMFS which said that NOAA/NMFS will rely on USFWS to conduct consultation on their behalf. **Action Item: Macie will send a copy of this letter to Jill. Upon the consultation initiation request from TCA, USFWS will coordinate with NOAA/NMFS, especially on the steelhead in San Mateo Creek.**
  4. Matt Lakin said that EPA would like to meet with TCA to discuss the responses to EPA's comments. This meeting will occur as EPA becomes more comfortable with the LEDPA. EPA will pose specific questions to TCA and will circulate them to the Collaborative, so that Collaborative members can choose whether to attend the EPA/TCA meeting.
- E. Collaborative agreement on the Preliminary LEDPA. This is not necessarily a formal step. The Collaborative will participate in discussion on the preliminary Preferred Alternative/LEDPA to give a general direction to TCA prior to TCA's Board taking action on the Preferred Alternative. This discussion will occur during Section 7 consultation, when more information is available.
- F. Section 7 consultation
1. TCA anticipates that they will submit the Biological Assessment and their request for the initiation of Section 7 consultation in January.
  2. Jill said that USFWS has already begun work on the Pacific pocket mouse analysis and the Upper Chiquita Bank agreement. The Service has some trapping data on another population of the Pacific pocket mouse that is the same species as the mice in the action area. It is hoped that this information will help the Service better understand the mouse.
  3. Mary Gray described a FHWA legal memorandum which reviews statutory requirements and case law regarding Section 7 consultation. **Action Item: Mary will send a copy of this memorandum to all the Collaborative Agencies.** This document addresses the following questions:
    - a. Who starts the 135-day clock? Answer: The federal lead agency, when they submit the Biological Assessment. There are six items that must be included in the Biological Assessment to start the clock.
    - b. What must happen in the 30-day period? Answer: The Service must let FHWA know whether they agree with FHWA's determination of effect.
    - c. How fixed is the 135-day period to arrive at a jeopardy/non-jeopardy decision? Answer: Unless an extension is granted to USFWS by the applicant, the 135-day period is a fixed timeframe.
    - d. Must the applicant do all that USFWS requires? Answer: No.

G. Question regarding Corps of Engineers ROD

1. In response to a question from Mary Gray, Susan Meyer explained that the Army Corps is not an official Cooperating Agency on the SOCTIIP project and therefore is unable to adopt the FHWA FEIS without re-circulating the final document for public review.. The Army Corps will make a decision on whether the FEIS is adequate to fulfill Corps responsibilities under 404 and NEPA. The Army Corps 404 permitting decision constitutes a federal action by the Corps, thereby requiring NEPA compliance. The Corps will issue its own ROD, which is a decision document (just like that of FHWA) that is published in the Federal Register. Mary Gray expressed concern that this step is redundant and that it may cause public confusion as it entails a second circulation of the FEIS/SEIR and gives the impression that there is a separate process.
2. **Action Item: Susan Meyer will email the name and phone number of the Army Corps counsel to Mary. Mary will consult with the FHWA attorney. If there is an issue about the Army Corps' expectation of a Corps recirculation of the FEIS and a Corps ROD to adopt the FEIS, Mary will contact Susan.**

#### H. Timeframe for Fish and Wildlife consultation.

Jill clarified that the 30 days for USFWS preparation of a response on the adequacy of the biological information submitted for initiating consultation and the 135 days for the formal Section 7 consultation are concurrent, not sequential. There have been times on other projects when USFWS has declined to initiate consultation because they have felt that the information was not adequate.

#### I. Selection of an alternative for the purpose of Section 7 consultation

1. Section 7 consultation is conducted on a particular alternative.
2. TCA and FHWA are prepared to identify an alternative for Section 7 consultation. They recognize they are stepping out ahead of the Collaborative and that they are taking a risk in doing so. However, their discussions with Collaborative members have given them sufficient confidence to proceed in this way. The Collaborative members do not want to participate in discussions of a preliminary LEDPA/preferred alternative until there is more information from USFWS, and the information from USFWS cannot be obtained until Section 7 consultation occurs. Section 7 consultation cannot occur until there is an alternative to consult on. Therefore, it is necessary and advisable for TCA to move forward with Section 7 consultation by identifying an alternative.  
**Agreement:** The Collaborative agreed that TCA and FHWA should identify an alternative for the purpose of initiating Section 7 consultation.
  - a. Mike Schulz said he liked the approach of TCA and FHWA declaring an alternative to pursue Section 7 consultation.
  - b. Jill Terp said that the decision on which alternative to request consultation on is TCA's and FHWA's decision to make.

3. TCA will ask the Collaborative to make a decision on the preliminary LEDPA/Preferred Alternative at some point during the Section 7 consultation period when more information is available.
- J. Relationship between the Biological Assessment, Section 7 consultation, and mitigation
1. Mary Gray said FHWA will review the Biological Assessment to ensure that it is complete, prior to initiating a request for Section 7 consultation.
  2. Jill asked whether the Biological Assessment will include proposed mitigation for aquatic impacts. Susan Meyer's "Checklist" identifies "General understanding of proposed mitigation for aquatic impacts" as a remaining data need. Mary Gray explained that proposed mitigation for aquatic impacts would be included in the Biological Assessment insofar as this mitigation pertains to the species at issue. She and Macie noted that they may use performance standards where complete design may not be available.
  3. The Biological Assessment will address impacted aquatic species, such as the steelhead trout, arroyo toad, and fairy shrimp.
  4. TCA has presented conceptual mitigation plans to the Collaborative, including some performance standards. Jill noted that the RMV's plan was not approved at the time TCA presented its conceptual mitigation and that the Marine Corps property has been unavailable for offsetting impacts.
    - a. The USFWS is interested in more proximate mitigation to offset aquatic impacts.
    - b. Larry Rannals said that he does not believe that there will be any opportunities for mitigation on the Base. The Commanding General of the Base will speak from the Marine Corps. His decision will be based on a recommendation from Environmental Security, which has stated in the past that there will be no mitigation on the Base.
    - c. Mary Gray said that FHWA is not tied to on-site mitigation and that there often is a better place for mitigation than on-site.
    - d. Jill reminded the group of the Section 7A1 federal obligation to preserve the species.
    - e. Jill encouraged TCA to provide mitigation information as early in the process as possible. She noted that there may be proposals about restoration which could have long-term benefits but short-term impacts to listed species.
- K. Army Corps needs regarding "general understanding of proposed mitigation for aquatic impacts"

1. Susan Meyer said that for purposes of 404(b)1 evaluation, mitigation needs to be proposed that will demonstrate that wetlands functions and values are adequately addressed and that, in the aggregate, there will be no net loss to wetlands functions and values and no significant degradation to aquatic resources.
2. TCA is working on its revised functional assessment, the revised jurisdictional delineation, and the 404(b)1 alternatives analysis.

L. Army Corps request for comparative socio-economic data

1. Susan Meyer explained that this comparative data has been requested by her manager. Residential and business relocations is a pertinent environmental factor for the SOCTIIP project, and decision-makers at the Corps want to understand the range of residential relocations for comparable transportation projects within the region..
2. **Action Item: TCA will ask FHWA for assistance on comparative socio-economic data. Smita Desphande said that Caltrans will help provide this information. Susanne Glasgow will provide TCA with residential relocation data on some other projects, particularly in the San Diego area.**
3. Mary Gray explained that socio-economic impacts are defined, not just by the numbers of relocations, but also the effect on neighborhood and community groups and on community cohesion. The significance of relocation numbers is affected by the availability of replacement housing. Evaluations of relocations are made on a project by project basis.
4. Susan said that the Corps would like to have the data that they requested, with a focus on projects in urban areas.

M. Revisions to the Flowchart

1. The goal is to continue efforts to clarify the next steps and to apply a calendar to these schematic steps
2. **Action Item: Collaborative members should provide comments on the flowchart, Environmental Permitting Process for NEPA-404 Integration, to Macie by December 27.**
3. **Agreement:** The Collaborative members agreed to keep the chart to the NEPA-404 process and to not incorporate processes of state resource/permitting agencies into the flowchart.
4. **Action Item: USFWS will try to estimate what it will take to accomplish the Section 7 consultation process and provide this input to TCA for the flowchart.**

5. Larry Rannals provided the following Camp Pendleton changes to the flowchart
  - a. Put an asterisk on the blocks, "FHWA/TCA prepare final EIS/SEIR" and "FHWA/TCA prepare Record of Decision" and add the footnote: "Requires USMC and Department of the Navy concurrence."
  - b. Re-order two boxes: Put "FHWA/TCA Circulate response to comments" above "Collaborative agrees on preliminary LEDPA."

II. RMV development map.

**Action Item: Macie will send to the Collaborative hard copies of the map showing approved RMV development with the SOCTIIP alternatives.**

III. 2005 Meetings

The Collaborative set the first Tuesday of the month, beginning in February, as the dates for Collaborative meetings for the first half of 2005. These dates are:

February 1  
March 1  
April 5  
May 3  
June 7

**Action Item: Collaborative members should put these dates on their calendars and hold them for Collaborative meetings.**



## ACTION ITEMS – February 1, 2005

	WHO	WHAT	Done
1	Mary Gray	Mary Gray will call Bill Berry (Camp Pendleton wildlife biologist) and report back to Macie and Jill about how he wants to be involved. If Bill wants Mary to call Deborah Bieber (760-725-9728), she will do so.	
2	Jill Terp	Jill will see if she has other information that is appropriate for distribution and provide this for TCA's use in the Biological Assessment.	
3	Stephanie Stoermer	Stephanie Stoermer will get a copy of the Shute Mihaly letter from Maiser Khalid. If she is unable to obtain this, she will contact TCA to request another copy.	
4	EPA and USACE, TCA	Steven and Susan will call TCA and set up a meeting in Los Angeles to discuss TCA's response to their comments. TCA will notify all the agencies of the date/times/locations. Caltrans will attend as an observer. USFWS would like to hear the wetlands discussion. Camp Pendleton will probably not attend but would like to know when the meetings will occur.	
5	TCA	TCA will provide the Collaborative with its response related to the NCCP.	
6	TCA and Stephanie Stoermer	TCA's counsel will consider whether the NEPA/404 MOU creates a situation that supercedes the regulations (that the Army Corps must recirculate the FEIS and issue a separate ROD if they are not a Cooperating Agency). TCA will then contact the Army Corps and FHWA. The Corps Counsel is Tiffany Troxel: Tiffany.A.Troxel@usace.army.mil (phone 213-452-3953). Stephanie Stoermer will contact Maiser Khalid to ensure that he reports back to Macie from his discussion with Larry Vinzant and Brent Gainer about this issue.	
7	Stephanie Stoermer	Stephanie will meet with Maiser Khalid to review the flowchart and get his comments. She will then report back to TCA and the Collaborative.	
8	Louise	Louise will distribute to the Collaborative the FHWA/USFWS memo about Section 7 Consultation that was provided by Mary Gray.	Done
9	Louise and Macie	Louise and Macie will discuss whether a meeting will be needed on March 1 and report back to the Collaborative.	

### Next Collaborative Meeting:

**Scheduled for April 5, May 3, June 7 (no meeting on March 1)**

**DRAFT MEETING SUMMARY  
SOCTIIP COLLABORATIVE  
February 1, 2005 Conference Call**

Participating in the conference call:

FHWA: Mary Gray, Stephanie Stoermer  
Caltrans: Ryan Chamberlain, Arianne Glagola  
EPA: Steven John  
USFWS: Jill Terp  
USACE: Susan Meyer  
TCA: Macie Cleary-Milan, Maria Levario, Carollyn  
Lobell (Nossaman)

Camp

Pendleton: Larry Rannals, Bob Taylor, Lt. Col. Gary Bauman

Consultants:

CDR Associates: Louise Smart

Handouts (sent in advance)

NEPA/404 Flowchart

I. Biological Assessment/Section 7 Consultation

- A. TCA is preparing the request for Section 7 consultation and anticipates sending that request to USFWS the week of February 14.
- B. Jill Terp is trying to complete other work so she will be ready and available to begin the Section 7 consultation when TCA's request arrives.
- C. Whenever there is a Section 7 Consultation on Threatened and Endangered species that are present on Camp Pendleton property, the base wildlife biologist, Bill Berry (760-725-9729) wants to be involved to determine if there is any impact to habitat or species on the base. Action Item: Mary Gray will call Bill Berry and report back to Macie and Jill about how he wants to be involved. If Bill wants Mary to call Deborah Bieber (760-725-9728), she will do so.
- D. The USFWS experts on the Pacific pocket mouse have had some preliminary discussions. They are looking at the Oscar site on Camp Pendleton. These experts are biomonitors for Orange County, Los Angeles, and San Bernardino.
- E. Mary asked whether USFWS has any additional information that TCA should include in its Biological Assessment. Action item: Jill will see if she has other information that is appropriate for distribution and provide this for TCA's use in the Biological Assessment.
- F. The Biological Assessment will include the green alignment as the preferred alternative.

## II. Responses to Comments

- A. After submitting the Request for Section 7 Consultation, TCA will complete its responses to comments that were provided by San Clemente, California Parks Department, Camp Pendleton, and Rancho Mission Viejo. TCA recognizes that these responses to comments are a priority for members of the Collaborative.
- B. Brent Gainer, FHWA, is reviewing TCA's responses to the Shute Mihaly comments. The format for TCA's responses includes scanned-in comments in conjunction with the specific responses. Action Item: Stephanie Stoermer will get a copy of the Shute Mihaly letter from Maiser Khalid. If she is unable to obtain this, she will contact TCA to request another copy.
- C. Steven John reported that EPA had an internal conference call on January 31, 2005 about the responses to comments. There were no substantial issues. EPA would like to meet with TCA, FHWA, and Caltrans to discuss EPA's issues about air modeling and air toxic issues. In addition, EPA has some minor suggestions about how TCA might proceed on wetlands mitigation and water quality. EPA suggested that TCA meet with EPA and the Army Corps on the same day in Los Angeles.
- D. Susan Meyer reported that she did not have any substantive concerns related to TCA's responses to the comments from the Army Corps. The Army Corps does have suggestions about how to make the responses more clear and accurate. The Army Corps would like to meet with TCA and FHWA to articulate those suggestions and hold additional discussion on mitigation.
- E. Action Item: Steven and Susan will call TCA and set up a date for their meetings in Los Angeles. TCA will notify all the agencies of the date/times/locations. Caltrans will attend as an observer. USFWS would like to hear the wetlands discussion. Camp Pendleton will probably not attend but would like to know when the meetings will occur.
- F. The USFWS will review the Shute Mihaly responses during the start of Section 7 consultation.
- G. Ryan Chamberlain said that Caltrans is reviewing the Shute Mihaly responses, but will defer to FHWA. Caltrans will be asking their legal department if they want to look at the Shute Mihaly comments and responses.
- H. Within FHWA, Larry Vinzant and Stephanie Stoermer sent their brief responses to Tay Dam. Since there are significant Shute Mihaly comments related to biological resources, Mary Gray will be reviewing the Shute Mihaly comments.
- I. Macie reported that the Shute Mihaly letter includes a lot of repetition, with the same comments stated over and over. She said that TCA found nothing in the comments that would prompt TCA to change the final document. Action Item: TCA will provide the Collaborative with its response related to the NCCP.

## III. NEPA/404 Flowchart

- A. Macie reminded the group that EPA had suggested a few months ago that TCA develop a roadmap of what the agencies would be doing as the project proceeds to the FEIS and the ROD. TCA developed the flowchart to show who is doing

what and how these different processes fit together and to check with the agencies to ascertain whether all the agencies' relationships are shown correctly. The timeframes (other than the 30-60 days for response to comments) are the legal timeframes set in FHWA's regulations or the NEPA/404 MOU.

B. Comments on the flowchart included:

1. A question to be resolved between FHWA and the Army Corps is whether the Army Corps needs to recirculate the FEIS and issue its own ROD. Mary Gray stated that she did not think a separate ROD or FEIS process was needed for a project under the NEPA/404 merger process. Rob Thornton is looking into this issue. If it is necessary for the Corps to do a separate ROD, that is fine with FHWA. Susan Meyer explained that the Army Corps counsel has said that by regulation the Corps must recirculate the FEIS and have its own ROD when the Corps is not a Cooperating Agency on a project (the Corps sent a letter in March 2001, declining to be a Cooperating Agency on the SOCTIIP project). This requirement is found in the CEQ Forty Questions document. The group discussed the fact that the regulations preceded efforts to merge the processes and create a quasi-Cooperating Agency relationship and preceded the national environmental streamlining agreements.
2. Action Items: TCA's counsel will consider whether the NEPA/404 MOU creates a situation that supercedes the regulations (that the Army Corps must recirculate the FEIS and issue a separate ROD if they are not a Cooperating Agency). TCA will then contact the Army Corps and FHWA. The Corps Counsel is Tiffany Troxel: Tiffany.A.Troxel@usace.army.mil (phone 213-452-3953). Stephanie Stoermer will contact Maiser Khalid to ensure that he reports back to Macie from his discussion with Larry Vinzant and Brent Gainer about this issue.
3. Larry Rannals noted that just as the flowchart has a line indicating Camp Pendleton's involvement in a review effort of the FEIS (through the USMC EIRB) before the FEIS is published, there should be a similar line showing Camp Pendleton's involvement in reviewing the ROD. He said that Camp Pendleton could review a draft ROD simultaneously with the EIRB.
4. Mary Gray explained the "30 day call on effect" box: Thirty days after receipt of the Biological Assessment by USFWS, the Service notifies FHWA by letter whether the Service agrees with FHWA on the effect call. Jill agreed that this box should be parallel (as it is) to the Preliminary Agreement on Preferred Alternative/LEDPA.
5. Macie Cleary-Milan explained that the state permitting processes (CDFG Stream Bed, 401 Certification, CZMA Consistency) are included in the "Submit Applications" box, but that the Coastal Development permit is shown separately, as it occurs after the ROD.
6. Susan Meyer suggested that the 401 Certification be separated from the other state permits to show where it fits with the 404 permit.
7. Susan suggested that "Preferred Alternative/" be inserted in front of "LEDPA" in the "Informal Preliminary LEDPA" box.
8. "RTC" means "response to comments."

9. There is no separate step for mitigation because the mitigation for 404 will be reflected in the final permit. The "Final DA 404 Permit" step will include the special conditions.
10. Stephanie Stoermer said that she likes this flowchart. Action Item: Stephanie will meet with Maiser Khalid to review the chart and get his comments. She will then report back to TCA and the Collaborative.

#### IV. FHWA/USFWS Memo on Section 7 Consultation

- A. Larry Rannals asked about this memo which was mentioned at the December 13, 2004 meeting. Louise received this from Mary Gray through a "reply" to an email sent to the Collaborative and did not realize that Mary's email had not gone to the Collaborative.
- B. Action Item: Louise will send this memo to the Collaborative.
- C. Mary Gray will provide the Collaborative with an updated copy when it has been released by FHWA and USFWS.

#### V. March SOCTIIP Collaborative Meeting

- A. The next Collaborative meeting is scheduled for March 1.
- B. Jill Terp said that since she will be out the week of February 21<sup>st</sup>, she will be reading the Biological Assessment the first week of March and prefers to use that week to read the Biological Assessment rather than meet.
- C. Action Item: Macie and Louise will talk about whether there will be a need for a meeting on March 1 and will report back to the Collaborative [Note from Louise: There will be no March 1 meeting].



**FINAL MEETING SUMMARY**  
**(sent to Collaborative)**  
**SOCTIIP COLLABORATIVE**  
**November 8, 2006**

In attendance:

FHWA: Lisa Cathcart-Randall (for part of the meeting), Tay Dam  
Caltrans: Lisa Ramsey, Smita Deshpande, Arianne Glagola (afternoon only),  
Charles Baker  
EPA: Susan Sturges, Eric Raffini  
USFWS: Jill Terp (by phone)  
USACE: Susan Meyer (by phone)  
TCA: Macie Cleary-Milan, Maria Levario, Paul Bopp, Rob Thornton (Nossaman)  
Camp  
Pendleton: Larry Rannals  
Consultants:  
CDR Associates: Louise Smart  
BonTerra: Ann Johnston  
Earthworks: Margot Griswold

Handouts

- Copies of Powerpoint presentations given to the TCA Board on January 12, 2006 and February 23, 2006
- Smart Mobility report
- FHWA letter of July 10, 2006, in response to the Endangered Habitats League's comments on SOCTIIP, including Caltrans letter of comments to FHWA, June 19, 2006, in response to statements made in the Shute, Mihaly & Weinberger's letter to TCA (Jan. 12 and 18, 2006) and their supporting documents.
- NEPA/404 MOU Remaining Issues

**I. Presentation on the history of the SOCTIIP project**

Macie Cleary-Milan provided a review of the history of the SOCTIIP project and the preferred alternative. The presentation was based on two presentations made earlier in the year (January and February) to the TCA Board in order to have the Board certify the environmental document (the EIR) and select the preferred alternative. The Board certified the Final SEIR as adequate in February 2006. Key points of this presentation included:

**A. Timeline:**

1. 2000 – The alternatives approved for study were developed by the Collaborative and included a large number of alternatives.

2. 2004 – The Draft EIS/SEIR was published, including 6 toll road alternatives and 2 non-toll road alternatives (arterial improvements and I-5 widening). In May 2004, the document was released for public review.
3. In September 30, 2005, USFWS provided a preliminary “no jeopardy” indication.
  - B. During refinement of the alternatives, TCA took into account the Donna O’Neill Land Conservancy, which was created in 1991 by Rancho Mission Viejo (RMV) and shifted an alignment westerly to avoid the wetlands and maximize wildlife connectivity to the east.
  - C. A stormwater collection system was designed, using extended detention basins, including capture of roadway runoff from two miles of I-5, at the juncture of the toll road and I-5.
  - D. The proposed project affects subarea unit 1 of the State Park. The park is owned by the Department of the Navy and is leased to the California Department of State Parks. In the lease, the Navy reserved the right to grant easements for other uses, including highways. The San Mateo Campground was established in the park eight years after Foothill South Toll Road was put on the map. TCA has proposed improvements to the park.
  - E. Funding for the toll road project will be provided through the sale of bonds. Tolls will pay back the bonds. There is no funding for improvements to I-5; such funding would have to come from Caltrans and FHWA, and that funding is not available. TCA has no jurisdiction over the arterials; none of the arterials were programmed by Caltrans, local governments, or the Metropolitan Planning Organization for funding.
  - F. The preferred alternative is the green alignment (each alternative was assigned a color), also known as A7C-FEC-M. It is projected to cost \$875 million and has been designed to avoid and minimize impacts. Jill Terp noted that USFWS might disagree with the statement that the Pacific Pocket Mouse occupied habitat was avoided; USFWS defines occupied habitat differently. Macie said that through design, TCA has reduced the environmental impact of this alignment. The green alignment is compatible with the approved RMV land use plan, RMV settlement agreement, and the NCCP.
  - G. The Army Corps and EPA have accepted the green alignment as the preliminary Least Environmentally Damaging Practicable Alternative (LEDPA). The Marine Corps continues to be neutral on the Foothill South Toll Road.
  - H. The NCCP was approved in October 2006 by the Board of Supervisors. Jill Terp said that USFWS was looking forward to the conservation that will result from the long-term conservation effort of the NCCP and is working on their responses to comments to finalize the environmental document on the NCCP. The permit on the NCCP is expected before the end of 2006, will cover development activities of RMV for 14,000 homes, and will outline a management strategy for open space area on RMV.
  - I. TCA committed to 182 mitigation measures in the environmental document, including the use of 327 mitigation credits from the Upper Chiquita Canyon conservation area.

## II. Status reports on the project

- A. FEIS. Macie Cleary-Milan and Lisa Cathcart-Randall provided information on the status of the FEIS.
1. On January 12, 2006, TCA made a presentation to the TCA Board and held a public hearing to take public comment. On February 23, provided more information to the Board, and the Board certified the SEIR as being adequate.
  2. Once the SEIR was certified by the TCA Board, the FEIS was submitted to FHWA (April 2006). FHWA and Caltrans provided comments to TCA on the FEIS; TCA addressed these comments and resubmitted the FEIS to FHWA in September, 2006.
  3. FHWA is reviewing the document and is still working on consultations, including 106 with the SHPO, Section 7 with the USFWS, and 6(f) with the National Park Service and State Parks Department. FHWA is working with other federal agencies to resolve issues. For Section 7, FHWA needs to receive the USFWS Biological Opinion and completion of Section 7 consultation. For 106, FHWA needs completion of consultation and concurrence from the SHPO on the Area of Potential Effects and the evaluation report. FHWA is considering whether the Historic Property Survey Report (HPSR) should be submitted at this time. Following the consultations, FHWA will pass the FEIS on to Camp Pendleton for their EIRB review. Lisa Cathcart-Randall stated that FHWA does not see fatal flaws in the FEIS; their concerns are primarily procedural.
  4. Susan Meyer asked whether FHWA plans to hold a public hearing on the FEIS. Lisa replied that FHWA has not yet decided this. Tay Dam noted that FHWA conducted a public hearing after the DEIS was released and had a 90-day comment period and that there is no requirement to hold a public hearing in conjunction with the release of the FEIS. Susan Meyer explained that the Army Corps anticipates receiving requests for a public hearing after the Army Corps posts the public notice for the preferred alternative. She noted that when the first public hearing was held in 2004, there was no clear identification of the applicant's preferred alternative. Now the Army Corps public notice will include the preferred alternative, and the Army Corps needs to determine whether to hold a public hearing if it is requested. She suggested that FHWA and the Army Corps coordinate their efforts. Action item: The Army Corps, FHWA, and Caltrans will discuss whether and when to hold a public hearing on the FEIS.
  5. Rob Thornton, TCA counsel, explained that the circulation of the FEIS is not a public review process. Although the public can provide comments during the thirty-day period following public circulation of the FEIS, FHWA may elect to/not to respond to comments received during this period.
  6. Lisa Cathcart-Randall said that considering the nature of this project, FHWA wants to ensure that the FEIS is "noticed" appropriately. FHWA may want to issue a notice in the Federal Register; this will enable FHWA to decrease the statute of limitations to 180 days on the FEIS and any associated permits and may seek concurrence from the Collaborative on doing so. Rob Thornton questioned whether concurrence of the Collaborative on this issue would be

required. Sylvia Vega stated that seeking such concurrence would be consistent with the spirit of the NEPA/404 MOU. Action item: TCA, FHWA, USACE, and MCB-CP will talk about whether to publish a notice of the FEIS in the Federal Register.

- B. EIRB Process. Maria Levario explained that there is an existing MOU between Camp Pendleton and FHWA stating that Camp Pendleton will review the environmental document before it is publicly circulated. Larry Rannals described the Environmental Impact Review Board (EIRB) process that the Marine Corps has for environmental review of its own process.
1. Ultimately, a representative of the Secretary of the Navy will sign the Record of Decision (ROD).
  2. In 1992, a Memorandum of Understanding was signed between FHWA and the Marine Corps that states that once the FEIS is ready for public distribution, the Marine Corps will review it through its EIRB process, which includes:
    - a. The document will be reviewed at the Camp Pendleton Base level with the Environmental Impact Review Board at the Base and will be signed by the Base Commander.
    - b. Marine Corps Headquarters will hold another Environmental Impact Review Board review.
    - c. The Deputy Assistant Secretary of the Navy for Environment and Installations will be briefed.
    - d. The Secretary of the Navy must sign off on the document before it can be released to the public.
  3. This is a four- to six-month process before the Marine Corps can send a letter to FHWA to say that that document is ready to be released to the public.
  4. Congress has provided that the Secretary of the Navy has the authority to grant an easement to TCA for the use of the property. The easement will constitute a federal action, and the Marine Corps is looking at using the FEIS and the ROD to support this federal action.
  5. The Navy will also review the draft Record of Decision (ROD). There is a separate EIRB process for the ROD, which is anticipated to be quicker than the EIRB process on the FEIS. Rob Thornton said that FHWA is willing to initiate the ROD process as soon as the FEIS has been signed.
- C. Biological Opinion. Jill Terp said that USFWS is in Section 7 consultation on this project and is working to refine the Biological Opinion. USFWS believes that this project will be litigated. They have sent the preliminary draft Biological Opinion to the USFWS solicitor for review and have received extensive comments. USFWS will be contacting Lisa Cathcart-Randall to discuss these comments and hopes to speak to FHWA and TCA prior to November 13<sup>th</sup>, which is the date for the issuance of the Biological Opinion. Action item: Macie Cleary-Milan, Rob Thornton, Lisa Cathcart-Randall, Jill Terp, and Jim Bartell (USFWS) will meet to discuss the USFWS solicitor's comments on the Biological Opinion prior to the release of the Biological Opinion.

- D. 404 permit. Maria Levario reported that TCA has been working cooperatively with Susan Meyer, who has reviewed the draft permit application and provided feedback. TCA is trying to coordinate the Army Corps public notice with the circulation of the FEIS. Susan Meyer explained the on-going coordination to date. The goal is to continue the informal coordination between the Army Corps and the applicant by having a preview of what TCA will be submitting in the 404 application in order to expedite the formal process by ensuring that the application is complete and by preparing the draft public notice. Sylvia Vega said that as future owner/operator of the facility, Caltrans would like to review the application to ensure that Caltrans is as free of maintenance responsibilities as possible. FHWA will also review the application to make sure that FHWA can support it. Action item: Caltrans and FHWA will review the 404 draft permit application.
- E. Water Quality 401 permit. Maria Levario explained that once the preferred alternative had been selected, TCA started working on state permit applications, including 401 water quality certification. TCA has submitted its application to the Regional Water Quality Control Board (RWQCB).
1. The RWQCB staff has deemed TCA's application to be complete.
  2. Sylva Vega asked about monitoring and maintenance requirements. Caltrans is interested in this because maintenance will involve funding and needs to know whether Caltrans will be expected to go above and beyond Caltrans requirements and to train the maintenance staff in different procedures. Maria stated that BMPs specified in the application are Caltrans-approved BMPs. Sylvia said that maintenance of any off-site mitigation areas outside the right-of-way are TCA's responsibility. Maria said that all BMP features are within the Caltrans right-of-way.
  3. Susan Meyer asked whether Caltrans would be responsible for specific BMPs, related to aquatic resources, which would become permit conditions. Action item: Caltrans, TCA, USACE, USFWS, USEPA, and FHWA will discuss responsibility for BMPs related to aquatic resources, which will become permit conditions.
  4. Eric Raffini asked about the retrofitting of I-5 to handle runoff. Sylvia explained that this would occur where improvements are made to I-5 for the interchange with the toll road.
  5. Eric asked about the success of detention basins on other projects. Macie explained that Caltrans has done an extensive analysis of these BMPs. Rob Thornton said that the BMPs were the result of litigation by the NRDC and others which resulted in an extensive study and report that was generated as part of the SOCTIIP process.
  6. Maria noted that a 401 certification will be required prior to release of the FEIS to the public.
- F. 106 Consultation. Charles Baker, Caltrans, said that he has received the Historic Property Survey Report (HPSR) and other documents and is not ready to provide formal comments. He said that the documents are well written. The HPSR

identifies 31 archaeological sites in the project area but does not evaluate whether they are significant. The HPSR describes what is known and says that more work will be done in a phased process.

#### G. Other permits

1. Fish and Game Streambed Alteration Permit. TCA submitted the application for this permit in summer of 2006, received a letter of "incomplete" because the mitigation plan was incomplete, and is working on the plan. Action item: TCA will provide a copy of the Streambed Alteration Permit application to Caltrans and a copy of the conceptual mitigation plan to USFWS.
2. Fish and Game code 2080. Ann Johnston explained that this relates to consistency of findings with the State Endangered Species Act. Once USFWS has issued its Biological Opinion, this should suffice for the state 2080 permit. There are no state-listed species in addition to the federal-listed species in the project area.
3. Air quality conformity. Maria explained that the air quality conformity determination will be appended to the FEIS and that the project is in compliance with regional transportation plans.
4. Coastal Development Permit. TCA is in the process of preparing the application for this permit.

#### H. U.S. Marine Corps Birthday

Larry Rannals and other representatives of the Marine Corps provided a ceremony to share the celebration of the 231<sup>st</sup> birthday of the U.S. Marine Corps. Each November 10, the Marines pause to celebrate the occasion. Larry read the message from the Commandant, showed a slide show, and shared a cake with the group.

#### I. Conceptual Mitigation Plan

Margot Griswold, presented the habitat restoration approach for the SOCTIIP project.

1. She reported that the Upper Chiquita Reserve has an existing 327 acres that can be applied as mitigation credit for the SOCTIIP project. In addition, TCA has asked that the bank be expanded to allow for additional mitigation credits, which would cover up to 241 acres of coastal sage scrub, 183 native perennial grasslands, and 13 non-wetland drainages. This site is a certified bank with a formal banking agreement between TCA, the California Department of Fish and Game, and USFWS. Rancho Mission Viejo is the underlying fee owner. The site is property that was taken out of development, provides opportunities for watershed-based restoration, and is close to the alignment for the Foothill South Toll Road.
2. In addition, TCA was asked by the Army Corps and USFWS to examine other sites for potential restoration, which would be used to mitigate impacts to

USACE jurisdictional waters. This restoration area includes an area east and south of Tesoro High School, within which TCA will restore the area, change the existing grade, and create a wet meadow.

3. The concept is to provide mitigation close to the toll road and restore it on a watershed basis. Comments, in response to questions, were provided by Margot Griswald, Macie Cleary-Milan, and by Ann Johnston, and included:
  - a. The mitigation for jurisdictional wetlands is in the same watershed as the impact.
  - b. The alignment does not go through any of the Rancho Mission Viejo conservation areas. In the alternatives development, TCA avoided RMV mitigation areas, especially Cañada Gobernadora.
  - c. TCA will acquire the land. After performance criteria have been met, it is anticipated that the parcels will be placed in the RMV Reserve design. USFWS also envisions this.
  - d. The conservation plan will be a three-way agreement among TCA, USFWS, and California Fish and Game.
  - e. Within the San Mateo Creek and San Onofre Creek crossings, the permanent impacts will be solely for the piers; the temporary impacts will be re-established to pre-impact conditions. Because these areas are within Camp Pendleton boundaries, mitigation cannot be put into place in perpetuity. Limiting the impact to the piers makes the impact very small.
  - f. Jill Terp said that USFWS experience has been that these conservation measures need some sort of management, such as weed control, until they meet a certain habitat standard. Funding is needed to monitor and maintain the site. Eric Raffini referred to the PARS analysis that can help define this performance. Rob Thornton noted that in other agreements, TCA has said that TCA has the obligation to fulfill its commitments and that TCA can only transfer the property to a party who is acceptable to Fish and Game and USFWS.
  - g. Susan Meyer asked why, since the Army Corps is not signatory to the conservation easement agreement, they are being asked to buy into the mitigation instrument. Macie replied that the mitigation instrument already exists and that TCA needs all the agencies to concur on the mitigation plan as sufficient. Action item: Further discussion will be held among TCA, the Army Corps, EPA (Eric Raffini), and USFWS regarding the technicalities of the mitigation instrument. The Army Corps will formulate questions to address in this discussion.
  - h. Jill Terp noted that TCA's plan is to revegetate the slopes of the roadway with native species and said that Caltrans has the responsibility to maintain them. Sylvia Vega responded that Caltrans' concerns would be that the project mitigation does not include the slopes.
  - i. Action item: The conceptual mitigation plan will be sent to the Army Corps before the end of the year. TCA will make the Powerpoint presentation on the conceptual mitigation plan available to the Collaborative.

## J. Lawsuits

1. Rob Thornton reported that lawsuits have been filed. The lawsuits include:
  - a. One from environmental groups
  - b. One from the Attorney General representing the State Parks Commission. This lawsuit was filed in San Diego County Superior Court. TCA requested that it be transferred to the Orange County court, but the petitioners appealed this. Macie Cleary-Milan clarified that the State Parks Commission is advisory to the Governor and does not issue permits.
  - c. One from the Native American Heritage Commission regarding Native American ceremonial sites. There is a venue motion pending on this lawsuit.
2. Rob said that TCA anticipates there will be additional lawsuits following issuance of the Record of Decision. Responses to the lawsuits occur in a track parallel to the rest of TCA's work on the project. Rob's responses to comments and questions included the following points:
  - a. Under CEQA, the only remedy is to go back and correct the document if needed and reconsider the decision in the light of the corrections that were made.
  - b. Regarding the issues underlying the lawsuits, it is impossible to know what those issues are until the briefs have been submitted.
  - c. The typical timeframe for a CEQA lawsuit is 2-1/2 years. The typical timeframe for a NEPA lawsuit is 2 to 3 years.
  - d. There are always options to settle.

## III. FHWA response to EHL/Smart Mobility Study

- A. Macie reported that during the comment period on the DEIS, the issues included in the Endangered Habitats League (EHL) letter were raised. FHWA received the EHL letter after the EIR was certified.
- B. Tay Dam said that EHL conducted a review of the CEQA document (the EIR) and wrote the letter in response to the CEQA document. As this is not a federal document, FHWA does not have jurisdiction. FHWA forwarded the letter and the Smart Mobility Study to Caltrans and TCA for appropriate action and response.
- C. Lisa Ramsey put together a group of engineers at Caltrans to review the study. Caltrans determined that the study did not follow the standard process. The Smart Mobility Study was conceptual, while TCA's study of traffic projections was thorough. The Smart Mobility Study did not take into account the engineering requirements that would be necessary to do the improvements to I-5 and did not factor in standard shoulders, lane widths, ramps, interchanges. A similar rationale applies to the improvements of the arterial alternatives. Caltrans stands by TCA's analysis.
- D. Larry Rannals noted that if I-5 were going to be widened, it would entail the rebuilding of 4 interchanges and that the traffic improvements were not significant enough to warrant such an expenditure.

- E. FHWA has been in communication with Dan Silver, the director of EHL and has sent a letter to EHL, noting FHWA's lack of jurisdiction over the CEQA document and including Caltrans' comments on the Smart Mobility Study and the DKS (John Long) independent traffic review.
  - F. Action item: TCA will email or fax the FHWA letter and the Smart Mobility Study to Susan Meyer and Jill Terp.
- IV. **Other issues and questions**
- A. Susan Sturges asked about the status of the 6(f) process. Macie reported that FHWA is addressing this process. Tay Dam said that FHWA has met twice with the National Park Service.
  - B. TCA is planning to have the FEIS ready for public circulation in the summer of 2008.
- V. **Where do we go from here?**
- A. Remaining NEPA/404 MOU tasks
    1. Macie Cleary-Milan distributed an excerpt from the NEPA/404 MOU that included upcoming steps to fulfill the requirements of the MOU and asked how these would be applied to the SOCTIIP process. Sylvia Vega responded that she sees these requirements as a kind of punch list of items that need to be agreed on in order to achieve compliance with the MOU.
    2. Macie asked about the section, "Obtain following documents for inclusion in the final EIS...: 1) FWS written preliminary agreement in the project mitigation plan." Jill Terp said she assumed that USFWS would receive a separate mitigation document, e.g., a comprehensive mitigation plan. Although Section 7 does not refer to the term, "mitigation," she said that she hopes that USFWS can include its agreement on the project mitigation plan as part of the Biological Opinion. Macie added that her understanding is that in the context of Section 7 consultation and the Biological Opinion, FHWA, TCA, and USFWS would agree on the things that will be done.
    3. Jill Terp said that she has raised some concerns with TCA regarding offsetting measures. There may be other mitigation measures included that are outside the Section 7 consultation. it is not a requirement for FHWA to offset impacts; under Section 7, FHWA only needs to avoid and minimize impacts. Macie said she would seek USFWS review of the items that USFWS has jurisdiction over. Action item: TCA, FHWA, and USFWS will meet to discuss the language regarding USFWS "written preliminary agreement on the project mitigation plan" and offsetting measures.
    4. Action item: Sylvia Vega will send the NEPA/404 MOU and the Guidance papers to Jill Terp.
    5. Susan Sturges said that there is a new MOU specific to the state of California, which was finalized in May 2006. The new MOU says that the final decision point is a preliminary LEDPA determination and a decision point on the conceptual mitigation plan. Her understanding is that for current projects that were begun under the 1994 MOU, the projects would move forward under the provisions of the new MOU, with decisions made under the 1994 MOU continuing to stand. Susan Meyer said that the difference between the two MOUs is that the new MOU defines the level of concurrence differently,

depending on the agency. Under the 1994 MOU, all agencies carry the same weight as others regarding concurrence. In the 1994, USFWS did not have any concurrence on the preferred alternative; in the new MOU, USFWS does have an agreement role regarding the preferred alternative. Action items: Susan Meyer will send the new MOU to the Collaborative. Sylvia Vega will talk with Lisa Cathcart-Randall and Larry Vinzant about the new MOU and will report back to TCA. When there is an understanding of the new MOU and whether/how it applies to the SOCTIIP project, there will be further discussions with the Collaborative.

B. Future role of SOCTIIP Collaborative

1. Macie said that in preparation for this Collaborative meeting, it had become apparent that the Collaborative had a number of questions regarding the status of the project. She asked if the Collaborative wanted to get together periodically in order to be updated on the project.
2. The Collaborative agreed to meet periodically on an as-needed basis when there are issues to discuss. Quarterly updates will be provided through a conference call or an email sent by TCA to keep the Collaborative apprised of the status of the project. Prior to these updates, Collaborative members will be asked to provide TCA with questions about the project or what they have been hearing so that TCA can directly respond to their concerns and questions.
3. The Collaborative would like to be informed when FHWA is ready to send the FEIS to the Marine Corps for the EIRB review (action item).

**VI. Action items**

- A. Macie will provide to the Collaborative copies of the Powerpoint presentation on the history of the project and the preferred alternative, either by CD, through online reference, or hard copy.
- B. USACE, FHWA, and Caltrans will discuss whether and when to hold a public hearing on the FEIS.
- C. TCA, FHWA, USACE, and MCB-CP will talk about whether to publish notice of the FEIS in the Federal Register.
- D. Macie Cleary-Milan, Rob Thornton, Lisa Cathcart-Randall, Jill Terp, and Jim Bartell (USFWS) will meet to discuss the USFWS solicitor's comments on the Biological Opinion prior to the release of the Biological Opinion.
- E. Caltrans, TCA, USACE, USFWS, USEPA, and FHWA will discuss responsibility for BMPs related to aquatic resources, which would become permit conditions.
- F. TCA will provide a copy of the Streambed Alteration Permit application to Caltrans and a copy of the conceptual mitigation plan to USFWS.
- G. Caltrans and FHWA will review the 404 permit application.
- H. Further discussion will be held among TCA, the Army Corps, EPA (Eric Raffini), and USFWS regarding the technicalities of the mitigation instrument. The Army Corps will formulate questions to address in this discussion.
- I. The conceptual mitigation plan will be sent to the Army Corps before the end of the year.

- J. TCA will make the Powerpoint presentation on the conceptual mitigation plan available to the Collaborative.
- K. TCA will email or fax the FHWA letter to EHL and the Smart Mobility Study to Susan Meyer and Jill Terp.
- L. TCA, FHWA, and USFWS will meet to discuss the language regarding USFWS "written preliminary agreement on the project mitigation plan" and offsetting measures.
- M. Sylvia Vega will send the NEPA/404 MOU and the Guidance papers to Jill Terp.
- N. Susan Meyer will send the new MOU to the Collaborative. Sylvia Vega will talk with Lisa Cathcart-Randall and Larry Vinzant about the new MOU and will report back to TCA. When there is an understanding of the new MOU and whether/how it applies to the SOCTIIP project, there will be further discussions with the Collaborative.
- O. FHWA will inform the Collaborative when the FEIS is being sent to the Marine Corps for EIRB review.



**Brenner, Paul**

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**From:** Levario, Maria  
**Sent:** Wednesday, November 07, 2007 3:45 PM  
**To:** Brenner, Paul  
**Subject:** FW: Draft SOCTIIP Public Notice and 404(b)(1) Alternatives Analysis

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**From:** Meyer, Susan A SPL [mailto:Susan.A.Meyer@spl01.usace.army.mil]  
**Sent:** Monday, March 13, 2006 7:24 PM  
**To:** Levario, Maria  
**Subject:** RE: Draft SOCTIIP Public Notice and 404(b)(1) Alternatives Analysis

Hello:

I'm still in the process of reviewing the subject draft documents. My most substantive suggestion thus far is to have Glenn Lukos follow the outline for the 404(b)(1) analysis/public interest review/EA I provided TCA back in August 2004 (I've attached a copy of this outline in this transmittal as well). Some of the sections in this combined "decision document" will require only a brief summary--rather than a lengthy thesis--and/or a cross reference to the appropriate location in the Final EIS where such information can be found in detail.

As for the Public Notice, I can prepare that. Most important is ensuring we have a complete application, including a breakdown of the permanent and temporary impacts to waters of the U.S. for your preferred alternative. I also suggest TCA provide a breakout of those impacts affecting waters of the U.S. that occur within the coastal zone (e.g., discharges into San Mateo Creek). I provided a checklist of what is required for a complete application (a while back), but you can always check our website for a quick and easy reference. Also be sure to include appropriate drawings of the project area, project activity/alternative, etc.

It would be helpful for purposes of addressing the ESA aspects of the decision document as well as the PN to have a copy of the FWS's final BO...could you mail a copy?

Due to other workload issues, I can't make any promises on an exact date for providing more detailed comments (if any at all), but I'll keep plugging away. In the meantime, please feel free to call and we can discuss these items further.

Susan

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**From:** levario@sjhtca.com [mailto:levario@sjhtca.com]  
**Sent:** Monday, March 13, 2006 11:41 AM  
**To:** Meyer, Susan A SPL  
**Subject:** RE: Draft SOCTIIP Public Notice and 404(b)(1) Alternatives Analysis

Hi Susan-

Checking in with you on your review of these two documents. We are also working on getting the RWQCB 401 Certification application out and do not want to submit that until we have received your input on the Public Notice and 404(b)(1) Alternatives Analysis. How is your review coming? Do you have any questions/comments/input? Please let me know - thanks!

Maria

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**From:** Levario, Maria  
**Sent:** Monday, February 27, 2006 3:30 PM  
**To:** 'Meyer, Susan A SPL'  
**Subject:** Draft SOCTIIP Public Notice and 404(b)(1) Alternatives Analysis

Hi Susan!

I hope all is well with you! It's been so long since we communicated!

I left you an email earlier today giving you a head's up that I would be sending you the Draft SOCTIIP Public Notice and 404(b)(1) Alternatives Analysis for your review and comment prior to finalizing the documents for submission to the ACOE.

Please find the two documents attached. We appreciate any input from ACOE on these documents.

Feel free to call me with any questions.

Maria

Maria Levario  
Principal Environmental Analyst  
Transportation Corridor Agencies  
949.754.3482 phone



**Bopp, Paul**

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**From:** Meyer, Susan A SPL [Susan.A.Meyer@spl01.usace.army.mil]  
**Sent:** Tuesday, March 28, 2006 3:06 PM  
**To:** Levario, Maria  
**Cc:** Swenson, Daniel P SPL  
**Subject:** RE: Urgent (but minor) data request

Thank you very much. Also, could you send the shapefile for this alternative directly to one of our Senior PMs, Dan Swenson, who is helping with this GIS data?

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**From:** levario@sjhtca.com [mailto:levario@sjhtca.com]  
**Sent:** Tuesday, March 28, 2006 11:46 AM  
**To:** Meyer, Susan A SPL  
**Subject:** FW: Urgent (but minor) data request

Here you go!

The northern limit is -117.609998, 33.587324  
The southern is -117.562919, 33.375936  
And finally, the centroid is -117.574061, 33.474629



**Bopp, Paul**

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**From:** Meyer, Susan A SPL [Susan.A.Meyer@spl01.usace.army.mil]  
**Sent:** Friday, August 18, 2006 11:47 AM  
**To:** Levario, Maria  
**Subject:** RE: SOCTIIP permits

thanks

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**From:** levario@sjhtca.com [mailto:levario@sjhtca.com]  
**Sent:** Friday, August 18, 2006 11:46 AM  
**To:** Meyer, Susan A SPL  
**Subject:** RE: SOCTIIP permits

Susan-

Below is Jeremy Haas' contact information.

Regional Water Quality Control Board  
San Diego Region  
Mr. Jeremy Haas  
9174 Sky Park Court, Suite 100  
San Diego, CA 92123  
858-467-2735  
[JHaas@waterboards.ca.gov](mailto:JHaas@waterboards.ca.gov)

I'll keep you informed on what our approach will be on isolated waters. Have a great weekend!

Maria

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**From:** Meyer, Susan A SPL [mailto:Susan.A.Meyer@spl01.usace.army.mil]  
**Sent:** Friday, August 18, 2006 11:10 AM  
**To:** Levario, Maria  
**Subject:** RE: SOCTIIP permits

Hi Maria,

If you would, please provide me with Jeremy's email address and telephone number. I'll try to give him a call in the next week or so.

As for TCA legal counsel's suggestion that the Corps take jurisdiction over isolated waters where we have no legal geographic jurisdiction, my initial thought is "no can do". I'm curious about Rob's rationale—as with most things, the Corps is always open to listening. However, I must say that in light of the Rapañis-Carabell and SWANCC Supreme Court decisions, our hands are tied and an action like what Rob is contemplating would likely be something much more than just precedent-setting. In general, isolated waters that don't fall under federal jurisdiction are solely a State matter these days.

An October meeting would be great and a welcome thing from my end. I'd like to hear where things are at

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with the schedule on the FEIS, Section 7 consultation, etc. I'd likely call-in, but will coordinate with my boss about possibly traveling to participate in person.

Have a nice weekend,  
Susan

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**From:** levario@sjhtca.com [mailto:levario@sjhtca.com]  
**Sent:** Friday, August 18, 2006 10:19 AM  
**To:** Meyer, Susan A SPL  
**Subject:** RE: SOCTIIP permits

Thanks Susan for your input...and yes I do think it would be helpful for you to speak with Jeremy - do you have his number?

We are also exploring to possibility of requesting that the Corps take jurisdiction over the isolated waters - this is something that Rob Thornton thought would be in the TCAs best interest. We are still doing some information gathering on this - so it may or may not occur. Do you have any thoughts on that idea?

Lastly - we are gearing up to have a Collaborative meeting - looking at October timeframe. There appears to be alot of interest in getting the group together and getting everyone up to speed on what we are doing and what the project status is.

Maria

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**From:** Meyer, Susan A SPL [mailto:Susan.A.Meyer@spl01.usace.army.mil]  
**Sent:** Friday, August 11, 2006 6:48 PM  
**To:** Levario, Maria  
**Subject:** RE: SOCTIIP permits

Hi Maria,

All is well here, and I trust things are going well for you back in Orange County. I will be happy to talk with Jeremy Haas if it helps any. Often, the RWQCB wants to see the 404 permit application along with the other permit applications to have a record of the Corps' file no. and understand what sort of permit is being contemplated and under what authority (e.g., what type of nationwide permit, Section 404, Section 10 only, etc.). Most importantly, they need to know that Section 404 of the CWA authorization is required for a given project because that is what triggers their 401 certification process. For projects involving Section 10 only authorization, there is no 401 certification requirement. Also, as a point of clarification, the Corps cannot issue a section 404 permit without first having proof of 401 certification and CZMA consistency; if either of these permits are denied, then the Corps must similarly deny its permit. By law, any 401 water quality conditions must be included or referenced in the section 404 permit.

The Corps file number for the SOCTIIP is 2000-00392-SAM and we expect to process a Standard Individual Permit (SIP) under the authority of Section 404 (and possibly Section 10, depending on the alternative and whether discharges would occur in tidally influenced areas).

Hope this helps.

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**From:** levario@sjhtca.com [mailto:levario@sjhtca.com]  
**Sent:** Wednesday, August 09, 2006 8:52 AM  
**To:** Meyer, Susan A SPL

4/15/2008

**Subject:** SOCTIIP permits

Hi Susan-

Hope all is well with you in Hawaii.

I wanted to give you a "heads up" that the TCA has submitted its 401 Certification application package to the San Diego Regional Water Quality Control Board last month (June). In their letter advising us that the application was incomplete they requested copy of our ACOE 404 application package. We are in the process of responding to the Board's other informational requests and will make the comment that the 404 permit application will not be complete until we are closer to the Final EIS. As I recall you mentioned that the Board does not need to have the 404 permit to issue its 401 Certification, we have included the ACOE's project number for SOCTIIP. I will copy you on the letter to the Board but this issue may require a call or email to Jeremy Haas from you on this issue. Let me know if you are OK with this approach.

Maria

Maria Levario  
Principal Environmental Analyst  
Transportation Corridor Agencies  
949.754.3482 phone

4/15/2008

## Bopp, Paul

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**From:** Meyer, Susan A SPL [Susan.A.Meyer@spl01.usace.army.mil]  
**nt:** Wednesday, September 06, 2006 8:19 PM  
**o:** Levario, Maria  
**Subject:** RE: Tollroad 241 south (401 app no. 06C-064)

Maria,

A quick update to keep TCA in the loop: I spoke with Jeremy this afternoon to explain the NEPA/404 integrated process and why/how this process affects the timing of the 404 application and the issuance of our Final Public Notice. He seemed to understand and appreciate the background information that I shared. Jeremy mentioned to me that technically the 404 permit does not need to be received by the RWQCB in order for them to deem their 401 application complete and initiate their review process.

From the federal side, it is obviously your prerogative as the applicant to submit the 404 application whenever you deem it necessary/appropriate. As you know, we've been encouraging the informal review/comment on a draft 404 application to reduce the potential for the more formal back-and-forth "need more information" letters, as well as to avoid having an open regulatory action on our books for which we cannot take immediate action due to the EIS process--we are essentially "dinged" in that sense by our internal reporting requirements and metrics for not meeting specified processing times. The latter is probably less of an issue since we already have an "open action" when we issued our first Public Notice for the Draft EIS/SEIR back in 2004.

Let's talk if need be. Otherwise, I'll plan to touch base with you and others in October on some of the remaining actions.

Susan

-----Original Message-----  
From: levario@sjhtca.com [mailto:levario@sjhtca.com]  
Sent: Wednesday, September 06, 2006 8:23 AM  
To: Meyer, Susan A SPL  
Subject: RE: Tollroad 241 south (401 app no. 06C-064)

Thanks Susan.

We are planning to take Jeremy out for a field trip at the end of this month on the 27th. I'm sure it will be the first of many. We did send the RWQCB the Corps' verification letter as part of a second submittal package to them. I'll be interested in Jeremy's response to your question on the 404 Application - we'll do what we have to do to get the 401 cert.

No news on the isolated waters issue.

Maria

-----Original Message-----  
From: Meyer, Susan A SPL [mailto:Susan.A.Meyer@spl01.usace.army.mil]  
Sent: Tuesday, September 05, 2006 6:10 PM  
To: Levario, Maria  
Subject: FW: Tollroad 241 south (401 app no. 06C-064)

Maria,

Just to keep you apprised of RWQCB/USACE coordination.

Susan

-----Original Message-----  
From: Meyer, Susan A SPL



**Bopp, Paul**

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**From:** Meyer, Susan A SPL [Susan.A.Meyer@spl01.usace.army.mil]  
**Sent:** Thursday, September 07, 2006 5:20 PM  
**To:** Levario, Maria  
**Subject:** RE: SOCTIIP Mitigation

Thanks, Maria, for your quick response; it will be helpful to hear what your ROW specialist has to say next week. There is at least one potential mitigation area along San Juan Creek that I believe is owned by RMV (I would have to confirm though). This area appears to have substantial potential for wetlands restoration, which could also possibly benefit arroyo toad breeding habitat.

Susan

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**From:** levario@sjhtca.com [mailto:levario@sjhtca.com]  
**Sent:** Thursday, September 07, 2006 5:10 PM  
**To:** Meyer, Susan A SPL  
**Subject:** RE: SOCTIIP Mitigation

I believe the Agency can condemn private property for mitigation but I will check and verify with our ROW specialist next week. Do you have something specific in mind? Does it involve RMV? The reason I ask is that we are currently negotiating with RMV on potential mitigation areas.

I'll reply to the larger group relating to what we have done on our conceptual mitigation plan.

Maria

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**From:** Meyer, Susan A.SPL [mailto:Susan.A.Meyer@spl01.usace.army.mil]  
**Sent:** Thursday, September 07, 2006 3:04 PM  
**To:** Levario, Maria  
**Cc:** Cathcart-Randall, Lisa; Raffini.Eric@epamail.epa.gov; John.Steven@epamail.epa.gov  
**Subject:** SOCTIIP Mitigation

Maria,

As you know, we've discussed and dabbled quite a bit in the conceptual mitigation arena for wetlands impacts, with May 25, 2005 being the last formal discussion between you, EPA and the Corps. We view the compensatory mitigation for jurisdictional waters of the U.S. to be one of the next big steps for the Corps and EPA in this environmental process. One question that has been raised internal to the Corps is whether TCA could pursue inverse condemnation of private lands for mitigation purposes (i.e., is this legally feasible?). We'd like to understand this scenario.

Aside from the aforementioned question, I need your help in refreshing my memory on where things are at with the functional assessment results, i.e., how they've been used to develop a proposed compensatory mitigation plan. The intent behind the SOCTIIP functional assessment was to get away from using the more subjective mitigation ratios (like 3:1 for wetlands) and instead be more consistent with our national regulatory guidance on assessing and replacing functional losses. In this regard, I think it would be helpful to revisit the May 25, 2005 PowerPoint presentation...has it been refined any and/or used as a foundation for developing the draft mitigation plan? As time permits, I'd like to develop some specific questions,

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comments, and recommendations pertaining to aquatic ecosystem mitigation.

Thanks in advance,  
Susan

*Susan A. Meyer*  
Sr. Project Manager  
U.S. Army Corps of Engineers  
Regulatory Branch  
CESPL-CO-R/CEPOH-EC-R  
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[www.spl.usace.army.mil/regulatory](http://www.spl.usace.army.mil/regulatory)



**Cleary-Milan, Macie**

**From:** Cleary-Milan, Macie  
**Sent:** Monday, October 30, 2006 11:11 AM  
**To:** 'Shortsmart@aol.com'  
**Cc:** lisa.cathcart-randall@fhwa.dot.gov; Levario, Maria  
**Subject:** RE: SOCTIIP Collaborative November 8

Louise, a couple of questions-

1. #4 & 5 seem to be the same issue. Did anyone believe that there was any follow-up info. that needed to be done. We will have a copy of the letter for the meeting.
2. I need more info. on #6- what is it that people are asking for here? Litigation status?
3. What is the *Communication Strategies* item about? About issues we are asked about, or communications between collaborative members?
4. #9- this feels like a land mine- are we asking for "other discussion items" or what?
5. Please add to the agenda, under 1 c.- the title should start "Status of FEIS" and then the rest is fine. Also, add "Remaining NEPA/404 MOU tasks discussion".

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**From:** Shortsmart@aol.com [mailto:Shortsmart@aol.com]  
**Sent:** Monday, October 23, 2006 7:38 PM  
**To:** blazej.nova@epa.gov; john.steven@epa.gov; levin.nancy@epa.gov; raffini.eric@epa.gov; Sturges.susan@epa.gov; Larry.Vinzant@fhwa.dot.gov; Levario, Maria; Cleary-Milan, Macie; Sylvia\_vega@dot.ca.gov; Susan.a.meyer@usace.army.mil; Larry.Rannals@usmc.mil; Todd, Dale; Jill\_terp@fws.gov; Bopp, Paul; Arianne\_Glagola@dot.ca.gov; Shortsmart@aol.com; susanne\_glasgow@dot.ca.gov; Tay.Dam@fhwa.dot.gov; Maiser.Khaled@fhwa.dot.gov; Smita\_Deshpande@dot.ca.gov; mark.w.anderson4@usmc.mil; robert.cady@fhwa.dot.gov; clobell@nossaman.com; Lisa\_Ramsey@dot.ca.gov; Lisa.cathcart-randall@fhwa.dot.gov  
**Subject:** SOCTIIP Collaborative November 8

Dear SOCTIIP Collaborative,

We will meet on Wednesday, November 8 from 10:00AM to 4:00PM at the TCA office, 125 Pacifica, Irvine. Current agenda items are:

1. What is the status of the project in terms of:
  - a. Water quality (401)
  - b. 106 consultation
  - c. Approval by FHWA of the FEIS, and any remaining FHWA concerns on the FEIS, requiring attention
  - d. The biological opinion.
2. The Conceptual Mitigation Plan
3. Any outstanding issues pertaining to mitigation and roadway maintenance
4. FHWA position on Caltrans analysis of Smart Mobility Study
5. Any follow-up that has occurred, post 7/7 FHWA letter, to the Endangered Habitat League

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6. What Macie can talk about, given legal limitations (i.e., state parks)
7. What everybody is hearing, thinking, worried about
8. Communication strategies
9. Any old business that may have been discussed but not resolved

Thanks, Collaborative members, for giving me these agenda items. We can add to the list at the meeting, Or, better still, if you have any other topics, please let me know so I can give everyone a heads up. - Louise

Louise Smart  
CDR Associates  
100 Arapahoe, Suite 12  
Boulder CO 80302  
Cell Phone: 303-918-2111  
Fax: 303-442-7442  
Email: [shortsmart@AOL.com](mailto:shortsmart@AOL.com)

**Cleary-Milan, Macie**

**From:** Shortsmart@aol.com  
**Sent:** Friday, November 03, 2006 12:33 PM  
**To:** blazej.nova@epa.gov; john.steven@epa.gov; levin.nancy@epa.gov; raffini.eric@epa.gov; Sturges.susan@epa.gov; Larry.Vinzant@fhwa.dot.gov; Levario, Maria; Cleary-Milan, Macie; Sylvia\_vega@dot.ca.gov; Susan.a.meyer@usace.army.mil; Larry.Rannals@usmc.mil; Todd, Dale; Jill\_terp@fws.gov; Bopp, Paul; Arianne\_Glagola@dot.ca.gov; Shortsmart@adcom; susanne\_glasgow@dot.ca.gov; Tay.Dam@fhwa.dot.gov; Maiser.Khaled@fhwa.dot.gov; Smita\_Deshpande@dot.ca.gov; mark.w.anderson4@usmc.mil; robert.cady@fhwa.dot.gov; clobell@nossaman.com; Lisa\_Ramsey@dot.ca.gov; Lisa.cathcart-randall@fhwa.dolgov  
**Subject:** Final agenda for SOCTIIP Collab November 8  
**Attachments:** FINAL AGENDA-November 8.doc

Dear SOCTIIP Collaborative,

Pasted below and attached as a separate file is the updated and more organized agenda for the November 8 meeting. See you next week. I'm reachable by cell phone if you have questions or something you want to talk about before the meeting. - Louise

FINAL AGENDA – SOCTIIP COLLABORATIVE MEETING November 8, 2006

10:00AM to 4:00PM

TCA Office – 125 Pacifica, Irvine CA

1. Presentation on the history of the alignment – how we got here X
2. Status report on the project
  - a. FEIS
  - b. EIRB process – Camp Pendleton
  - c. Biological Opinion - USFWS
  - d. Water Quality 401 permit
  - e. 106 Consultation
  - f. Other permits
  - g. Lawsuits
  - h. Presentation on Conceptual Mitigation Plan
3. FHWA response to EHL/Smart Mobility Study
4. Other issues and questions?
5. Where do we go from here?
  - a. Remaining NEPA/404 MOU tasks
  - b. Future role of the SOCTIIP Collaborative
    - i. Communication strategies – keeping the Collaborative informed through the NEPA process
    - ii. What are the objectives for the Collaborative between now and the ROD?

Bopp, Paul

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**From:** Meyer, Susan A SPL [Susan.A.Meyer@spl01.usace.army.mil]  
**Sent:** Monday, January 08, 2007 1:04 PM  
**To:** Shortsmart@aol.com; blazej.nova@epa.gov; john.steven@epa.gov; levin.nancy@epa.gov; raffini.eric@epa.gov; Sturges.susan@epa.gov; Larry.Vinzant@fhwa.dot.gov; Levario, Maria; Cleary-Milan, Macie; Sylvia\_vega@dot.ca.gov; Larry.Rannals@usmc.mil; Todd, Dale; Jill\_terp@fws.gov; Bopp, Paul; Arianne\_Preite@dot.ca.gov; susanne\_glasgow@dot.ca.gov; Tay.Dam@fhwa.dot.gov; Maiser.Khaled@fhwa.dot.gov; Smita\_Deshpande@dot.ca.gov; mark.w.anderson4@usmc.mil; robert.cady@fhwa.dot.gov; clobell@nossaman.com; Lisa\_Ramsey@dot.ca.gov; Lisa.cathcart-randall@fhwa.dot.gov  
**Subject:** RE: SOCTIIP Meeting summary from Nov 8 Collab  
**Attachments:** 2006-11-08 Draft Meeting Summary-sent to Collab.doc

Louise,

I've added a few minor edits to the meeting notes.

~ Susan

---

**From:** Shortsmart@aol.com [mailto:Shortsmart@aol.com]  
**Sent:** Wednesday, December 27, 2006 9:56 AM  
**To:** blazej.nova@epa.gov; john.steven@epa.gov; levin.nancy@epa.gov; raffini.eric@epa.gov; Sturges.susan@epa.gov; Larry.Vinzant@fhwa.dot.gov; Levario@sjhtca.com; cleary@sjhtca.com; Sylvia\_vega@dot.ca.gov; Meyer, Susan A SPL; Larry.Rannals@usmc.mil; todd@sjhtca.com; Jill\_terp@fws.gov; bopp@sjhtca.com; Arianne\_Preite@dot.ca.gov; Shortsmart@aol.com; susanne\_glasgow@dot.ca.gov; Tay.Dam@fhwa.dot.gov; Maiser.Khaled@fhwa.dot.gov; Smita\_Deshpande@dot.ca.gov; mark.w.anderson4@usmc.mil; robert.cady@fhwa.dot.gov; clobell@nossaman.com; Lisa\_Ramsey@dot.ca.gov; Lisa.cathcart-randall@fhwa.dot.gov  
**Subject:** SOCTIIP Meeting summary from Nov 8 Collab

Dear SOCTIIP Collaborative members,

Attached is the draft meeting summary from the November 8, 2006, SOCTIIP Collaborative meeting. TCA has done its initial review. I am now sending it to you for review. Please send me any additions or corrections by January 15. If I receive no corrections by then, it will become final on January 15. Have a lovely remainder of the holiday and a Happy New Year. - Louise

Louise Smart  
CDR Associates  
100 Arapahoe, Suite 12  
Boulder CO 80302  
Cell Phone: 303-918-2111  
Fax: 303-442-7442  
Email: shortsmart@AOL.com

4/15/2008



## Todd, Dale

---

**From:** Gary Medeiros [GMedeiros@bonterraconsulting.com]  
**Sent:** Tuesday, April 15, 2008 4:04 PM  
**To:** Todd, Dale  
**Cc:** Ann Johnston  
**Subject:** Fwd: RE: Draft EA for Foothill South

Mime-Version: 1.0  
Content-Type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: quoted-printable  
Content-Disposition: inline  
X-TM-AS-Product-Ver: IMSS-7.0.0.6126-5.0.0.1023-15852.002  
X-TM-AS-Result: No--14.714-10.0-31-1  
X-imss-scan-details: No--14.714-10.0-31-1

Dale, =20

Sent email number 2. =20

Gary Medeiros  
Associate Principal  
Regulatory Services  
BonTerra Consulting  
151 Kalmus Drive  
Suite E-200  
Costa Mesa, California 92626  
Phone: (714) 444-9199 X238  
Cell: (714) 264-6858  
Fax: (714) 444-9599  
gmedeiros@bonterraconsulting.com

>>> Gary Medeiros 1/22/2007 10:26 AM >>>  
Susan, =20

Thanks. =20

Gary Medeiros  
Associate Principal  
Regulatory Services  
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>>> "Meyer, Susan A SPL" <Susan.A.Meyer@sp101.usace.army.mil> 01/22/07 =  
10:01 AM >>>  
Gary,

A Word file is just fine and nothing more is needed at this juncture. =20

Mahalo,  
Susan

-----Original Message-----

From: Gary Medeiros [mailto:GMedeiros@bonterraconsulting.com]=20  
Sent: Friday, January 19, 2007 4:49 PM  
To: Meyer, Susan A SPL  
Cc: Ann Johnston; Maria Levario  
Subject: Draft EA for Foothill South

Susan,=20

We have just completed the draft EA. I assume that you would like it as a = MS Word file to work. Let me know if you need anything else with the transmittal.

Thanks!=20

Gary Medeiros  
Associate Principal  
Regulatory Services  
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San Joaquin Hills  
Corridor Agency

Chairwoman:  
Carmen Val-Cave  
Aliso Viejo



**TRANSPORTATION CORRIDOR AGENCIES**

---

Foothill/Eastern  
Corridor Agency

Chairman:  
Jim Thor  
Rancho Santa Margarita

April 4, 2007

Susan Meyer  
U.S. Army Corps of Engineers  
Honolulu Engineer District  
Regulatory Branch, CEPOH-EC-R  
Building T214  
Ft. Shafter, Hawaii 96858-5440

Dear Susan,

For your review, please see the enclosed *Conceptual Habitat Mitigation and Monitoring Plan for Impacts to Areas within the Jurisdiction of The United States Army Corps of Engineers Pursuant to Section 404 of the Clean Water Act, The Regional Water Quality Control Board Pursuant to Section 401 of the Clean Water Act, and The California Department of Fish and Game Pursuant to Section 1600 of the Fish and Game Code South Orange County Transportation Infrastructure Improvement Project (SOCTIIP) Orange and San Diego Counties, California Report.*

If you have any questions, feel free to give me a call at 949-754-3482 or Macie at 949-754-3483.

Sincerely,

Maria Levario  
Principal Environmental Analyst

cc: David Tedrick, FHWA  
Larry Rannals, USMC Camp Pendleton  
Nova Blazej and Eric Raffini, EPA  
Sylvia Vega – Caltrans, District 12

Enclosure (1)

William Woollett, Jr., Chief Executive Officer

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San Joaquin Hills  
Corridor Agency

Chairman:  
Jim Dahl  
San Clemente



TRANSPORTATION CORRIDOR AGENCIES

Foothill/Eastern  
Corridor Agency

Chairman:  
Lance MacLean  
Mission Viejo

January 17, 2008

RECEIVED

JAN 22 2008

CDMG

Susan A. Meyer  
Biologist, Sr. Project Manager  
US Army Corps of Engineers  
Regulatory Branch, CEPOH-EC-R  
Building 230 (Building T214)  
Ft. Shafter, Hawaii 96858-5440

Dear Ms. Meyer:

Per our conversation this morning, enclosed is a copy of the *Conceptual Habitat Mitigation and Monitoring Plan*.

If you need any other information, please let me know.

Sincerely,

Paul Bopp

Paul A. Bopp, Ph.D., G.E., C.E.G.  
Foothill-South Corridor Manager

Thomas E. Margro, Chief Executive Officer

125 PACIFICA, SUITE 100, IRVINE CA 92618-3304 • P.O. BOX 53770, IRVINE CA 92618-2770 • 949/754-3400 • FAX 949/754-3467  
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CONCEPTUAL HABITAT MITIGATION AND MONITORING PLAN  
FOR IMPACTS TO AREAS WITHIN THE JURISDICTION

OF

THE UNITED STATES ARMY CORPS OF ENGINEERS  
PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT,

THE REGIONAL WATER QUALITY CONTROL BOARD  
PURSUANT TO SECTION 401 OF THE CLEAN WATER ACT,

THE CALIFORNIA DEPARTMENT OF FISH AND GAME  
PURSUANT TO SECTION 1600 OF THE FISH AND GAME CODE

AND

THE CALIFORNIA COASTAL COMMISSION  
PURSUANT TO THE CALIFORNIA COASTAL ACT

SOUTH ORANGE COUNTY TRANSPORTATION INFRASTRUCTURE  
IMPROVEMENT PROJECT (SOCTIIP)  
ORANGE AND SAN DIEGO COUNTIES, CALIFORNIA

August 31, 2007

Prepared for:

Transportation Corridor Agencies (TCA)

125 Pacifica

Irvine, CA 92618

Contact: Maria Levario

Telephone: (949) 754-3400

Prepared by:

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Telephone: (323) 735-3225  
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