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CDP 1-06-022, Approved June 16, 2006

CONDITION COMPLIANCE

Memorandum: To Commissioners and Interested Parties

From: Peter Douglas, Executive Director
Robert Merrill, District Manager, North Coast District
Mark Delaplaine, Supervisor, Federal Consistency
Melanie Faust, Sr. Coastal Planner, North Coast District

Date: January 25, 2007

Regarding: **CONDITION COMPLIANCE, CDP No. 1-06-022, California Department of Transportation (Caltrans District 1, Eureka), Ten Mile River Bridge, Highway 1, unincorporated Mendocino County**

1.0 STAFF RECOMMENDATION

Staff recommends that the Commission **approve** the compliance plans as outlined in the series of **four motions & resolutions** commencing on page two.

The Commission conditionally approved CDP 1-06-022 on June 16, 2006, for construction of a new State Highway Route 1 bridge over the Ten Mile River, north of Fort Bragg, in rural Mendocino County (Adopted findings, Exhibit 6). Five of the special conditions imposed by the Commission required the permittee (Caltrans) to submit for subsequent Commission approval various compliance plans pertaining to acoustic monitoring during pile driving activities in the river, fisheries conservation/mitigation, marine mammal monitoring, and bird/bat habit preservation. In addition, final plans for bridge rails and other features of the project must be submitted by June, 2007 for subsequent Commission review in the form of a permit amendment (the Commission's Road's Edge subcommittee continues to evaluate design options) in accordance with the requirements of Special Condition 18.

The compliance plans have been evaluated by the Commission's staff expert in the area of hydroacoustics/marine mammal trauma-- Mark Delaplaine, Federal Consistency, in consultation with senior staff ecologist John Dixon, Ph.D. Mr. Delaplaine's memorandum summarizing the results of his technical review, dated January 24, 2007 is attached as Exhibit 6. Throughout the review, staff has conferred extensively with Caltrans staff and with Caltrans' consultants and other state and federal agencies with authority over the project (see also Exhibits 8-11). Caltrans

has incorporated the changes requested by Commission staff and the final plans are attached as Exhibits 1-4. In addition, a memorandum in partial conformance to Special Condition 2 submitted by the Department of Transportation, dated January 25, 2007, clarifying the permittee's commitment to undertake fish passage mitigation management at Dunn Creek as a conservation measure that would not replace the requirement for future fisheries mitigation if in-water sound impacts exceed the adopted thresholds, is attached as Exhibit 5.

2.0 STANDARD OF REVIEW

The Commission must determine whether the subject plans comply with the requirements of the applicable special conditions. The Commission's actions are limited to approving or denying the plans. The plans are not submitted as amendments to the permit, therefore the Commission cannot impose conditions in approving any of the plans. If the Commission determines that one or more of the plans does not comply with the requirements of the applicable special condition, the Commission must deny the non-compliant plan(s).

3.0 MOTIONS & RESOLUTIONS

MOTION & RESOLUTION No. 1: Regarding compliance of plans titled "Hydroacoustic Monitoring Plan for the Ten Mile River Bridge Replacement Project" and "Biological Monitoring Plan – Ten Mile River Bridge Replacement Project" with Special Condition 1 (Fish Injury & Acoustic Monitoring) of CDP 1-06-022:

MOTION: "I move that the Commission approve as submitted the "Hydroacoustic Monitoring Plan" and "Biological Monitoring Plan" attached to the staff recommendation as Exhibit 1, Parts 1 and 2, as compliant with Special Condition 1 of CDP 1-06-022."

STAFF RECOMMENDATION

Staff recommends a "YES" vote, which will result in the approval of the plans as compliant with Special Condition 1 and adoption of the following findings and resolution. The motion passes only by an affirmative vote of a majority of the Commissioners present.

RESOLUTION TO APPROVE

The Commission hereby finds that the compliance plan titled "Hydroacoustic Monitoring Plan for the Ten Mile River Bridge Replacement Project" prepared by Illingworth & Rodkin, Inc., for, and submitted by the permittee, the California Department of Transportation, dated September 27, 2006 and revised on January 22, 2007, attached as Exhibit 1, Part 1, and the compliance plan titled "Biological Monitoring Plan – Ten Mile River Bridge Replacement Project" prepared and submitted by the permittee, the California Department of Transportation, dated January 22, 2007, attached as Exhibit 1,

Part 2, are appropriately prepared and adequate, if fully implemented, to comply with the requirements of Special Condition 1 of CDP 1-06-022.

MOTION & RESOLUTION No. 2: Regarding Compliance of plan titled “Fish Passage Enhancement/Mitigation Site Assessment and Proposal for the Ten Mile River Bridge Replacement Project” as modified by memorandum from the Department of Transportation dated January 24, 2006 with Special Condition 2 (Fisheries Habitat Mitigation/Enhancement Plan) of CDP 1-06-022:

MOTION: “I move that the Commission approve as submitted the Fish Passage Enhancement/Mitigation Site Assessment and Proposal for the Ten Mile River Bridge Replacement Project” as modified by memorandum from the Department of Transportation dated January 24, 2006 attached to the staff recommendation as Exhibits 2 and 5, respectively, as compliant with Special Condition 2 of CDP 1-06-022.”

STAFF RECOMMENDATION

Staff recommends a “YES” vote, which will result in the approval of the plan as compliant with Special Condition 2 and adoption of the following findings and resolution. The motion passes only by an affirmative vote of a majority of the Commissioners present.

RESOLUTION TO APPROVE

The Commission hereby finds that the compliance plan titled “Fish Passage Enhancement/Mitigation Site Assessment and Proposal for the Ten Mile River Bridge Replacement Project” prepared and submitted by the permittee, the California Department of Transportation, dated September 28, 2006, attached as Exhibit 2, as modified by the memorandum from the Department of Transportation dated January 24, 2007, attached as Exhibit 5, is appropriately prepared and adequate, if fully implemented, to comply with the requirements of Special Condition 2 of CDP 1-06-022.

MOTION & RESOLUTION No. 3: Regarding compliance of plan titled “Marine Mammal Monitoring Plan for the Ten Mile River Bridge Replacement Project” with Special Condition 4 (Marine Mammal Monitoring Plan) of CDP 1-06-022:

MOTION: “I move that the Commission approve as submitted the “Marine Mammal Monitoring Plan for the Ten Mile River Bridge Replacement Project” attached to the staff recommendation as Exhibit 3 as compliant with Special Condition 4 of CDP 1-06-022.”

STAFF RECOMMENDATION

Staff recommends a “YES” vote, which will result in the approval of the plan as compliant with Special Condition 4 and adoption of the following findings and

resolution. The motion passes only by an affirmative vote of a majority of the Commissioners present.

RESOLUTION TO APPROVE

The Commission hereby finds that the compliance plan titled “Marine Mammal Monitoring Plan for the Ten Mile River Bridge Replacement Project” prepared and submitted by the permittee, the California Department of Transportation, dated March 3, 2006 and revised September 29, 2006, attached as Exhibit 3, is appropriately prepared and adequate, if fully implemented, to comply with the requirements of Special Condition 4 of CDP 1-06-022.

MOTION & RESOLUTION No. 4: Regarding compliance of plan titled “Bird and Bat Nesting/Roosting Plan for the Ten Mile River Bridge Replacement Project” with Special Condition 27 (Bird & Bat Nesting/Roosting Plan) of CDP 1-06-022:

MOTION: “I move that the Commission approve as submitted the Bird & Bat Nesting/Roosting Plan for the Ten Mile River Bridge Replacement Project attached to the staff recommendation as Exhibit 4 as compliant with Special Condition 27 of CDP 1-06-022.”

STAFF RECOMMENDATION

Staff recommends a “YES” vote, which will result in the approval of the plan as compliant with Special Condition 27 and adoption of the following findings and resolution. The motion passes only by an affirmative vote of a majority of the Commissioners present.

RESOLUTION TO APPROVE

The Commission hereby finds that the compliance plan titled “Bird & Bat Nesting/Roosting Plan for the Ten Mile River Bridge Replacement Project” prepared and submitted by the permittee, the California Department of Transportation, dated September 29, 2006, including attachments thereto dated June 21, September 11, and December 4 of 2006, attached as Exhibit 4, is appropriately prepared and adequate, if fully implemented, to comply with the requirements of Special Condition 27 of CDP 1-06-022.

4.0 BACKGROUND

On June 16, 2006, the Commission approved CDP No. 1-06-022 for Caltrans’ proposal to replace the Ten Mile River Bridge on Highway 1, approximately seven miles north of Fort Bragg, Mendocino County, and demolish & remove the existing bridge after the new bridge is constructed, including a separate pedestrian corridor on the bridge to provide an all-weather

accessible segment of the Coastal Trail. Commission staff subsequently prepared Adopted Findings, dated August 7, 2006 (provided in pertinent part, without exhibits to the staff report, in Exhibit 7).

The Commission also certified a Public Works Plan (1-06-PWP) and a Specific Public Works Plan Project (1-06-001-PWP) for the off-bridge components of the project, including public parking, on June 16, 2006. The Commission previously reviewed the project and conditionally concurred with Federal Consistency Compliance Certification (CC-074-05) in November 2005 (revised findings adopted March 2006).

The Commission imposed numerous special conditions in approving CDP 1-06-022. Among these special conditions, the Commission required four conditions that required that the responsive compliance plans be submitted to the Commission for final approval. Caltrans has submitted these four plans, in compliance with:

- Special Condition 1 (Acoustic Monitoring Plan) (Exhibit 1);
- Special Condition 2 (Fisheries Habitat Mitigation/Enhancement Plan) (Exhibit 2);
- Special Condition 4 (Marine Mammal Monitoring Plan) (Exhibit 3); and
- Special Condition 27 (Bird and Bat Nesting/Roosting Features on Bridge) (Exhibit 4).

The Commission also imposed Special Condition 18 (Bridge Rail Design) requiring Caltrans to submit the final design plan for various bridge features, including rails, in the form of a permit amendment for Commission approval within one year of the date of approval of CDP 1-06-022, that is, by June 16, 2007. Caltrans continues to participate in the Commission's Road's Edge Subcommittee (coordinated by the Commission's statewide planning & transportation liaison, Tami Grove).

The Commission staff review of the hydroacoustic, fisheries, and marine mammal-related compliance plans was coordinated by Mark Delaplaine, who supervised the preparation of the staff report and revised findings for Federal Consistency Compliance Certification CC-074-05 (the earliest staff review of the Ten Mile Bridge project) and is the statewide lead staff for matters pertaining to hydroacoustic impacts on fish and marine mammals. Mr. Delaplaine's memorandum summarizing the staff review of the subject compliance plans, prepared in consultation with Commission staff ecologist John Dixon, Ph.D., is attached as Exhibit 6. In addition, Dr. Dixon reviewed the bat/bird plan required by Special Condition 27 and verified that the plan is compliant with Special Condition 27.

5.0 SPECIAL CONDITIONS of CDP 1-06-022

This section sets forth the applicable special conditions of CDP 1-06-022 that require Coastal Commission compliance review at this time. The pertinent special conditions are 1, 2, 4, and 27, are also contained in the adopted findings (Exhibit 7).

Special Condition 1:

1. COMMISSION REVIEW OF FISH INJURY AND ACOUSTIC MONITORING

A. WITHIN NINETY (90) DAYS AFTER COMMISSION APPROVAL OF COASTAL DEVELOPMENT PERMIT 1-06-022, or within such additional time as the Executive Director may grant for good cause, Caltrans shall submit a copy of the final acoustic monitoring plan to the Commission for review and approval at a regularly scheduled public hearing; and

B. The plan shall include a description of how the acoustic footprint will be determined, what equipment/personnel efforts to observe or detect fish reactions to pile driving are proposed, the length of time and number of sound measurement replicates that will be consecutively collected to adequately characterize the sound footprint and maximum hydroacoustic impact generated by project activities, how Caltrans proposes to adequately monitor hydroacoustic affects on fish if visibility is impaired (such as by weather, available light, or turbidity), what criteria will be used for fish injury thresholds, and how such criteria, and fish injury, will be measured. The acoustic footprint monitoring shall provide adequate data point locations (including several hydrophone locations between the proposed 10 meter and 100 meter locations) sufficient to adequately characterize the acoustic footprint. In addition, if sonar monitoring of fish behavior during pile-driving is required by state and/or federal agencies, the method and equipment used to conduct such monitoring, and the means of describing and reporting the results shall be included in the Acoustic Monitoring Plan. The plan shall additionally include any recommendation for species conservation or protection, and any specific requirements or conditions imposed by NOAA National Marine Fisheries Service, U.S. Fish & Wildlife Service, or California Department of Fish & Game; and

C. Project activities that may result in hydroacoustic impacts shall not commence until the Commission has considered the proposed final plan at a regularly scheduled public hearing, which shall be scheduled as soon as practicable after Caltrans submits the final plan. The Commission may require additional measures for the purpose of collecting sufficient information about the affects of pile driving on the fish that inhabit the Ten Mile River.

Special Condition 2:

2. COMMISSION REVIEW OF FISHERIES HABITAT MITIGATION/ ENHANCEMENT PLAN

A. WITHIN NINETY (90) DAYS AFTER COMMISSION APPROVAL OF COASTAL DEVELOPMENT PERMIT 1-06-022, or within such additional time as the Executive Director may grant for good cause, Caltrans shall submit to the Commission a preliminary plan for compensatory mitigation of adverse impacts to fish in the Ten Mile River that are reasonably anticipated through the assessments of state and federal agencies in rendering “Biological Opinions”(or other analyses) applicable to the proposed project. The plan shall include details of the proposed mitigation, including the location, scope of work, objectives, cooperating partners, timeline for completion, and means of verifying project success. The Commission shall consider

the preliminary mitigation plan at the earliest practicable hearing following submittal of the plan by Caltrans; and

B. To the extent that fish habitat enhancement project(s) are proposed to satisfy mitigation obligations, the projects shall benefit the habitat of the affected species proportionally to the impacts sustained by each; and

C. The Plan shall require mitigation of coho and chinook salmon, northern California steelhead trout, and tidewater goby habitat commensurate with the level of unmitigated residual adverse impact on these species determined likely at the anticipated impact threshold (the impacts that would occur if the project does not exceed the expected peak sound pressure threshold); and

D. The Plan shall include a further requirement that if the acoustic footprint monitoring establishes that, or ongoing monitoring document that adverse effects would be more extensive than predicted, additional mitigation commensurate with the level of additional impact shall be required. For example, if the initial assumption will be a defined estimate of numbers of fish exposed to a particular decibel level, and the actual acoustic footprint monitoring shows the footprint exceeds the predicted footprint, additional noise reduction strategies and/or offsite mitigation may be required; and

E. Upon completion of all project activities that may generate hydroacoustic impacts, Caltrans shall submit to the Commission a final report (together with the final acoustic monitoring report required by Special Condition 3 below), estimating the extent of adverse impacts of project activities deemed to have exceeded the levels originally predicted on the four fish species listed above, at any life stage of these species present during pertinent project activities. Caltrans shall describe proposed mitigation in the form of specific habitat improvement projects for the affected species in a manner reasonably proportionate by species and degree of adverse effects sustained, including a timeline to accomplish the proposed mitigation, and the method of verifying successful completion. Alternatively, Caltrans may propose payment of compensatory fees commensurate with the level of impact to some or all of these species, in an amount deemed reasonable by the Commission. Such fees, if required, shall be collected and distributed in accordance with the Commission's direction for projects that would provide direct benefits to the habitat of the affected species within or as close as is feasible to the Ten Mile River or its watershed. In reviewing the proposed mitigation, the Commission shall assign the greatest benefit to projects that provide in-kind, in-location habitat mitigation that benefits the species affected by the Ten Mile River Bridge construction, in preference to projects that provide in-kind but offsite mitigation, with declining value based on increasing distance from the impact site, and shall finally assign the least value to out of kind mitigation; and

F. Caltrans shall submit the final mitigation proposal not later than sixty (60) days after project completion, and the Commission shall consider the final mitigation proposal at the earliest practicable hearing following submittal of the plan by Caltrans.

Special Condition 3:

3. REVISED MARINE MAMMAL MONITORING PLAN.

WITHIN 90 DAYS AFTER COMMISSION APPROVAL OF CDP 1-06-022, Caltrans shall submit for the review and approval of the Commission, a revised Marine Mammal Monitoring Plan that provides that the Executive Director shall receive timely copies of all pertinent reports generated, and prohibits construction during periods of reduced visibility (i.e., the observer must be able to see the required distance, or pile driving may not commence until visibility has improved and the observer can verify that the area is clear of marine mammals).

Special Condition 27:

27. FINAL PLAN FOR INCLUSION OF BIRD AND BAT NESTING/ROOSTING FEATURES ON BRIDGE

Within one year following Commission approval of CDP 1-06-022, and by the time the final bridge rail design is submitted for final Commission review and approval, Caltrans shall submit for the Commission's review and approval a plan, including applicable revised project plans and/or construction drawings to scale, to incorporate bird and bat nesting and roosting habitat into the final bridge plan. The plan and supporting documents shall show features of the project that have been designed in consultation with a qualified biologist with expertise in the subject area, to ensure that the new bridge provides extensive and species-appropriate, permanent nesting and roosting habitat designed to attract and support bridge-nesting or roosting birds and bats. The plans shall include an attached explanation prepared by the consulting biologist of the selection and extent of design features and identification of the target species for which the habitat features have been designed, with annotated citations of supporting research and reference literature.

6.0 COMPLIANCE

The Commission's permit conditions adopted on June 16, 2006 (and set forth above in Section 4.0 and in the adopted findings attached as Exhibit 7), included requirements that Caltrans submit, for Commission review, revised monitoring and mitigation plans, including:

- (1) a final fish injury and acoustic monitoring plan, which includes predator monitoring plans;
- (2) a final fish habitat enhancement/mitigation plan
- (3) a final marine mammal monitoring plan; and
- (4) a final bird/bat nesting/roosting plan.

The conditions also required Caltrans to commit to providing ongoing monitoring reports to the Commission staff, as well as to coordinate, and to submit for Commission staff review and approval, any future changes to the monitoring protocols.

Commission staff has reviewed the pertinent compliance plans submitted by the permittee (California Department of Transportation) and determined that the plans comply with the requirements of Special Conditions 1, 2, 4, and 27. The memorandum of review prepared by Federal Consistency Supervisor Mark Delaplaine in consultation with Commission staff ecologist John Dixon, Ph.D., is attached hereto as Exhibit 6. Staff has also consulted with California Department of Fish & Game (CDFG), NOAA Fisheries, US Fish & Wildlife Service, and with technical consultants retained by the Caltrans, as well as with biologists from various Caltrans departments with special expertise in construction and related hydroacoustic concerns. In addition, Dr. Dixon specifically reviewed the bird/bat nesting/roosting plan and conferred with Humboldt State University staff with special knowledge of northern California bat ecology.

The Commission's conditions and findings associated with fish injury and acoustic monitoring, and marine mammal monitoring, include the following:

The plan shall include a description of how the acoustic footprint will be determined, what equipment/personnel efforts to observe or detect fish reactions to pile driving are proposed, the length of time and number of sound measurement replicates that will be consecutively collected to adequately characterize the sound footprint and maximum hydroacoustic impact generated by project activities, how Caltrans proposes to adequately monitor hydroacoustic affects on fish if visibility is impaired (such as by weather, available light, or turbidity), what criteria will be used for fish injury thresholds, and how such criteria, and fish injury, will be measured. The acoustic footprint monitoring shall provide adequate data point locations (including several hydrophone locations between the proposed 10 meter and 100 meter locations) sufficient to adequately characterize the acoustic footprint. In addition, if sonar monitoring of fish behavior during pile-driving is required by state and/or federal agencies, the method and equipment used to conduct such monitoring, and the means of describing and reporting the results shall be included in the Acoustic Monitoring Plan; ...

The Commission's conditions and findings specified that the marine mammal monitoring plan include:

the requirement that construction may not commence in the event of reduced visibility (i.e., the observer must be able to see the required distance, or pile driving may not commence until visibility has improved and the observer can verify that the area is clear of marine mammals). Caltrans shall submit a copy of the revised plan to the Executive Director prior to commencement of in-water construction activities.

Since the Commission's decision, Caltrans has revised and updated its monitoring plans and commitments and met with the Commission and other agency staffs to discuss the revisions. Based on the most recent of these meetings, Caltrans has submitted a revised Hydroacoustic Monitoring Plan for the Ten Mile River Bridge Replacement Project, dated January 19, 2006 (copy attached), which contains modifications Caltrans has agreed to incorporate based on the discussions with the Commission and other agency staffs, including detailing how and where the monitors will take measurements of the pile driving sounds and how they will characterize the acoustic footprint from the pile driving. The hydroacoustic monitoring will be supplemented by monitoring unusual predation, as discussed in Caltrans' "Fish Relocation, Avian and Marine

Predation, and Water Temperature Monitoring Plans for the Ten Mile River Bridge Replacement Project,” (dated September 28, 2006), and by the Marine Mammal Monitoring Plan (dated March 3, 2006). These latter two plans are supplemented by additional commitments and clarifications contained in Caltrans’ December 8, 2006, Memo entitled “Response to the California Coastal Commission memo of 10-25-06” (copy attached).

Among other measures, the revised Hydroacoustic Monitoring Plan specifies that:

- 1) monitors will take fixed measurements at 10 and 100 meters (m);
- 2) where feasible, monitors will take measurements closer than 10 m;
- 3) using a boat monitors will take various other (i.e., drifting) measurements, including attempting to locate the loudest noise levels, and including at least measurements at 25 m and 50 m (and using accurate GPS data to identify all distances); and
- 4) Caltrans will submit for Commission staff review and approval any changes to the monitoring, including but not limited to any request to discontinue or reduce levels of acoustic monitoring once Caltrans believes it has adequately characterized the sound footprint.

The plan also reiterates:

- a) that all feasible physical measures have been incorporated that would reduce sound levels;
- b) the goal is that sound levels will not exceed 190 dB at 10 meters;
- c) that Caltrans will measure sound exposure levels (SELs), in addition to instantaneous peak and RMS sound pressure levels;

The plan includes the following discussion:

There will be up to four hydrophones deployed around the cofferdam. The hydrophones will be located 10m from the center of each side of the cofferdam where the water depth is greater than 1m. These measurements will then be compared to the project’s threshold of 190 dB Peak. Measurements at the stationary positions will be conducted with the instrumentation located on small rafts that would be tethered to a buoy or anchored to the bottom. This is a proven method of deploying hydrophones on marine construction projects, utilized on numerous projects previously. There will be one stationary measurement site located 100 meters from the cofferdam. The direction and location will depend upon where the cofferdam is located in the river. For the two piers located near the shore, the stationary location would be located 100 meters normal to the shore towards the center of the estuary. During the driving of the pier located near the middle of the channel, the 100 meter stationary position would be selected based on hydroacoustic monitoring results previously obtained on the project. In addition, there will be a monitor in a boat drifting outward from the source taking

hydroacoustic measurements. There will be observations of peak noise levels at increasing distances up to at least 100 meters from the source, to characterize the noise field and determine locations of maximum noise levels. Measurements from the boat will be made at intermediate distances of 25 meters and 50 meters from the cofferdam in directions upstream, downstream, and normal to the cofferdam. Additional drift measurements will be used to determine if there are any isolated areas of higher-than-expected sound pressure in between the defined monitoring distances. As stated in the previous section changes to this monitoring process may be necessary to fit site conditions. Underwater sound levels would also be measured any time a change in hammer type or size occurs. Additionally, as described in the “Data Reporting” section of this plan, if underwater SPLs for each pile type and size do not vary to a large degree, then, pursuant to CDFG 2081 Incidental Take Permit Section 4.3.12, Caltrans will provide a written request to the CDFG to discontinue hydroacoustic monitoring. Caltrans will also provide a written request to the Coastal Commission Executive Director to discontinue hydroacoustic monitoring.

For these reasons, and as further stated below, the compliance plans for hydroacoustic & predation monitoring, and the marine mammal monitoring plan, as revised and submitted by Caltrans (attached as Exhibits 1 and 3) are compliant with the requirements of Special Conditions 1 and 4 of CDP 1-06-022.

Fish Habitat Enhancement/Mitigation - Special Condition 2:

After the Commission approved CDP 1-06-022 in June, 2006 Caltrans completed negotiations with the California Department of Fish and Game and other federal agencies concerning the project's potential impacts on fish. As memorialized in Caltrans' memorandum to CDFG (Exhibit 8, Part 1), Caltrans agreed to accept a restriction on underwater sound pressure levels during pile driving as the key means of avoiding significant impacts on the fisheries of the Ten Mile River. The limit Caltrans accepted is described above, in the discussion of the hydroacoustics monitoring plan, and is set at 190 decibels (dB) at 10 meters from the pile being driven. This limit also applies to potential exceedances of the 190-decibel limit in locations further than 10 meters from the pile being driven, as sound pressure levels may be higher in some cases further from the source.

The agencies have agreed that if the underwater noise levels do not exceed this limit, significant impacts to fisheries are unlikely. As a result, specific mitigation for adverse impacts to fish are not proposed in the plan submitted to satisfy Special Condition 2, although Caltrans has included as a conservation measure recommended by CDFG, a fish passage enhancement project along Dunn Creek, north of Westport, just inland from the coastal zone. However, Special Condition 2 requires, and Caltrans has agreed, that if the 190-decibel-limit is exceeded and the increased sound pressure measured above the 190-decibel-limit is determined to be biologically significant by the Executive Director, additional mitigation will be required. In that case, Special Condition 2 (E) requires Caltrans to submit a final report for review by the Commission that addresses the impact of fisheries and proposes mitigation. Specifically, Caltrans has provided a memorandum dated January 24, 2006 (Exhibit 5) which states in pertinent part:

“...For clarification, the fish passage enhancement project located at Dunn Creek (SR1, Post Mile 92.83) and referenced in the (Fish Passage Enhancement/Mitigation Site and Proposal) will act as a conservation measure (pursuant to CDP 1-06-022, Special Condition 2). Monitoring reports containing the decibel levels measured in the field during pile driving will be submitted to the Coastal Commission, NOAA Fisheries, CDFG, and USFWS as required in the permits and authorizations of the respective agencies. If the decibel levels exceed 190 dB (decibel) peak at 10 meters from the pile being installed, Caltrans will confer with the agencies to determine whether the increased decibel levels are significant and/or warrant remedial action. Caltrans hereby confirms that for the purpose of continuing compliance with Special Condition 2 of CDP 1-06-022, if the Executive Director, after consultation with NOAA Fisheries, CDFG, USFWS, and Caltrans biologists, determines that the exceedance of the 190 decibel level (at 10 meters) limit is of biological significance, additional mitigation may be required pursuant to the requirements of CDP 1-06-022.”

In summary, Caltrans has submitted a fisheries habitat enhancement/mitigation plan (Exhibit 2). The plan proposes the implementation of fish passage improvements of particular benefit to coho, including, as stated above, a proposal for improvements at a location known as Dunn Creek (discussion commences on page 4 of Exhibit 2). Caltrans proposes to construct improvements to fish passage as a conservation measure for coho, pursuant to requirements imposed by CDFG, and to avoid impacts to fisheries by restricting the peak sound pressure levels as stated above. Caltrans has clarified that the agency is committed to providing further mitigation consistent with the requirements of Special Condition 2 if the acoustic limits are exceeded in a manner deemed biologically significant by the Executive Director as noted above .

For these reasons, and as further stated below, the compliance plan for fisheries habitat enhancement/mitigation, as submitted and as clarified by Caltrans (Exhibits 1 and 5) is compliant with the requirements of Special Condition 2 of CDP 1-06-022.

Bird/Bat Nesting/Roosting Plan: Special Condition 27

Caltrans has submitted a bird and bat nesting/roosting plan (Exhibit 4) based on further field surveys completed by Caltrans biologists with specific expertise in bat ecology and bat survey techniques after the June 16, 2006 Commission hearing. The surveys, documented in Exhibit 4, concluded that only a small number of bats utilize the existing bridge, and only for occasional night roosting. Caltrans biologists further concluded that no maternity use of the bridge occurs by bats because ambient temperatures in the Ten Mile River area are too cold for this purpose. The Caltrans biologists also reviewed the new bridge plans and concluded that the openings into the extensive network of bridge cavities suitable for use by bats would be increased in the new bridge, and that no aspect of the bridge design would create a barrier for bats, or limit nesting use of the bridge by birds.

Caltrans has additionally committed to leaving the existing bridge fully in place until the end of the swallow nesting season of the year that demolition is scheduled (which will not occur until after the new bridge is completed). Thus, continuously available nesting/roosting habitat will be provided for bat and bird species using the bridge. Caltrans biologists have additionally

confirmed that the new bridge design includes the same ledge features that attract swallow nesting presently. The new bridge will be longer and wider than the existing bridge, increasing the total amount of internal and external nesting/roosting habitat available for bridge-nesting birds and roosting bats after construction is completed. At the request of Commission staff, Commission ecologist John Dixon, Ph.D., additionally reviewed the plan and also consulted with Humboldt State University staff with expertise in bat biology. Dr. Dixon concluded that the plan is compliant with the requirements of Special Condition 27.

For these reasons, and as further stated below, the compliance plan for bird/bat roosting/fisheries habitat enhancement/mitigation, as submitted and supplemented by Caltrans (Exhibit 4), is compliant with the requirements of Special Condition 27 of CDP 1-06-022.

Commission Conclusion:

The Commission agrees that with the revisions included in the current hydroacoustic monitoring plan and other above-described commitments, the plan is consistent with the Commission's conditions because it contains sufficient data points and appropriate methodology adequate to characterize the acoustic footprint, describes the criteria used for fish injury thresholds, sufficient to enable a determination of maximum sound levels, will report results to the Commission staff, and will seek Commission staff authorization for any changes to the plan. The Commission also agrees that with the additional commitments on the marine mammal monitoring and avian predation plans, these plans are also adequate to comply with the Commission's conditions. However, the Commission also finds that in the event the monitoring results establish that the acoustic thresholds are being exceeded (i.e., in the event Caltrans' pile driving exceeds 190 dB, as defined by NMFS' BO, Condition 19 [under which an exceedance would occur "If underwater sound produced during five or more strikes on a single day exceeds the anticipated level of 190 dB peak at 10 meters from the pile being installed]), the Commission retains the authority to "reopen" its federal consistency authorization (CC-74-05) under 15 CFR Sections 930.65 and 930.66). In addition, Condition 2 of the Commission's permit (CDP No. 1-06-022) also triggers additional mitigation requirements in the event sound levels exceed the predicted 190 dB limit (at 10 meters).

The Commission further concludes that the fish habitat enhancement/mitigation plan is sufficient to achieve compliance with Special Condition 2, given that the plan provides that as stated above, exceedance of the applicable noise thresholds will be evaluated for biological significance, and if deemed warranted by the Executive Director, additional fisheries mitigation measures will be implemented by the permittee.

Finally, the Commission agrees, in light of the further evaluation provided in the bird/bat nesting and roosting plan, that the plan confirms that adequate bird/bat nesting/roosting habitat will be supplied by the new bridge design. The new bridge design, combined with the permittee's commitment to preserve and make continuously available the old bridge until the new bridge is completed, and to demolish the old bridge only after the pertinent nesting season is completed further ensures that nesting/roosting habitat is available at all times during and after project construction.

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For all of these reasons, therefore, the Commission finds that the plans attached in Exhibits 1, 2, 3, and 4 are compliant as revised and submitted, with the requirements of Special Conditions 1, 2, 4, and 27 of CDP 1-06-022.

[Click Here to See the exhibits.](#)