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Staff Report:	August 29, 2002
Hearing Date:	September 11, 2002
Commission Action:	

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.:	**1-02-031**
APPLICANT(S):	**Blake and Stephanie Alexandre**
PROJECT LOCATION:	On the exposed Saxton Gravel Bar in the Smith River, 0.7 miles downstream from the Dr. Fine Bridge (US 101), in the Smith River Area of Del Norte County. APNs 105-020-06, -07, & -10.
PROJECT DESCRIPTION:	Extraction of up to 14,000 cubic yards of sand and gravel aggregates during the 2002 gravel extraction season (between June 1 and October 15) with 7,000 cubic yards extracted from a 300-ft.-long x 40-ft.-wide x 15-ft.-deep "alcove" trench and approximately 7,000 cubic yards extracted by shallow skimming of the exposed gravel bar.
PLAN DESIGNATION:	RCA-1, General Resource Conservation Area.
ZONING:	RCA-2(e)(r), Designated Resource Conservation Area – estuary, riparian vegetation.
LOCAL APPROVALS RECEIVED:	Del Norte County Use / Coastal Development Permit No. UP9203, issued on July 11, 2001 for a four extraction season term expiring on February

	1, 2005, and annual mining plan authorization for 2002 season, issued May 1, 2002.
OTHER APPROVALS REQUIRED:	California Department of Fish and Game Sec. 1603 Streambed Alteration Agreement; and U.S. Army Corps of Engineers Letter of Modification to Permit No. 26813N.
SUBSTANTIVE FILE DOCUMENTS:	*Smith River Gravel Study*, California Department of Water Resources, January, 1974; *Del Norte County Programmatic Mitigated Negative Declaration for Gravel Extraction on the Lower Smith River and Rowdy Creek*, County of Del Norte, July, 2000; *Amendment Two to Biological Opinion – U.S. Army Corps of Engineers Letter of Permission Procedure Gravel Mining and Excavation Activities within Del Norte, California, LOP 96-2a*, National Marine Fisheries Service, August 16, 2002; and *Candidate Species Review Report 2002-3: Status Review of California Coho Salmon North of San Francisco - Report to the California Fish and Game Commission*, California Department of Fish and Game, April 2002.

SUMMARY OF STAFF RECOMMENDATION

Staff recommends that the Commission approve with conditions the coastal development permit for sand and gravel extraction and temporary stockpiling. The applicant proposes to extract gravel between early September and October 15, 2002, from a gravel bar along the lower Smith River from a site located approximately 0.35 mile downstream from the Highway 101 (Dr. Fine Bridge) crossing. The Commission previously granted a five-year permit for mining at the project site in 1991 (CDP-1-91-191). However, due to the on-going development of multi-year gravel mining permitting protocols by involved federal resource agencies, the current application seeks authorization for a specific extraction proposal for only the 2002 mining season.

Although information is currently being gathered by the National Marine Fisheries Service (NMFS) in anticipation of re-issuance of the U.S. Army Corps of Engineers' (USACE) Letter of Permission (LOP) for gravel mining on the Smith River through 2007, data collection has not been completed. In the interim, the NMFS has issued an amended biological opinion addressing the Corps' administrative extension of the current LOP through the 2002 calendar year. The amended opinion finds that direct or cumulative impacts of gravel mining in 2002 subject to LOP standards would not result

in more than incidental take to federally-listed endangered or threatened salmonid species. The opinion's scope does not support approval of mining activities beyond the immediate extraction season. Without this information, and in the absence of any other information that demonstrates that gravel extraction in future years would not result in significant cumulative or individual adverse impacts to threatened or endangered fish species that cannot be mitigated, the Commission would be unable to find that gravel mining in future years was consistent with the Coastal Act.

The specific gravel extraction plan prepared by the applicant is currently being assessed by the County of Del Norte as part of the annual compliance review of conditional use permits issued for in-stream gravel mining. In addition, under both the County of Del Norte's surface mining regulations and the USACE's LOP process for permitting gravel mining pursuant to Section 404 of the Clean Water Act, gravel mining entities are required to submit gravel pre-extraction plans for a comprehensive hydrologic and geomorphic review and approval by the County and other agencies as a way of ensuring that gravel extraction each year does not exceed the annual replenishment of the site by the river, and that other potential resource impacts from gravel extraction are avoided.

Measures to prevent disturbances to both riverine and terrestrial habitat have been recommended. The bar contains environmentally sensitive riparian vegetation areas. To prevent disturbance of such habitat, staff recommends that the Commission require that the gravel extraction activities be conditioned to avoid environmentally sensitive habitat areas and other locations where gravel extraction could have significant adverse impacts. In recognition of the fact that areas of the bar contain very young vegetation that has not developed to the point where it provides appreciable habitat value, and that the Coastal Act defines environmentally sensitive areas in such a way as to only include riparian vegetation with habitat value, the condition does not ban extraction in all areas containing vegetation, but only those areas where the riparian vegetation has reached a size and extent where there is an expectation of appreciable habitat values for nesting, forage and cover of wildlife being afforded.

In developing the recommended conditions, staff has considered the requirements imposed on the applicants by other regulatory agencies, including the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the California Department of Fish and Game, and the State Lands Commission.

As conditioned, staff believes that the proposed project is fully consistent with the Coastal Act.

STAFF NOTES

1. Jurisdiction and Standard of Review

The site of the proposed surface mining project is within a gravel bar within the Smith River, ¾ mile downstream of the State Highway 101 Doctor Fine Bridge. The project is located within the Coastal Commission's area of original or retained jurisdiction (see Exhibit No. 3). Thereby, the standard of review that the Commission must apply to the project is the applicable Chapter 3 policies of the Coastal Act.

I. MOTION, STAFF RECOMMENDATION, AND RESOLUTION

The staff recommends that the Commission adopt the following resolution:

Motion:

I move that the Commission approve Coastal Development Permit No. 1-02-031 pursuant to the staff recommendation.

STAFF RECOMMENDATION OF APPROVAL

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of the majority of the Commissioners present.

Resolution to Approve Permit:

The Commission hereby approves a coastal development permit, subject to the conditions specified below, for the proposed development on the grounds that, as conditioned, the development will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either: (1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment; or (2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS: See attached.

III. SPECIAL CONDITIONS:

1. State Lands Commission Review

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director, a written determination from the State Lands Commission that:

a. No State lands are involved in the development; or

b. State lands are involved in the development and all permits required by the State Lands Commission have been obtained; or

c. State lands may be involved in the development, but pending a final determination an agreement has been made with the State Lands Commission for the project to proceed without prejudice to that determination.

2. Run-Off Control Plan

A. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT,** the applicant shall submit, for the review and approval of the Executive Director, a plan for run-off control to avoid significant adverse impacts on coastal resources. The runoff control plan shall include, at a minimum, the following components:

(1) The erosion control, run-off, spill prevention and response plan shall demonstrate that:

(a) Run-off from the gravel mining extraction and stockpiling sites shall not increase sedimentation in coastal waters;

(b) Run-off from the gravel mining extraction and stockpiling sites shall not result in pollutants entering coastal waters;

(c) Best Management Practices (BMPs) shall be used to prevent entry of polluted storm water runoff into coastal waters during the transportation and storage of excavated materials, including but not limited to a suite of the following temporary erosion and runoff control measures, as described in detail within in the "California Storm Water Best Management Commercial-Industrial and Construction Activity Handbooks, developed by Camp, Dresser & McKee, *et al.* for the Storm Water Quality Task Force, shall be used during mining: *Spill Prevention and Control* (CA12), *Vehicle and Equipment Fueling* (CA31), *Vehicle and Equipment Maintenance* (CA32), *Employee / Subcontractor Training* (CA40), and Dust Control (ESC21);

(2) A narrative report describing all temporary runoff control measures to be used during mining;

(3) A site plan showing the location of all temporary runoff control measures; and

(4) A schedule for installation and removal of the temporary runoff control measures.

B. The permittee shall undertake development in accordance with the approval final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

3. Gravel Extraction Plan

A. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT,** the applicant shall submit, for the review and written approval of the Executive Director, a gravel extraction plan consistent with the terms and conditions of this permit and that contains the following:

(1) A gravel extraction plan of the 2002 gravel extraction operation containing cross-sections, maps, and associated calculations that accurately depict the proposed extraction area, demonstrates that the proposed extraction will be consistent with the extraction limits specified in Special Condition No. 4 below, and is prepared in conformance with Appendix C of U.S. Army Corps of Engineers, San Francisco District Letter of Permission Procedure, Gravel Mining and Excavation Activities in Del Norte County, No. LOP 96-2, dated March 28, 1997, as modified by Letter of Permission Procedure No. LOP 96-2a, dated July 26, 2002;

(2) A pre-extraction aerial photo of the site taken during the spring of the year of mining at scale of 1:6000 and upon which the proposed extraction activities have been diagrammed;

(3) A botanical survey prepared by a qualified biologist with experience in riparian and wetland vegetation mapping approved by the Executive Director, that maps all vegetation found in potential extraction areas of the site and highlights the location and extent of all vegetated areas containing woody riparian vegetation that is either: (i) part of a contiguous riparian vegetation complex 1/16-of-an-acre or larger; or (ii) one-inch-in-diameter at breast height (DBH) or greater. If the areas proposed for extraction are devoid of vegetation, the applicant may substitute the submittal of

photographs (including aerial) that are sufficient in the opinion of the Executive Director to demonstrate that no vegetation exists in the proposed extraction areas in lieu of the botanical survey.

(4) A copy of the gravel extraction plan recommended by the County of Del Norte hydrologist;

(5) A post-extraction survey of the prior year's mining activities (if any) conducted following cessation of extraction and before alteration of the extraction area by flow following fall rains, that includes the amount and dimension of material excavated from each area mined and is prepared in conformance with Appendix C of U.S. Army Corps of Engineer's, San Francisco District Letter of Permission Procedure, Gravel Mining and Excavation Activities within Del Norte County, No. LOP 96-2, dated March 28, 1997, as modified by Letter of Permission Procedure No. LOP 96-2a, dated July 26, 2002;

(6) The results of biological monitoring report data required by the U.S. Army Corps of Engineers as described in Appendix D of U.S. Army Corps of Engineers, San Francisco District Letter of Permission Procedure, Gravel Mining and Excavation Activities within Del Norte County, No. LOP 96-2, dated March 28, 1997, as modified by Letter of Permission Procedure No. LOP 96-2a, dated July 26, 2002.

B. The permittee shall undertake development in accordance with the approved gravel extraction plan. Any proposed changes to the approved gravel extraction plan shall be reported to the Executive Director. No changes to the approved gravel extraction plan shall occur without a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

4. <u>Extraction Limitations</u>

Extraction of material shall be subject to the following limitations:

a. The permittee shall extract material only by gravel skimming, dry trenching, wetland pits, horseshoe-shaped deep skims, or alcove extractions as approved by the National Marine Fisheries Service and the California Department of Fish and Game. If trenching methods are used, a barrier such as silt fencing, straw bales, or sand bags shall be constructed and maintained during trenching along the entire length of the excavated area to prevent turbid water from entering the flowing river. After completion of gravel extraction operations, the permittee shall remove the berm in several locations to prevent the creation of fish traps;

b. The permittee shall extract no more than 14,000 cubic yards of gravel from the site, with no more than 7,000 cubic yards removed by bar-skimming and no more than 7,000 cubic yards removed by trenching of the cold-water refugia alcove;

c. Excavation shall not occur in the active channel and the skimming operation shall be limited to exposed river bar areas a minimum of one (1) vertical foot elevation above the current water surface and a minimum of six (6) feet horizontally from the current water's edge;

d. Extraction quantities shall not exceed the long-term average sustained yield;

e. Mining shall not occur on areas of the gravel bar identified by NMFS as needing protection of hydraulic processes that create and maintain pools and riffles;

f. Gravel extraction operations shall not disturb or remove any of the riparian vegetation on the river banks; and

g. Gravel extraction operations shall not disturb or remove any of the riparian vegetation on the gravel bar that is either: (1) part of a contiguous riparian vegetation complex 1/16 acre or larger, or (2) one-inch-in-diameter or greater at breast height (DBH).

5. Extraction Season

Extraction and all regrading required by Special Condition No. 6 must be completed by October 15. The Executive Director may approve an extension of gravel extraction and regrading activities beyond that date to November 1 if the permittee has submitted a request for an extension in writing and the Executive Director determines that dry weather conditions are forecast for the extension period and any necessary extensions of time have been granted by the Department of Fish and Game, the U.S. Army Corps of Engineers, and the National Marine Fisheries Service. No extraction or regrading activities shall occur between October 15 and November 1 unless the permittee has first received approval of an extension of time from the Executive Director.

6. Seasonal Site Closure

The excavation area must be regraded before October 15, or by the extended date approved by the Executive Director pursuant to Special Condition No. 5 above. Regrading includes: (a) filling in depressions created by the mining; (b) grading the excavation site according to at least a 2% grade; (c) sloping downward to the river channel; and (d) removing all seasonal crossings and grading out the abutments to conform with surrounding topography and removing all temporary fills from the bar.

7. Permit Termination Date

The gravel operations authorized by this permit shall terminate on October 15 unless the Executive Director extends the termination date to as late as November 1, 2002 pursuant to Special Condition No. 5. Continued gravel operations after that date shall require a new coastal development permit.

8. Resource Protection

The gravel extraction and processing operations shall not disturb or remove any of the established riparian vegetation habitat along the banks of the river, nor any of the riparian vegetation on the gravel bar that is either: (1) part of contiguous riparian vegetation complex 1/16 acre or larger; or (2) one-inch in diameter-at-breast-height (DBH) or greater. No new haul roads shall be cut through the habitat. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete, oil or petroleum products, or other organic or earthen material from any gravel extraction or reclamation activities shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into river waters.

9. Permit Amendment

Any proposal to take more than the maximum permitted 14,000 cubic yards of materials, to take more than the amount of gravel sufficiently replenished by the river preceding high-flow season, to increase the size of the permitted area, to extract in a manner contrary to the extraction limitations set forth in Special Condition No. 4 or to make any other changes to the proposed operation shall require an amendment to this permit.

10. Streambed Alteration Agreement

PRIOR TO THE COMMENCEMENT OF ANY GRAVEL EXTRACTION OPERATIONS, the permittee shall submit a copy of any necessary Section 1603 Streambed Alteration Agreement or other approval required by the Department of Fish and Game for the project for the 2002 gravel extraction season. The applicant shall inform the Executive Director of any changes to the project required by the Department of Fish and Game. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

11. U.S. Army Corps of Engineers Approval

PRIOR TO THE COMMENCEMENT OF GRAVEL EXTRACTION OPERATIONS, the permittee shall submit a copy the permit issued by the U.S. Army Corps of Engineers granting approval for the project for the 2002 gravel extraction season, or a Letter of Permission, or evidence that no permit or permission is required.

The applicant shall inform the Executive Director of any changes to the project required by the Army Corps of Engineers. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

IV. FINDINGS AND DECLARATIONS.

A. Site Description.

The project site comprises a portion of the Saxton Gravel Bar, located in the bed of the Smith River about ¾ mile downstream and west of the Highway 101 crossing (Dr. Fine Memorial Bridge) in Del Norte County (see Exhibit Nos. 1 and 2). The Saxton Gravel Bar is one of five gravel bars that are located within the coastal zone along the lower reaches of the Smith River. The lower Smith River flows through a broad alluvial floodplain that is extensively used for agriculture. The project site is within the Commission's retained permit jurisdiction and is not governed by the certified LCP. Lands adjacent to the project site have land use plan designations of Prime Agriculture and Resource Conservation Area (AE, RCA), implemented through a Designated Resource Conservation Area – Estuary, Riparian Vegetation (RCA-2 (e)(r)) zoning district. The County's Smith River Fishing Access, a boat-launch and one-acre parking lot coastal access support facility, is located approximately 400 feet downstream from the lower end of Saxton Bar.

In its present configuration, the perennial main channel of the Smith River runs along the western side of the Saxton Bar with a seasonal channel flanking its eastern side. The seasonal channel is dry during the summer and early fall gravel extraction season. From bank to bank, the river is about 600-700 feet wide in the area of Saxton Bar. However, during the summer and early fall months when low flow conditions prevail, the river is confined to a main channel of approximately 100 feet in width. During this time of year, Saxton Bar has approximately seven acres of exposed surface above the low-water level mark. Access to the gravel bar is via an unimproved gravel road that crosses the seasonal channel and ascends the riverbank to a levee road leading to Fred Haight Drive (see Exhibit No. 4).

The proposed gravel extraction areas were the subject of a wetlands investigation conducted in August, 1994, by Botanica Northwest Associates. An updated vegetation assessment based on recent aerial-photography and site visits compiled in Spring 2002 found site conditions largely unchanged in the portions of the bar proposed for extraction. Among other observations, these investigations note that the bar is subject to hydrologic scouring during high flow periods over the winter and early spring seasons during normal rainfall years. This regime causes vegetative cover on the site to be limited to low-water vegetation characterized mostly by herbaceous and scattered young willows.

The riparian vegetation found on the gravel bar consists of three plant associations: (1) a permanent palustrine woody vegetation complex encompassing areas along the eastern and northeastern side of bar and northern riverbank; (2) a small emergent pond wetland; and (3) a non-persistent palustrine scrub-shrub complex occurs over the open gravel areas on the bar. The banks of the river are 20-30 high and are covered with well-established riparian vegetation dominated by an arroyo willow (Salix lasiopis), Sitka willow (Salix sitchensis) and red alder (Alnus rubra) plant community. These dominants are interspersed with black cottonwood (Populus balsamifera ssp. trichocarpa) with an understory composed primarily of Himalaya blackberry (Rubus discolor), California blackberry (Rubus ursinus), French broom (Genista monspessulana), coyote brush (Baccharis pilularis), and various forbs, ferns and upland grasses. The riparian vegetation along the riverbanks and on the higher portions of the bar supports a variety of wildlife species, including a number of small mammals such as raccoon (Procyon lotor), striped skunk (Mephitis mephitis), gray fox (Urocyon cinereoargenteus), rodents and rabbits, and many bird species that use the area for foraging, nesting and cover.

The small pond is located on the north side of the bar beneath a dense canopy of riverbank trees, approximately 200 feet from the closest extraction area. This water feature has a depth of approximately 18 inches and has long-leafed pondweed (Potamogeton nodosus) growing within its waters. No emergent wetland vegetation was found growing along the perimeter of the pond.

Plant coverage over the exposed bar area ranges from five to ten percent and is dominated by Sweet William (Dianthus barbatus ssp. barbatus), and willow and cottonwood saplings of two to three feet in height. Other common species include goldenaster (Heterotheca oregona var. rudis), Mexican tea (Chenopodium ambrosioides), white sweet clover, (Melilotus alba), Queen Anne's lace (Daucus carota), and English plantain (Plantago lanceolata). Along the river's edge, several hydrophytic plants occur in scattered clumps, including sedges (Carex sp.), rushes (Juncus sp.), and spikerush (Eleocharis macrostachya).

B. Project Description.

The applicants have mined this reach only sporadically, with no mining having occurred during the last five years. Recent and past volumetric assessments (Larue, 1997, 1998, 1999) indicate that erosional losses to the lower end of Saxton Gravel Bar during the 1997-98 high-flow season began to be replenished during the 1998-99 winter. However, due to low rainfall during the 2000-01 and 2001-02 winter months and a corresponding drop in river flows, little replenishment of the Saxton Bar has occurred since the 1996 mining season.

Proposed extraction for the 2002 season would be limited to removal up to 14,000 cubic yards of river-run sand and gravel aggregates from two areas on Saxton Bar using a combination of "bar-skimming" and "back-channel trenching" techniques. A 450-feet-

long by 125- to 175-feet-wide area along the downstream side of the bar adjacent to the river's main channel would be removed by bar-skimming where bands of bar materials are shallowly scraped by mechanized equipment, such as excavators, bulldozers or front-end loaders. The materials would be loaded onto dump trucks and transported to the designated temporary stockpile area on the bar before being transported off the bar for use on the dairy's roads. An estimated 7,000 cubic yards of sand and gravel materials would be removed. Additionally, approximately 7,000 cubic yards of sand and gravel materials would be extracted from a 300-ft.-long x 40-ft.-wide x 15-ft.-deep "U"-shaped dry bar area by alcove-trenching excavation methods. In addition to providing materials for use on the adjoining dairy farm, the alcove trenching would be undertaken in the interest of enhancing river channel passage and habitat utilization for fish and other wildlife. The alcove trench would allow for formation of a cold-water refugia along the riverbank side of the bar's downstream end at the end of the extraction season. The proposed trenching would be subject to specific design and oversight by the California Department of Fish and Game (CDFG).

Following the end of the extraction season in mid-October, the alcove trench would be breached toward the main river channel on its downstream end, once the sub-surface water that seeped into the trench during mining has been allowed to settle. This action is generally required under the CDFG Streambed Alteration Agreements to avoid turbid water discharges and to prevent stranding of fish when the river level recedes in late Spring. In addition, the CDFG requires that trench breaches are similarly sloped to provide a means for trapped animals to escape. (Note: In the early-1990s, a horse fell into and became trapped within the near vertical walls of a former mining trench on the Mad River. With no way to extricate itself, the horse subsequently drowned.)

A channel crossing is not necessary to gain access to the bar because the secondary channel that separates the bar from the bank is dry in the summer. Accordingly, unimpeded access down the river would continue to be available for kayakers and other boaters transiting this reach.

C. Project History / Extraction Methodologies.

Commercial sand and gravel mining has been documented at the Saxton Bar site since the early 1970's, with smaller scale extraction along the lower Smith River document back to 1914. The proposed project seeks authorization of a scaled-down gravel extraction operation that the Commission last approved in December 1991 under Coastal Development Permit No. 1-91-191. Coastal Development Permit No. 1-91-191, issued on September 24, 1992, authorized gravel extraction of up to 40,000 cubic annually for a five-year, expiring on February 1, 1997. The stated intent for extracting gravel is to provide materials for grading the adjoining dairy's ranch roads.

The applicants are requesting to remove a decreased amount of gravel during the 2002 extraction season, acknowledging the lack of recruitment of sand and gravel during the

2001-01 and 2001-02 winter that make continued extraction at past levels unsustainable. In addition, given the limited amount of replenishment that has occurred in the past couple of years on the lower bar, "dry trenching" to form a cold-water refugia alcove on the riverbank side of the bar at its downstream end is also being proposed for 2002 extraction season.

The project requires a coastal development permit from the Commission because the gravel bar is located within the Commission's area of original or retained permit jurisdiction (see Exhibit No. 3). The project before the Commission calls for removing sand and gravel only from the dry-season exposed portions bar and temporarily stockpiling the excavated materials in two areas on the denuded bar prior to being moved off of the bar for use on the adjoining dairy. All processing of the excavated materials will be done away from the gravel bar and outside of the Coastal Commission's permit jurisdiction. The project requires a separate conditional use permit from Del Norte County for surface mining. The local coastal development use permit was approved by the County on July 5, 2000, for a five-year period to expire on February 1 2005. The project was not appealed to the Commission. The local coastal development / use permit is subject to the County's annual review process commencing on February 1st of every year.

Gravel bar extraction operations are seasonal activities. The gravel extraction season usually runs from July 1st to October 15th of each year based on the CDFG's annual Streambed Alteration Agreement, pursuant to Section 1603 of the California Fish and Game Code. This period of time coincides with low water conditions on the river when substantial portions of the gravel bars are exposed and are above the live waters of the river. Mining is to cease on October 15th, unless extended by the reviewing agencies to as late as November 1, based on continued favorable weather. Much of the final two weeks of the season are utilized to remove all mining equipment, conduct all required reclamation practices and winterize the site.

Because of the dynamic nature of sediment transport within river systems, an adaptive management approach must be taken in determining both the most appropriate locations for mining to occur and the least environmentally damaging extraction method to be used. In the past, the applicants have taken gravel from the Saxton Gravel Bar using skimming operations, trenching operations, or a combination of both methods. Over the last decade due to problems associated with past trenching operations, the bar-skimming method has become the primary method of taking gravel from river bars.

Gravel removal by skimming occurs outside of the low-flow channel of the river. In skimming operations at the site, the operator skims gravel from the top of the bar in a manner that creates a shallow-sloped plain rising gently back from the river to the landward edge of the bar. Gravel removal equipment includes front-end loaders, scrapers, pushcats, excavators, or equivalent equipment. Gravel is transported from the extraction site by dump trucks or off-road trucks and stockpiled on the upland portion of

the subject property. After completion of gravel extraction operations, the applicants return the gravel bar to a smoothly graded condition, sloping toward the main channel at no less than a two-percent grade, and without any pits, potholes, trenches, mounds, or stockpiles to prevent the creation of fish traps.

However, bar-skimming should not be viewed as necessarily an environmentally-superior mining technique compared to other forms of extraction. To the contrary, in situations where adequate replenishment has not occurred and the gravel bar profile has been lowered to within one to two feet of the water's surface, continued skimming on the bar could compromise the channel confining properties that the bar affords. If unabated, the loss of vertical diversity within the stream cross section may instigate major alterations in water flow and bedload depositional patterns, resulting in the formation of a shallow, multi-channeled riverbed configuration, or cause other changes in stream morphology with associated impacts to fish and wildlife habitat and water quality. Accordingly, bar-skimming should be considered as one of several mining techniques to be used when site conditions support its application.

By contrast trenching involves the excavation-at-depth of aggregate materials. Removal equipment is generally limited to back-hoes and excavators stationed along the side of the area to be trenched. Materials are removed from the excavation, lifted from the trench and placed directly into a dump truck for transport from the mining site. Trenching can take several forms: (1) "dry-trenching," in which a pit is dug wholly within the bounds of the exposed gravel bar; (2) "wet-trenching," where an area within the wetted channel of the river is de-watered by diversion of the river waters around the site and aggregate materials are removed directly from the riverbed; and (3) "alcove trenching," wherein an off-channel backwater area is excavated at the downstream end of the point bar to create a deep cold-water pocket in which fish may hold during migration periods. In addition, a "modified dry-trenching" technique has also been authorized in the past, where gravel materials are removed from the areas along the margins of the bar that have been separated from the river's waters by coffer damming, water-filled barriers, sheetpile bulkhead, or other types of impoundments.

The applicants propose that they be allowed to perform both skimming on the dry-season exposed portions of the bar and alcove-trenching on the riverbank side of the bar at its downstream end during the 2002 extraction season. Trenching operations have been proposed in the past to: 1) encourage future gravel recruitment; 2) increase the capacity of the low-flow channel; 3) create deep-water habitat for aquatic species; and 4) maintain the geomorphology of the river's bar and riffle, bank, and channel configuration. Trenching has been undertaken at various sites along the Smith River as recently as 2001, and has resulted in geomorphic alterations beneficial to both gravel recruitment and aquatic habitat at the site. The National Marine Fisheries Service (NMFS) currently supports trenching only in very limited situations and subject to special operational standards partly out of concern that such excavation within the live channel may result in

take of juvenile salmonids by the action of the equipment used to extract the gravel and/or disruption of essential behaviors of adult salmonids during migration.

It should be noted that the CDFG Section 1603 Streambed Alteration Agreement issued for Smith River mining operations during the 2001 extraction season limited extraction to trenching to form bar alcove refugia and modified "dry" trenching, where excavation would occur entirely outside of the wet channel on the dry gravel bar. Similarly, under the emergency regulatory actions in place during the candidacy period for the coho salmon, CDFG has suspended authorization for all gravel extraction trenching methods, unless site-specifically approved in advance by Department. The current alcove-trenching proposal was developed in consultation with the Dr. Doug Jager, the County's 2001 contracted mining plan reviewer, and CDFG and NMFS personnel based on a field visit to the Saxton Bar site on July 25, 2002. Issuance of the Streambed Alteration Agreement for the requested skimming and alcove trenching operation is pending.

D. Smith River Resource Issues and Regulatory Background.

Resource Utilization

The Smith River has 11 gravel bars that have been mined on a regular or periodic basis since 1914. Five of these bars are located on the lower Smith River within the coastal zone (i.e., downstream of the Highway 101 / Dr. Fine Bridge). The gravel bars on the Smith River contain a renewable resource of cobbles, gravel, sand, and other rock-derived products. There has been an on-going demand for gravel and aggregate products within Del Norte County because of the construction of a variety of private developments and public facility improvements.

The Smith River and its tributaries are ranked among the most significant anadromous fisheries in Northern California. Chinook salmon (Oncorhynchus tshawyscha), coho salmon (Oncorhynchus kisutch), Klamath Mountain Province steelhead (Oncorhynchus mykiss irideus), and coastal cutthroat trout (Oncorhynchus clarki clarki) are among the most important species with regard to commercial and sports fisheries. The project area and the lower Smith River are mainly utilized by anadromous fish as a migration route to and from upstream spawning grounds. Most spawning areas along the lower Smith River have previously been lost due to sedimentation of this river system, although some main stem spawning use does occur by Chinook salmon.

In addition to the fish and wildlife habitat the river affords, the Smith River is also recognized for its significant recreational and aesthetic values. In 1972, the Smith River was included in the original listing of waterways under the California Wild and Scenic Act (PRC §5093.50 *et seq.*). The reach of river passing through the project site is classified as "recreational." PRC Section 5093.53 defines recreational rivers or river segments as: "...those rivers or segments of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past." Restrictions on land uses along

recreational rivers are not as stringent as those on their "wild" or "scenic" counterparts, and are primarily limited to prohibiting the construction of dams or other permanent diversion structures. The protection and enhancement of recreational uses are stressed with particular emphasis placed on ensuring that river front development does not block or impede recreational access within navigable waters.

The Smith River also provides domestic water supply to many residents of northern Del Norte County, including the City of Crescent City, the unincorporated town of Smith River, and Pelican Bay State Prison. Water is drafted from the river's aquifer through subsurface "Ranney Well" pumps operated by the City of Crescent City and several other community services districts. The current (1997) water consumption rate is approximately 62 million gallons per month.

Regulatory Chronology

Beginning in 1975 with the adoption of the Surface Mining and Reclamation Act or "SMARA" (PRC §2710 *et seq.*), the regulation of gravel mining has been a steadily evolving process. Reauthorization and amendments to the Federal Clean Water Act (CWA) in the early 1990's saw the U.S. Army Corps of Engineers (USACOE) becoming more actively involved in regulating many in-stream gravel operations under the auspices of the CWA Section 404 permit program. The extent of the Corps' CWA Section 404 authority with respect to in-stream gravel mining has subsequently been addressed and modified through several judicial rulings known as the "Tulloch Ruling Decisions."

Until the 1990's, there had been little coordinated review of the combined effects of the various gravel mining operations. An in-stream gravel mining operation can require the approval of a number of different agencies. Permits granted in the past by the various approving agencies were site-specific and granted with little acknowledgement of the cumulative effects of gravel mining.

California Department of Fish and Game Lake or Streambed Alteration Agreements

The California Department of Fish and Game (CDFG) is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the State Legislature in the 1960's enacted Sections 1600 through 1607 of the California Fish and Game Code. These statutes requires that any person, business, state or local government agency, or public utility who proposes an activity that may impact a river, stream, or lake to notify the CDFG prior to commencing the activity. Notification to CDFG is required for activities that will: (a) divert, obstruct, or change the natural flow or the bed, channel or bank of any river stream or lake; (b) use material from a streambed; or (c) result in the disposal or deposition of debris, waste, or other material where it can pass into any river, stream, or lake.

If CDFG determines that the project may adversely affect existing fish or wildlife resources, a Lake or Streambed Alteration Agreement is required. An agreement is

first drafted by the Department containing a list of measures needed to be taken to ensure that fish and wildlife resources are protected. Department staff will then generally work with project proponent to find a mutually acceptable solution, offering suggested ways to modify the project so that harmful impacts to fish and wildlife resources would be eliminated or reduced.

Once the Lake or Streambed Alteration Agreement has been executed between the Department and the project proponent, and all other legal requirements have been satisfied (i.e., the securement of other related permits and authorizations), the proposed activity may be undertaken.

Following the order issued by the County of Mendocino Superior Court on February on February 3, 1999, in Mendocino Environmental Center, EPIC, *et al.* v. California Department of Fish and Game, CDFG initiated changes in its Section 1603 Streambed Alteration Agreement process. The Department now conducts a tiered environmental review of such projects pursuant to the California Environmental Quality Act (CEQA).

County of Del Norte Surface Mining and Reclamation Program

The County of Del Norte regulates surface mining and quarries as a conditional use pursuant to Title 7, Chapter 7.36 of the Del Norte County, adopted as Ordinance No. 77-16 on April 15, 1977. The ordinance contains operational standards and limitations for mining and reclamation activities for the purpose of "keeping with the protection of the public health, safety, convenience, and general welfare." Conditional use permits for gravel mining may be issued for terms up to five years, subject to an annual review of the mining operation's compliance with permit conditions.

In 1999, the County of Del Norte began updating its environmental documentation for the 11 Smith River gravel operations. A programmatic Mitigated Negative Declaration was adopted July 7, 2000. This document updates the previous project analyses conducted during the late 1980's and early 1990's, and incorporates mitigation and monitoring provisions in response to changes in regulatory programs, environmental review requirements, and federal and state threatened and endangered species listings (i.e., coho salmon, steelhead) which have occurred since their preparation. Under the current mitigation and monitoring programs, assessments of river and habitat conditions are conducted annually by the County's hydrologist in consultation with other resource agencies to determine appropriate quantities and areas for extraction for the upcoming season.

Army Corps of Engineers and Section 7 Consultation with NMFS and USFWS

In the fall of 1993, due to an amendment to the Army Corps of Engineers Clean Water Act Regulatory Program, the Army Corps of Engineers (Corps) became more involved in regulating gravel extraction operations. Whereas previously, the Corp's regulatory review of many in-stream gravel extraction operations focused mainly on the installation

of channel crossings and stockpiling of material on the river bar, in 1993, the Corps began actively regulating incidental fill related to gravel mining activities themselves. In an effort to streamline the processing of Corps permits for numerous in-stream gravel operations within Del Norte County, the Corps adopted a Letter of Permission (LOP) procedure for authorizing such projects. On March 28, 1997, the USACOE issued a Letter of Permission No. 96-2 for the Del Norte County in-stream gravel mining operations which established a programmatic framework of extraction performance standards alleviating the need for individual Section 404 permits. The Letter of Permission ran for a five-year period, and expired on March 22, 2002. The LOP was adopted after a series of interagency and public meetings. An applicant for a project covered by the LOP must submit yearly gravel plans and monitoring information to the Corps for approval under the procedure.

The Corps LOP procedure incorporates the County's review process outlined above. In addition, the LOP process requires consultations under Section 7 of the Federal Endangered Species Act. The National Marine Fisheries Service (NMFS) issues a Biological Opinion regarding impacts of gravel extraction to the listed salmonid species. Mitigation measures identified within the biological opinion are incorporated into extraction requirements of the LOP. As more information is gathered or conditions change with respect to the affected listed species, NMFS may initiate consultation wherein a revised interim Biological Opinion is issued, revising operational standards and limitations as may be required to ensure protection of the listed species.

The National Marine Fisheries Service originally issued a Biological Opinion (Opinion) for the Letter of Permission Procedure for Gravel Mining and Excavation Activities within Del Norte County, California (LOP 96-2) in July, 1997. The LOP 96-1 was due to expire in August, 2001. By the late 1990's the listing and candidacy of several anadromous salmonid fish species by the National Marine Fisheries Service (NMFS) resulted in habitat and incidental take consultation requirements under the Federal Endangered Species Act (FESA) to be applied to riverine activities such as gravel mining. These actions included the May 1997 listing of the SONCC coho salmon as a threatened species. On September 12, 1997, NMFS issued a Biological Opinion regarding the USACE's LOP, finding that the implementation of the Corps' gravel mining letter of permission, which expires after the 2001 gravel extraction season, was not likely to jeopardize the continued existence of threatened SONCC coho salmon during the authorized period of mining.

Several other Endangered Species Act listing actions occurred subsequent to the issuance of NMFS' 1997 Opinion. In March 1998, the Klamath Mountain Province steelhead trout became a candidate for FESA listing. NMFS subsequently determined that listing the species was not warranted. In response to the designation of critical habitat areas for the SONCC coho salmon, on September 23, 1999, the USACOE requested NMFS to re-initiate consultation on the Corps' Letter of Permission. NMFS contracted a study to review the efficacy of regulatory efforts to protect listed fish species to date. On

September 5, 2000, NMFS issued its most recent Biological Opinion covering the 2000 and 2001 extraction seasons. The study concluded that the Corps' gravel mining regulatory program was not likely to jeopardize the continued existence of threatened SONCC coho salmon during the authorized period of mining. In June, 2001, the Corps extended the expiration date of LOP 96-2 to March 28, 2002 and requested an amendment to the duration of the 2000 Biological Opinion which analyzed the extended duration of the proposed gravel extraction activities.

NMFS began working with the Corps, other agencies, and Del Norte County gravel operators and their consultants during the winter of 2001-2002 on a replacement LOP procedure anticipated to be in place for the 2002-2007 extraction seasons (LOP 2002-2). A draft LOP 2002-2 was circulated for public comment in May, 2002 at which time it became apparent to involved agencies that several issues could not be resolved prior to the 2002 mining season. As a result, to enable gravel extraction to be authorized for the 2002 gravel mining season, the Corps decided to further extend LOP 96-2 (re-enumerated as "LOP 96-2a") through December 31, 2002. Based on input provided by NMFS during circulation of the draft LOP 2002-2, the Corps attached seven additional mitigation measures to the mining conditions to offset potential impacts associated with wetted channel extraction and other operations that involved low-flow channel diversions (see Exhibit No. 6). The Corps requested that NMFS again amend the 2000 Biological Opinion to analyze the extended duration of LOP 96-2a. The requested amended opinion was issued on August 16, 2002 (see Exhibit No. 7).

The amended Biological Opinion incorporates newly available information that was not previously analyzed in the 2000 biological opinion. In addition, the amended Opinion incorporates changes to the project description and listed effects of gravel mining and extraction activities for the proposed extended duration of LOP 96-2a. In the amended Opinion, NMFS concludes that extending the LOP 96-2 procedures for gravel mining operations during 2002 "is not likely to jeopardize the continued existence of SONCC coho salmon or destroy or adversely modify its designated critical habitat."

Currently, NMFS has returned to preparing a Biological Opinion in response to a consultation request from the Corps of Engineers for an LOP procedure addressing mining activities during 2003 through 2007. It is likely that recommendations for more comprehensive habitat management measures may result which could affect standards for gravel mining operations. NMFS and the Corps expect that a new LOP will be implemented prior to the 2003 gravel extraction season.

Proposed Listing of Coho Salmon Under the California Endangered Species Act

On July 28, 2000, the California Fish and Game Commission (CFGC) received a petition from the Salmon and Steelhead Recovery Coalition requesting that the coho salmon north of San Francisco (i.e., Southern Oregon / Northern California Coast Environmentally Significant Unit or "SONCC Coho ESU") be listed as an endangered species under the California Endangered Species Act (CESA). The petition described runs of coho as

having declined 90 percent in the past 30 years, to stand at 1 percent of the historic levels. CFGC subsequently forwarded the petition to the California Department of Fish and Game (CDFG) to review the petition and determine whether acceptance of the petition would be appropriate. On April 5, 2001, the CFGC accepted the petition for listing, initiating a 12- to 14-month review period by CDFG in which appropriate recommendations on the requested listing were to be developed. During that period, the protection granted to listed species under the CESA was extended to candidate species, specifically prohibiting taking of the species without the express consent of CDFG.

On April 27, 2001, the CFGC published a notice of findings declaring the coho a candidate species (see Exhibit No. 8). Pursuant to Section 2084 of the Fish and Game Code, CDFG also adopted a Statement of Proposed Emergency Regulatory Action for the species' candidacy period (see Exhibit No. 9). The so-called "2084 rules" establish a variety of performance standards for various types of in-stream activities, including gravel mining, that are to be required as part of any Streambed Alteration Agreements issued by CDFG. The standards are intended to minimize potential impacts to the coho during its listing candidacy.

In April 2002, the CDFG released Candidate Status Review Report 2002-3, "Status Review of California Coho Salmon North of San Francisco." The report concluded that CDFG had found that while a CESA "endangered" listing was not warranted at this time, the SONCC Coho ESU was in serious danger of becoming extinct throughout all or a significant portion of its range. Accordingly, CDFG recommends that the CFGC list the SONCC Coho ESU as "threatened." Although the CFGC received the status review report at its June 20, 2002 hearing, no action was taken on the listing. The CFGC had originally planned to begin accepting public testimony and discussing the proposed listing at its August 1, 2002 meeting. However, on July 25, 2002, the Salmon and Steelhead Recovery Coalition requested the CFGC to delay consideration of its petition to list coho salmon north of San Francisco as an endangered species until its August 30, 2002 meeting.

Inter-agency Coordination

The regulatory developments described above underscore how close multi-agency review coordination and a comprehensive approach to river management of in-stream surface mining projects may be the only way in which permitted operations will be sustainable in the future. To this end, beginning in the Spring of 2001 and continuing in 2002, meetings between the various regulatory agencies involved in Smith River mining were initiated. The purpose of these workshops was to foster a greater understanding of the roles and concerns of each agency and to promote greater efficiency in the review and permitting of gravel mining proposals. Among others, participants have included staff from the USACOE, CDFG, NMFS, U.S. Fish and Wildlife Service, California Department of Conservation – Office of Mine Reclamation, County of Del Norte, City of Crescent City, the University of California – Sea Grant Program, and the Coastal Commission.

E. Protection of Riverine Environment.

The proposed project involves the surface mining extraction of sand and gravel from the lower Smith River using heavy mechanized equipment for grading and dredging operations. Several Coastal Act policies address protection of the portion of the river environment below the ordinary high water mark from the impacts of development such as gravel mining. These policies include Sections 30231 and 30233. Section 30231 applies generally to any development in riverine environments and other kinds of water bodies in the coastal zone. Section 30233 applies to any diking, filling, or dredging project in a river and other coastal waters. Gravel extraction within a riverbed is a form of dredging within coastal waters.

Section 30231 of the Coastal Act states, in applicable part:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes... shall be maintained and, where feasible restored...*

Section 30233 of the Coastal Act states, in applicable part:

> *(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*
>
> ...
>
> *(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
>
> ...
>
> *(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary...*

The above policy sets forth a number of different limitations on what fill and dredging projects may be allowed in coastal waters. For analysis purposes, the limitations can be grouped into four general categories or tests. These tests are:

1. That the purpose of the fill and dredging is for one of the eight uses allowed under Section 30233;

2. That feasible mitigation measures have been provided to minimize the adverse environmental effects; and

3. That the project has no feasible less environmentally damaging alternative;

4. That the biological productivity and functional capacity of the habitat shall be maintained and enhanced where feasible.

1. Permissible Use for Dredging and Filling of Coastal Waters

The first test set forth above is that any proposed fill, diking or dredging must be for an allowable purpose as enumerated under Section 30233 of the Coastal Act. The proposed project involves dredging for mineral extraction. Section 30233(a)(6) specifically allows dredging for mineral extraction as a permissible use, provided the activity is not undertaken in environmentally sensitive areas. Therefore, to the extent that the proposed gravel extraction will avoid environmentally sensitive areas, the proposed project is consistent with the use limitations of Section 30233(a)(6).

As currently designed and limited to the 2002 extraction season, the proposed project does not have the potential to affect environmentally sensitive areas. The environmentally sensitive habitat consists of various types including riparian scrub habitat occurring on high points within the bank full channel of the river and along the riverbanks as well as the live waters of the river which is habitat for threatened salmonid species. The proposed mining project would be located in areas that would avoid intrusion into these habitat areas and/or be performed at times when sensitive species were not utilizing the site for habitat. Descriptions of the habitats and their use by wildlife are found in the Findings Section IV.A, "Site Description," of this report.

Riparian Vegetation as Environmentally Sensitive Habitat

The Coastal Commission has previously determined in numerous permit actions that most forms of riparian vegetation are environmentally sensitive habitat areas because they are especially valuable and easily disturbed by human activities. The Commission has consistently conditioned permits for development near riparian woodlands along streams and rivers to avoid disturbances of riparian areas where mature vegetation exists.

Some of the riparian coastal scrub-shrub vegetation on the gravel bar is inundated during high flows and is often uprooted and scoured by river flows. The hydrodynamics of the river can cause the channel itself to migrate over time, which in time can eliminate more stands of riparian scrub vegetation from one year to the next. As a result, much of the vegetation is young, having only grown a season or several seasons since the time of the last inundation severe enough to remove the plants previously growing there.

Given that some of this riparian vegetation is very new and underdeveloped, it may not provide habitat values sufficient enough for the areas to be characterized as environmentally sensitive.

Section 30107.5 of the Coastal Act defines "environmentally sensitive area" as:

> *Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in the ecosystem and which could be easily disturbed or degraded by human activities and developments.*

Under this definition, any area supporting a plant, animal, or habitat is environmentally sensitive if the area meets two main criteria: (1) the plant, animal, or habitat is either rare or of special value because of their unique nature or role in the ecosystem, and (2) the area could be easily disturbed or degraded by human activities and developments. The non-persistent scrub-shrub riparian areas clearly meet the second criterion in that the gravel extraction materials on the river bar, such as proposed by the applicant, can quickly obliterate any of the habitat the extraction activities comes in contact with. With regard to the first criterion, the riparian scrub-shrub vegetation is not rare, as it usually does not contain rare or endangered species and can be found extensively on the many gravel bars along North Coast waterways. However, such vegetation can be considered especially valuable and therefore also meet the second criterion. In general, riparian vegetation must grow to a certain size and mass before it can begin to contribute significantly to the river ecosystem. A willow sprig growing in isolation that has just taken root and only rises a few feet out of the ground cannot provide much forage area, nesting opportunities, or much screening from predators for birds and other animals who choose to use it. As the sprig grows taller, however, and as more riparian plants colonize the surrounding area, the sprig, and the plants now growing in association with it, can start to provide forage, nesting, and cover opportunities that make it especially valuable habitat and therefore an environmentally sensitive area.

There is no clear-cut answer to the question of just when in the growth and development of riparian scrub-shrub vegetation it reaches the point where it can be considered environmentally sensitive. In discussions with the California Department of Fish and Game staff, Commission staff has learned that no specific plant height and diameter, coverage, age, etc. thresholds exist for riparian vegetation that define when habitat value is sufficient to categorize the vegetation as environmentally sensitive. Part of the reason for this uncertainty is that there can be tremendous variability in the values of riparian vegetation of the same size from one location to the next depending on such factors as surrounding habitat and vegetation, surrounding land uses, river configuration, etc.

One existing standard that may provide useful guidance for determining when riparian scrub-shrub vegetation reaches the point of becoming environmentally sensitive is a standard imposed in the USACE Letter of Permission (LOP) Procedure authorizing

gravel mining in Del Norte County. The LOP, which was first issued in 1997, was developed by the Corps after a number of interagency meetings and consultations with representatives of various state and federal resource agencies. The LOP sets a number of restrictions on the gravel extraction projects that it authorizes. One such restriction concerns riparian vegetation. The restriction states as follows:

> All riparian and woody vegetation and wetlands must be avoided to the maximum extent possible. Any riparian vegetation or wetland that is to be disturbed must be clearly identified by mapping. Woody vegetation that is part of a contiguous 1/8-acre complex or is at least two inches in diameter breast height (DBH) must be mitigated if it is disturbed. Impacts to other woody vegetation must be described and a summary submitted to the Corps and CHERT with the gravel extraction plans. These impacts may require mitigation at the discretion of the Corps...

The restriction establishes a threshold for when impacts to riparian vegetation must be mitigated. The threshold is reached any time the riparian area that would be disturbed contains woody vegetation that is part of a contiguous 1/8-acre complex or is at least two inches (2") diameter at breast height.

The U.S. Army Corps of Engineers administers its permit program under Section 404 of the Clean Water Act (and the related Section 10 of the Rivers and Harbors Act of 1899). This administration does not limit mineral extraction in coastal wetlands and other coastal water bodies to the same extent that Coastal Act Section 30233 does. As previously stated, Section 30233(a)(6) only allows the dredge or fill of open coastal waters for mineral extraction if the mineral extraction occurs outside of environmentally sensitive areas. Although the Corps can allow mineral extraction in an environmentally sensitive area so long as mitigation is provided, the Commission cannot allow mineral extraction within an environmentally sensitive area at all. Thus, the Corp's purpose in determining when mitigation should be required is not the same as determining when riparian vegetation reaches a level of growth and development such that it should be considered environmentally sensitive.

By requiring mitigation whenever a riparian vegetation area that is to be disturbed contains woody vegetation that is part of a contiguous 1/8-acre complex or is at least 2 inches DBH, the Corp's LOP indicates that vegetation at this level already is providing habitat value. Otherwise, if the vegetation were not providing habitat value there would be no need for mitigation. Therefore, the Commission finds that the riparian vegetation must reach a form of growth and development where it provides important habitat values at some point before the Corps threshold is reached. Acknowledgement of this fact is contained in the rest of the Corps standards which indicate that impacts to other woody vegetation not rising to the threshold level must also be described and submitted to the Corps and may require mitigation at the discretion of the Corps.

In discussions with CDFG staff, Commission staff has discerned that under average growing conditions, a willow tree that is one inch (1") in DBH or part of a contiguous 1/16-acre complex would likely have survived for one growing season. Given that riparian vegetation is only becoming established during the first growing season, the vegetation may not provide significant habitat value at this point. On the other hand, vegetation that has survived more than one growing season would be established and likely to be used by wildlife. Therefore, the Commission finds that the riparian scrub-shrub vegetation should be characterized as an environmentally sensitive area when the vegetation contains woody vegetation that is part of a contiguous complex of 1/16-acre or larger or is 1" or larger in DBH. In addition, by restricting extraction in vegetated areas that are essentially half as developed as the riparian vegetation for which mitigation is indicated under the Corps' LOP, the Commission will minimize the chances that any riparian vegetation providing significant habitat value will be disturbed by the proposed gravel extraction.

To ensure that mineral extraction proposed by the applicant is not performed within an area of environmentally sensitive riparian vegetation, thereby remaining an allowable use under Coastal Act Section 30233(a)(6), the Commission attaches Special Condition No. 4.f and 4.g, which states that gravel extraction operations shall not disturb or remove any area of riparian vegetation growing on the river banks or on the gravel bar meeting either the aerial extent or plant girth criteria discussed above.

Moreover, the Commission attaches Special Condition No. 4.c which requires that excavation not occur within the active channel, where sensitive salmonid species could be present. Therefore, as conditioned herein, the proposed gravel extraction operation is consistent with the use limitations of Section 30233 of the Coastal Act on dredging in coastal water bodies as the mining operation is for mineral extraction in areas that are not environmentally sensitive, consistent with Section 30233(a)(6).

2. Feasible Mitigation Measures

The second test set forth by the dredging and fill policy of the Coastal Act is whether feasible mitigation measures have been provided to minimize the adverse environmental impacts of the proposed project.

Depending on the manner in which the gravel operation is conducted, the portions of the proposed project to be conducted below the ordinary high water mark could have four potentially significant adverse effects on the natural environment of the lower Smith River. These impacts include: (a) impacts on fisheries; (b) alteration of the riverbed and increased bank erosion; (c) impacts on environmentally sensitive riparian vegetation; and (d) impacts to the water quality of the river. The potential impacts and their mitigation are discussed in the following sections:

(a) Fisheries

As noted previously, the Smith River and its tributaries are ranked among the most significant anadromous fisheries in Northern California and include coho salmon, Chinook salmon, and steelhead trout, all federally listed threatened species under the federal Endangered Species Act. The project area and the lower Smith River are important for these anadromous fish as a migration route to and from upstream spawning grounds. In addition, the lower Smith River supports summer rearing for juvenile salmonids, especially steelhead yearlings and fall Chinook sub-yearlings, and holding areas for adult summer steelhead as well as spawning and nursery habitat for marine fishes and invertebrates.

The impacts of gravel mining operations on sensitive fish species include more than just the individual impacts of a particular gravel mining operation at one site. Often of greater significance is the cumulative adverse impact on sensitive fish species from all of the various gravel mining operations occurring along the river. Accurately assessing significant adverse cumulative impacts of the various gravel mining operations on sensitive fish species can be a difficult task for any one operator to perform.

An assessment of the significant adverse cumulative impacts of U.S. Army Corps of Engineers (Corps) permitted gravel mining operations along the lower Smith River on sensitive fish species does exist in the form of Biological Opinions issued by National Marine Fisheries Service (NMFS). These Biological Opinions are issued as a result of formal consultations between the Corps of Engineers and the NMFS pursuant to Section 7 of the Federal Endangered Species Act. As discussed previously in the "Smith River Resource Issues and Regulatory Background" Finding, the Corps decided to extend LOP 96-2 (originally due to expire on March 28, 2002) through December 31, 2002 to enable gravel extraction on the Smith River to be authorized for the 2002 gravel mining season while a new LOP for subsequent gravel mining seasons is prepared. The Corps requested that NMFS amend the most recent (2000) Biological Opinion to analyze the extended duration of LOP 96-2a.

NMFS has prepared a second amended Biological Opinion for the extended duration of LOP 96-2a that incorporates newly available information that was not previously analyzed in the 2000 Biological Opinion and its 2001 first amendment regarding the effects of gravel mining and extraction activities on listed salmonids (see Exhibit No. 7). According to NMFS, gravel mining results in both short-term and long-term changes to channel form and function and such changes affect habitat function for listed salmonids. The amended Biological Opinion indicates that gravel mining could result in adverse impacts to listed salmonids from the input of fine sediment, reduced bar height and channel confinement, and a

reduction of habitat complexity as a result of various gravel extraction related activities.

Construction and removal of channel crossings and the use of heavy equipment can adversely affect salmonids. Heavy equipment is required to operate in the wetted, low flow channel to construct and remove the crossings, which are typically placed at riffle locations. According to the amended Biological Opinion and consultation between Commission staff and NMFS staff, Chinook salmon build redds and spawn in riffles and the redds could be subject to a pulse of fine sediment during removal of the channel crossing in late fall. In addition, the operation of heavy equipment has the potential to result in disturbance to salmonids caused by noise and vibration in the extraction work area. Furthermore, culverted stream crossings can also impact rearing salmon habitat by impeding or altering channel stream flow dynamics.

NMFS also indicates that juvenile and adult salmonid stranding could occur as a result of certain extraction methodologies depending on how the methodology is implemented and the manner in which the extraction area is reclaimed and left following extraction. For example, bar skimming allows inundation of the skimmed area more frequently and at lower river stage heights, resulting in an increase in the width-to-depth ratio of the channel, which results in an increase in the area where mainly juvenile, but possibly adult, salmonid stranding may occur. The potential for salmonid stranding is minimized if the gravel bars are groomed to be free of depressions and graded to provide a free draining surface back towards the river thalweg following extraction.

NMFS indicates that gravel mining has the potential to result in elevated turbidity levels and increased sedimentation. Fine sediments can become entrained in runoff from skimmed bar surfaces, as skimming typically exposes finer sediment that would be inundated during lower discharges. According to NMFS, increased sedimentation can adversely impact salmonid spawning habitat by filling pore spaces, which decreases hydraulic conductivity of the gravel, thus reducing the supply of oxygenated water to incubating eggs.

Gravel extraction can also impact migratory, rearing and holding habitat by increasing the width-to-depth ratio of river channels, decreasing channel confinement, and changing the hydraulic function of gravel bars required to create and maintain pools and riffles. NMFS has concluded that when gravel bars are skimmed to a depth less than one foot above the low-flow water surface, or mining occurs on the upstream third of point bars, loss of channel confinement can result.

Gravel mining can also result in a reduction of large woody debris, which provides important rearing and holding habitat for salmonids. Large woody

debris at gravel mining sites is often removed for use as firewood or for constructing burl furniture.

Although gravel mining has the potential to result in several adverse short-term and long-term impacts to salmonids and salmonid habitat, NMFS indicates that adherence to the above-described project design features minimizes effects of gravel extraction on listed salmonid species. NMFS concludes in the amended Biological Opinion that:

> NMFS anticipates that gravel mining operations under LOP 96-2a will result in take of listed salmonids. This take will primarily be in the form of harm to salmonids by impairing their essential behavior patterns as a result of reductions in the quality or quantity of their habitat. NMFS anticipates that the number of individuals harmed will be low. In addition, NMFS anticipates that a small number of juveniles may be killed, injured, or harasses during construction and removal of channel crossings or during relocation of juveniles for trenching...
>
> Because the expected impacts to salmonid habitat correspond with these impaired behavior patterns, NMFS is describing the amount or extent of take anticipated from the proposed action in terms of limitations on habitat impacts. NMFS expects that physical habitat impacts will be consistent with the areas described in Table 1 below[1], compliant with the terms of conditions of LOP 96-2a and this incidental take statement and within the expected effects of gravel mining operations as described in this Opinion...
>
> Anticipated incidental take will be exceeded if gravel mining operations extend beyond the areas described in Table 1 above, or are not in compliance with the terms and conditions of LOP 96-2a or this incidental take statement, or if effects of gravel mining operations are exceeded or different than the expected effects described in this Opinion...
>
> In the accompanying opinion, NMFS determined that the amount of anticipated take is not likely to result in jeopardy to SONCC coho salmon, or result in the destruction or adverse modification of SONCC coho salmon designated critical habitat.

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[1] Referenced "Table 1" consists of a list of 11 gravel bar site names on the Smith and Klamath Rivers and Rowdy Creek, and includes the "Saxton Bar" project site.

Based on existing biological information, NMFS concludes that extraction of gravel during the summer months will not result in more than incidental take of threatened salmonid species and will not jeopardize their continued existence provided that extraction operations are conducted in the manner prescribed in a set of conditions attached to the Biological Opinion. To ensure that significant adverse impacts to salmonids from exceedance of incidental take of listed species does not occur, the Commission incorporates within the standards of Special Condition Nos. 3, 4, 5, 6, 7, and 10-12 the relevant Reasonable and Prudent Measures and Conservation Recommendations proposed by NMFS in their amended Biological Opinion.

To ensure that gravel extraction operations are designed in a manner that would retain channel form and function to protect the quality and quantity of salmonid habitat, the Commission attaches Special Condition No. 3, which establishes an administrative review process that requires the applicant, prior to issuance, to submit for the review and approval by the Executive Director, a gravel extraction plan that together with field surveys and site assessments demonstrates consistency of the proposed extraction plan with criteria identified by the Commission. The applicant must determine the volume of gravel recruitment over the preceding high-flow season and identify areas where mining can occur without causing bed degradation or significant adverse impacts to listed salmonids or salmonid habitat. The applicant must demonstrate that the proposed extraction plan is consistent with all terms and conditions of the permit. Special Condition No. 3.A.(4) requires the applicant to submit a copy of the gravel extraction plan reviewed by the County. In their amended Biological Opinion, NMFS has indicated the importance of protecting hydraulic processes that create and maintain pools and riffles, which provide valuable salmonid habitat. Special Condition No. 4.e requires that mining not occur on areas of the gravel bar identified by NMFS as requiring protection of hydraulic processes to create and maintain pools and riffles.

With regard to the method of gravel extraction, bar skimming has been the most commonly used method of gravel extraction in the past in addition to dry trenching. In their amended Biological Opinion, NMFS has included additional extraction methodologies for the 2002 extraction season. These additional extraction methods include provisions for in-stream wet-trenching and related stream diversions, subject to operational limits and performance standards to avoid significant adverse impacts to salmonids as detailed in the amended Biological Opinion.

Therefore, Special Condition No. 4.a requires that only those extraction methodologies reviewed and approved by NMFS in the amended Biological Opinion be utilized at the site with the further limitation that wet trenching not be used. As discussed in Finding IV.E.1 above, this further limitation is necessary

for the project to be found consistent with Section 30233(a)(6) of the Coastal Act, which limits dredging of coastal waters for mineral extraction to areas that are not environmentally sensitive. Wet trenching would involve mineral extraction within the active channel, where sensitive salmonid species could be present. If the dry trenching method is used, the applicant is further required by Special Condition No. 4.a to construct and maintain a barrier such as silt fencing, straw bales, or sand bags, along the entire length of the excavated area to prevent turbid water from entering the flowing river.

Another potential significant adverse impact of gravel mining operations is degradation of the riverbed and erosion of the riverbanks. Such impacts can occur if the amount of gravel extracted from a particular part of the river exceeds the amount of gravel deposited on the site through natural recruitment, or the downstream movement of sand and gravel materials. Bed degradation and bank erosion can also result from the manner in which gravel is extracted. For example, if gravel bars have been skimmed too close to the low-water surface or are left with a very shallow slope, at higher flow stages the river will tend to spread across the bar, reducing the depth of flow. This spreading may cause the channel to both migrate rapidly and break into a number of shallow channels or threads. Such sites will tend to trap gravel that would otherwise move downstream, and can potentially trap or impede fish migrating up and down the river. Therefore, to ensure that the gravel extraction proposed by the applicant does not exceed the natural replenishment of gravel, degrade the riverbed, or induce bank erosion, the Commission attaches Special Condition No. 4.d which requires that extraction quantities not exceed the long term average sustained yield based on estimates of mean annual recruitment, as utilized by the County. Subsection c of the condition requires that the excavation shall not occur in the active channel and shall be limited to areas that are a minimum of one (1) vertical foot elevation above the current water surface and a minimum of six (6) feet horizontally from the current water's edge. This requirement will ensure that disturbance of the active channel will be avoided.

With regard to the completion of gravel operations, Special Condition No. 6 requires that the excavation area must be regraded before the end of the excavation season. Regrading includes filling in depressions created by the mining, grading the excavation site according to a prescribed grade, sloping downward to the river channel, and removing all temporary fills from the bar. This condition would ensure that all gravel mining activities are completed prior to the onset of winter rains and the start of the salmonid migration period. This condition further requires that the site is regraded in a manner that would not result in fish stranding or barriers to fish migration.

To prevent impacts to salmonids associated with loss of channel confinement, the Commission includes within the mining limitation standards of Special Condition

No. 4.c a requirement that the minimum skim floor depth (maximum extraction depth) be no less than one foot above the river water level at the bar edge.

In addition, gravel mining operations on the riverbed need to cease before the rainy season to prevent significant adverse impacts to fisheries, as the runs of the various species of anadromous fish up and down the river increase in the fall with the rise in river water levels and remain at high levels through the early spring. In recent F&GC Section 1600 Streambed Alteration Agreements issued for gravel extraction at the project site, the Department of Fish and Game has limited gravel extraction operations to June 1 through October 15 each year, which corresponds to the period when potential impacts to fisheries is lowest. The conditions of the NMFS Biological Opinion also require completion of gravel mining operations by October 15. Therefore, the Commission attaches Special Condition No. 5 that requires mining and all post-extraction bar grooming work and equipment removal be performed during the summer months and completed by October 15, unless extended by the Executive Director and all other involved agencies to as late as November 1 based on forecast dry-weather, to ensure no significant disturbance to migrating anadromous fish.

NMFS and the Corps expect that a new Biological Opinion on the effects of lower Smith River gravel mining on sensitive fish species and new LOP will be implemented prior to the 2003 gravel extraction season. This new Biological Opinion will be prepared as a result of formal consultations between the Corps and NMFS pursuant to the Federal Endangered Species Act on the Corps' proposed issuance of a new LOP to authorize gravel mining beyond the 2002 season. This Biological Opinion will likely contain new recommendations on how to further limit gravel extraction operations to avoid significant adverse cumulative impacts on sensitive fish species. For purposes of gravel extraction in 2002, NMFS concludes that extending LOP 96-2 for gravel mining operations during 2002 "is not likely to result in jeopardy to SONCC coho salmon, or result in the destruction or adverse modification of SONCC coho salmon designated critical habitat."

Therefore, the Commission finds that as conditioned, the proposed gravel mining for the 2002 extraction season would not result in significant adverse impacts on sensitive fish species consistent with the requirements of Sections 30231 and 30233 of the Coastal Act.

(b) River Morphology

As discussed above, a potential major impact of gravel mining operations is degradation of the riverbed and erosion of the riverbanks. Such impacts can occur if the amount of gravel extracted from a particular part of the river over time exceeds the amount of gravel deposited on the site through natural recruitment—

the downstream movement of sand and gravel materials. Bed degradation and bank erosion can also result from the manner in which gravel is extracted. For example, if gravel bars are skimmed too close to the low-water surface or are left with a very shallow slope, at higher flow stages the river will tend to spread across the bar, reducing the overall depth of flow and resulting in rapid channel migration or instigation of a multi-channel "braided" configuration. This is also true of watercourse reaches where aggradation of materials is a problem. Such sites tend to trap gravel that would otherwise move downstream, potentially trapping or impeding fish migration up and down the river.

The applicants propose to extract a maximum of 14,000 cubic yards of sand and gravel annually from the site during the 2002 extraction season, to be excavated under bar-skimming and cold-water refugia alcove trenching methods designed in consultation with NMFS and CDFG staff. Although this amount is small relative to the overall permitted gravel mining activity along the Smith River (up to 390,000 cubic yards annually), extraction without consideration of river morphology concerns could cause bed degradation and riverbank erosion.

Therefore, to ensure that the mineral extraction proposed by the applicant does not exceed the natural replenishment of gravel, degrade the riverbed, or induce bank erosion, the Commission attaches Special Condition No. 3. The condition requires, in part, that the applicant, prior to permit issuance, submit for the review and approval by the Executive Director, a gravel extraction plan together with field surveys and site assessments demonstrates consistency of the proposed extraction plan with criteria identified by the Commission. The applicant must determine the levels and volume of gravel recruitment over the preceding high-flow season and identify areas where mining can occur without causing bed degradation. The condition requires that the plan be consistent with the extraction limits set forth in Special Condition No. 4, including the restriction of subsection d which states that extraction quantities shall not exceed the long term average sustained yield based on estimates of mean annual recruitment as utilized by the County and that mining not occur on areas of the gravel bar identified by NMFS as needing protection of hydraulic processes that create and maintain pools and riffles.

Other limitations imposed by Special Condition No. 4 will also ensure that the amount and location of mining will not lead to adverse bed degradation. Subsection a of the condition states that the applicants shall extract material only by gravel skimming, dry trenching, wetland pits, horseshoe-shaped deep skims, or alcove extractions as approved by the National Marine Fisheries Service and the California Department of Fish and Game. Subsection c of the condition states that the excavation shall not occur in the active channel and shall be limited to areas that are a minimum of six (6) feet horizontally from the current water's

edge. This requirement will ensure that disturbance of the active channel will be avoided.

(c) Riparian Vegetation

As discussed previously under Findings Section IV.A above, the project vicinity contains riparian scrub habitat. The riparian scrub habitat occurs on the riverbanks and upper bar areas. Thus, the proposed project has the potential to significantly adversely affect environmentally sensitive riparian vegetation at the site.

To prevent disturbances to riparian habitat, Special Condition No.3.A.(3) requires in part, that the applicant, prior to permit issuance, submit for the review and approval of the Executive Director a gravel extraction plan together with a botanical survey prepared by a qualified biologist that maps all vegetation found on potential extraction areas of the site and highlights the location and extent of all vegetation that meets the criteria discussed in Finding IV.E.1. The condition requires that the plan be consistent with the extraction limits set forth in Special Condition No. 4, including the restrictions of subsection g that states that gravel extraction operations shall not disturb or remove any area of environmentally sensitive vegetation growing on the gravel bar that is either part of a contiguous riparian vegetation complex 1/16-acre or larger or one-inch in diameter or greater at breast height. In this manner, disturbance to all of the environmentally sensitive riparian vegetation on the bar will be avoided.

(d) Water Quality

If properly managed, the proposed gravel operations should not significantly adversely affect the river's water quality. However, excessive or sloppy gravel extraction operations in close proximity to an open streamcourse could significantly adversely impact water quality, and ultimately the biological productivity and fisheries resources of the river. For example, pushing gravel materials or allowing sediment-laden water to drain from the excavation bucket into the river could degrade water quality and biological productivity by increasing the turbidity of the water.

To prevent such occurrences, the Commission attaches Special Condition Nos. 2, 3, 4, and 8. Special Condition No. 2 requires that a runoff control plan be reviewed and approved by the Executive Director ensuring that mining equipment be maintained and operated in such a manner as to not allow for release of petroleum products into the river, and that spill clean-up materials be available on the worksite, and that operators and sub-contractors undergo spill contingency training. Special Condition No. 4.c requires that no excavation occur in the active channel to avoid in-water activities that might result in sedimentation of the river.

Special Condition No. 8 prohibits placing any material into the river during gravel extraction activities. Furthermore, to abate dust generated during mining from entering the river, the requirements of Special Condition No 2 include that the erosion control plan include watering of the bar access roads during mining operations.

As a trenching method is to be used, the applicants are required by Special Condition No. 4 to construct a berm along the entire length of the excavated area between the trenches and the river channel to prevent turbid water from entering the flowing river. After completion of gravel extraction operations, the applicants would be required by Special Condition 4.a to allow turbid water within the trenches to completely settle, skim off with absorbent padding any petroleum products sheen, then breach the trenches at both their downstream and upstream ends to prevent the creation of fish traps. Finally, Special Condition No. 4.d requires the applicant to remove the berm and grade the area between the trench and the main river channel to match its pre-extraction slope. Special Condition No. 3 also requires that the mining activities be performed consistent with a runoff control plan designed to prevent and intercept a variety of potential pollutants, including sediment and petroleum products.

Therefore, as conditioned, the project will avoid significant adverse impacts to coastal water quality.

(e) Conclusion

The Commission finds, as conditioned herein, the proposed gravel extraction operation is consistent with the requirements of Section 30233 of the Coastal Act, in that feasible mitigation measures have been provided to minimize significant adverse environmental effects. The gravel extraction limitations and performance standards imposed through Special Condition Nos. 2-6 and 10-12 are designed to minimize or prevent significant adverse impacts to river morphology, riparian vegetation, threatened and endangered species, and water quality. Together with the requirements of Special Condition Nos. 7 and 8, to limit the extraction season and prohibit placement of material into the active channel, the project is conditioned to ensure that significant adverse impacts to the Smith River from the proposed gravel extraction operation will be avoided or minimized. Therefore, the proposed project as conditioned is consistent with the requirements of Section 30233 in that feasible mitigation measures have been provided to minimize adverse environmental effects.

3. Alternatives

The third test set forth by the dredging and fill policies of the Coastal Act, is that the proposed dredging or fill project must have no feasible less environmentally damaging

alternative. In this case, the Commission has considered the various identified alternatives, and determines that there is no feasible less environmentally damaging alternatives to the project as conditioned in Special Conditions 1-8. A total of four possible alternatives have been identified, including: (a) the "no project" alternative; (b) obtaining sand and gravel from quarry operations; (c) obtaining sand and gravel from alluvial terrace deposits in the Smith River floodplain; and (d) modifying the proposed project. As explained below, each of these alternatives are infeasible and/or more environmentally damaging than the proposed project.

(a) No Project Alternative

The no project alternative means that the proposed gravel extraction project would not be undertaken. Without extraction from this site, an equivalent amount of sand and gravel materials would be obtained from other sources to meet regional demand for cement and concrete aggregate products for the construction of roads, buildings, and other development. Increasing production from other river bar extraction operations would have environmental impacts similar or greater than the proposed project.

The proposed project is located in an area where gravel has historically accumulated and been mined. Mining in many other parts of the river where gravel does not accumulate could lead to changes in river geomorphology which, in turn, could cause a variety of adverse impacts such as increase sedimentation, bank erosion, or the undermining of bridge supports, resulting in the loss of environmentally sensitive riparian habitat areas and/or adjacent agricultural lands.

As discussed below, obtaining additional sand and gravel from terrace deposits along the valley floors of local rivers would also create environmental impacts similar to or greater than the proposed project. The Commission therefore finds that the "no project" alternative is not a feasible less environmentally damaging alternative to the project as conditioned.

(b) Obtaining Sand and Gravel from Quarry Operations.

Excavation from the river could be avoided if an equivalent amount of sand and gravel could be obtained from upland quarries. However, there are few quarries in the vicinity where it would be economically feasible to obtain material of sufficient quality and quantity to that available at the project site. Many of the upland areas of Del Norte County are underlain by the Franciscan Formation, comprised of a complex of massive greywacke sandstone, greenstone, and serpentine, interspersed with less competent (for construction applications) clays and silt materials. To produce aggregate products similar to that obtainable from river bars would require extensive screening, crushing, and washing processes. As these quarry sites are generally located in remote areas with limited water

supplies and where no nearby processing facilities are available, the unprocessed materials would need to be transported greater distances, with associated traffic and air quality impacts. The Commission therefore finds that substituting gravel extracted from quarry operations is not a feasible less environmentally damaging alternative.

(c) Obtaining Sand and Gravel from Alluvial Deposits.

Excavation from the river could similarly be avoided if an equivalent amount of sand and gravel products could be obtained from alluvial deposits in the floodplain of the lower Smith River. The floodplain of the Smith River is underlain by substantial amounts of sand and gravel deposited over the last several thousand years. However, taking gravel from these alluvial deposits would have its own environmental impacts. Almost all of the Smith River floodplain is devoted to agricultural production and related uses. Converting productive coastal agricultural areas to other uses such as mineral extraction would not be consistent with the Coastal Act policies that call for the protection of agricultural lands. In addition, most of the remaining undeveloped areas in the lower Smith River floodplain are covered by mature riparian vegetation that would be considered environmentally sensitive areas. Extracting gravel from such areas would result in far more impact than would extraction at the project site as conditioned by the permit. The Commission therefore finds that substituting gravel extraction from alluvial floodplain deposits of the lower Smith River is not a feasible environmentally less damaging alternative.

(d) Modifying the Proposed Project as Conditioned.

Various modifications to the project as proposed and conditioned could be made in an attempt to reduce the environmental effects. One such modification would be to mine in different locations at the project site. However, this modification would not result in less impact than the project as conditioned under this permit. As discussed previously, the proposed project has been conditioned to restrict mining to areas that would avoid significant adverse impacts to coastal resources. Therefore, modifying the proposed gravel extraction project to require mining in different locations at the project site could result in greater impacts on coastal resources and would not create an environmentally less damaging alternative.

No other feasible modification to the proposed extraction scheme has been identified. Therefore, the Commission finds that modifying the proposed gravel extraction project as conditioned is not a feasible less environmentally damaging alternative.

4. Maintenance and Enhancement of Estuarine Habitat Values

The fourth general limitation set by Sections 30231 and 30233(a) of the Coastal Act on fill and dredging projects is that any such proposed project shall maintain and enhance the biological productivity and functional capacity of the habitat, where feasible.

As discussed in the section of this finding on mitigation, the conditions of the permit will ensure that the project will not have significant adverse impacts on water quality, riparian vegetation, rare and endangered species, stream morphology, or other coastal resources. By avoiding impacts to coastal resources, the Commission finds that the project will maintain the biological productivity and functional capacity of the habitat consistent with the requirements of Sections 30231 and 30233 of the Coastal Act.

The Commission thus finds that the project is an allowable use, that there is no feasible less environmentally damaging alternative, that no mitigation is required for the insignificant impacts associated with the dredging of coastal waters, and that estuarine habitat values will be maintained or enhanced. Therefore the Commission finds that the proposed development, as conditioned, is consistent with Section 30233 of the Coastal Act.

F. Protection of Environmentally Sensitive Habitat Areas.

Section 30240 of the Coastal Act states that environmentally sensitive habitat areas shall be protected. Section 30240 states:

> *(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*
>
> *(b) Development in areas adjacent to environmentally sensitive habitat areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreational areas.*

As discussed in Finding IV.A, above, the Saxton Bar is located adjacent to a well-developed riparian corridor along the edge of the riverbank that is considered an environmentally sensitive habitat area. The proposed project will not adversely affect this riparian habitat. None of the habitat will be disturbed by the extraction operations itself. In addition, existing haul roads through the riparian will be used to truck gravel from the bar to the stockpiling and processing area. No new haul roads are proposed to be cut through the riparian woodland. To ensure that no new haul roads are created through riparian woodland, the Commission attaches Special Condition Nos. 4 and 8 that require that the proposed project not disturb or remove any of the established riparian vegetation at the site and prohibits the cutting of new haul roads through the habitat.

Because the extracted gravel will be loaded directly onto trucks and hauled to the adjoining upland stockpile/processing area and in turn to off-site construction sites or processing facilities, truck traffic during the extraction season could become significant, depending upon the local demand for aggregate materials. Typically, dump trucks of 10 to 15-cubic-yard-capacity are used to transport aggregate materials on surfaced roads. Based on an estimated 5-week, 5-day working week, up to approximately 37 to 56 truckloads of extracted material per day could be expected to transport the full 14,000 cubic yard annual extraction entitlement from the site. The continual passing of trucks could degrade the quality of the riparian habitat by raising dust that would coat parts of the habitat. The impacts of truck traffic could be reduced in part, by controlling the dust problem. Therefore, the Commission attaches Special Condition No. 2 that requires the applicants to regularly water the roadway with the use of a water truck to keep the dust down.

As conditioned, the Commission finds that the project is consistent with Section 30240 of the Coastal Act, as the project will avoid significant adverse impacts to the environmentally sensitive habitat area found on the site.

G. Visual Resources.

Section 30251 of the Coastal Act provides in applicable part that the scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall: (a) be sited and designed to protect views to and along the ocean and scenic coastal areas, and (b) be visually compatible with the character of surrounding areas.

Due to grade and vegetation screening, the gravel extraction operations will generally not be visible from Highway 101 or Fred D. Haight Drive, the principal public roads in the area. Glimpses of the extraction operation would be afforded from the Smith River Fishing Access Point located approximately 400 feet to the northwest of the project site. The extraction operation has existed at the site for many years, and many of the approximately half dozen gravel operations occurring along the lower Smith River are similarly visible from public roads. The proposed project will not be any more prominent that the gravel extraction that has occurred in the past. Therefore, the Commission finds that the proposed project is visually compatible with the character of the area as gravel extraction operations here and in the vicinity have long been a part of the viewshed.

To ensure that the Commission would have the opportunity to review any future proposals by the applicants to change other aspects of the project that could affect visual resources in their conformity with Coastal Act Section 30251, the Commission attaches Special Condition No. 9. The condition states that any changes to the proposed operation shall require an amendment of the permit.

Therefore, the Commission finds that, as conditioned, the proposed project is consistent with the visual resource policies of Section 30251 of the Coastal Act as the project is compatible with the visual character of the surrounding area and will not block views to and along the coast.

H. Public Access.

Coastal Act Section 30210 requires in applicable part that maximum public access and recreational opportunities be provided when consistent with public safety, private property rights, and natural resource protection. Section 30211 requires in applicable part that development not interfere with the public's right of access to the sea where acquired through use (i.e., potential prescriptive rights or rights of implied dedication). Section 30212 requires in applicable part that public access from the nearest public roadway to the shoreline and along the coast be provided in new development projects, except in certain instances, such as when adequate access exists nearby or when the provision of public access would be inconsistent with public safety.

The project site is located between the first public road (Fred D. Haight Drive) and the sea (the Smith River is considered to be an arm of the sea in this area). Accordingly, a public access finding is required for the project.

In applying Sections 30210, 30211 and 30212, the Commission is limited by the need to show that any denial of a permit application based on these sections, or any decision to grant a permit subject to special conditions requiring public access, is necessary to avoid or offset a project's adverse impact on existing or potential public access.

Four shoreline access points presently exist within the coastal zone along the lower Smith River (i.e., downstream and west of the Dr. Fine or Highway 101 Bridge). From west to east, these access points are located at: (1) the southerly end of the mouth of the Smith River; (2) the Ship-a-Shore resort; (3) the southerly end of Sarina Road; and (4) the County-owned Smith River Fishing Access 400 feet downstream of the project site. No shoreline access point exists within the project area and there is no evidence within the project area that rights of public access have been acquired through implied dedication.

Recreational use of the lower Smith River is extensive. The principal public access use of the project site that does occur is by fishermen who go out to the river channel for recreational fishing. Other public access and recreational uses of this stretch of the river include canoeing and kayaking. However, the project will not affect these recreational uses. The prime fishing seasons occur during the wet months, when gravel extraction is not occurring. The peak canoeing and boating use takes places during the spring before the gravel extraction season begins. Moreover, mining operations are confined to the exposed Saxton Bar with access occurring across the seasonally dry, high-water channel along the bar's northern side. Accordingly, for any recreational boaters using the river

during the extraction season, the main river along the south side of the bar will remain open for water travel through this reach.

Thus, the project will not significantly adversely affect public access by fishermen, canoeists, or other recreational boaters. Furthermore, gravel extraction operations have been occurring at the site for many years. The continued extraction authorized by this permit will not create any additional burdens on public access than have existed in the past. The project will not create any new demands for fishing access or other public access use.

Therefore, the Commission finds that the proposed project as conditioned, which does not include any new public access, is consistent with the public access policies of the Coastal Act.

I. State Lands Commission Review.

The project is located on the bed of the Smith River, a navigable river, between the ordinary high water marks. As such, the State of California may hold a public trust easement and other property interests at the site. Any such property interest would be administered by the State Lands Commission. To assure that the applicant has a sufficient legal property interest in the site to carry out the project consistent with the terms and conditions of this permit, the Commission attaches Special Condition No. 1 which requires that the applicant submit evidence that any necessary authorization from the State Lands Commission has been obtained prior to issuance of the permit.

J. Department of Fish and Game Review.

The project requires an annual F&GC Section 1603 Streambed Alteration Agreement from the California Department of Fish and Game (CDFG). The applicant has not yet received an agreement for the 2002 gravel extraction season. Therefore, to ensure that the project area reviewed by the CDFG is the same project area that was reviewed under this permit by the Commission, and to ensure that extraction does not exceed the extraction limits established under Special Condition No. 4, the Commission attaches Special Condition No. 10 which requires that prior to commencing any gravel extraction operations, the applicant submit a copy of the Section 1603 agreement approved by the Department of Fish and Game.

K. U.S. Army Corps of Engineers Review.

The project is within and adjacent to a navigable waterway and is subject to review by the U.S. Army Corps of Engineers (USACE). Pursuant to the Federal Coastal Management Act, any permit issued by a federal agency for activities that affect the coastal zone must be consistent with the coastal zone management program for that state. Under agreements between the Coastal Commission and the USACE, the Corps will not issue a

permit until the Coastal Commission approves a federal consistency certification for the project or approves a permit. To ensure that the project ultimately approved by the Corps is the same as the project authorized herein, the Commission attaches Special Condition No. 11 which requires that prior to commencing any gravel extraction operations, the applicants demonstrate that it has obtained all necessary approvals from the USACE for the proposed gravel extraction to be performed until October 15, 2002.

L. California Environmental Quality Act.

Section 13906 of the California Code of Regulation requires Coastal Commission approval of a coastal development permit application to be supported by findings showing that the application, as modified by any conditions of approval, is consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Public Resources Code Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available, which would significantly lessen any significant effect that the activity may have on the environment.

The Commission incorporates its findings on conformity with Coastal Act policies at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed herein in the findings addressing the consistency of the proposed project with the Coastal Act, the proposed project has been conditioned in order to be found consistent with the policies of the Coastal Act. As specifically discussed in these above findings which are hereby incorporated by reference, mitigation measures which will minimize all adverse environmental impact have been required. These required mitigation measures include requirements that limit extraction to avoid environmentally sensitive habitat areas, rare and endangered species, migratory fish, and extractions that could lead to changes in river morphology. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity would have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act and to conform to CEQA.

IV. EXHIBITS:

1. Location Map
2. Vicinity Map
3. Jurisdictional Map (excerpt)
4. Project Narrative and Mining Site Plans
5. Pre-extraction and Monitoring Cross-sections
6. Public Notice - Extension of Letter of Permission Procedure No. LOP 96-2a to December 31, 2002, U.S. Army Corps of Engineers, July 26, 2002
7. *Amendment Two to the Biological Opinion - Letter of Permission Procedure Gravel Mining and Extraction Activities within Del Norte County LOP 96-2a*, August 16, 2002
8. *Notice of Findings*, California Fish and Game Commission, California Regulatory Notice Register, April 27, 2001
9. Excerpt, 14 CCR §749.1 – *Exhibit C: Incidental Take Authorization Standards for In-Stream Gravel Extraction During the Candidacy Period for the Coho Salmon* (Fish and Game Code Section 2084 Take Regulations), California Department of Fish and Game, April 27, 2001

APPENDIX A

STANDARD CONDITIONS

1. Notice of Receipt and Acknowledgement. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt f the permit and acceptance of the terms and conditions, is returned to the Commission office.

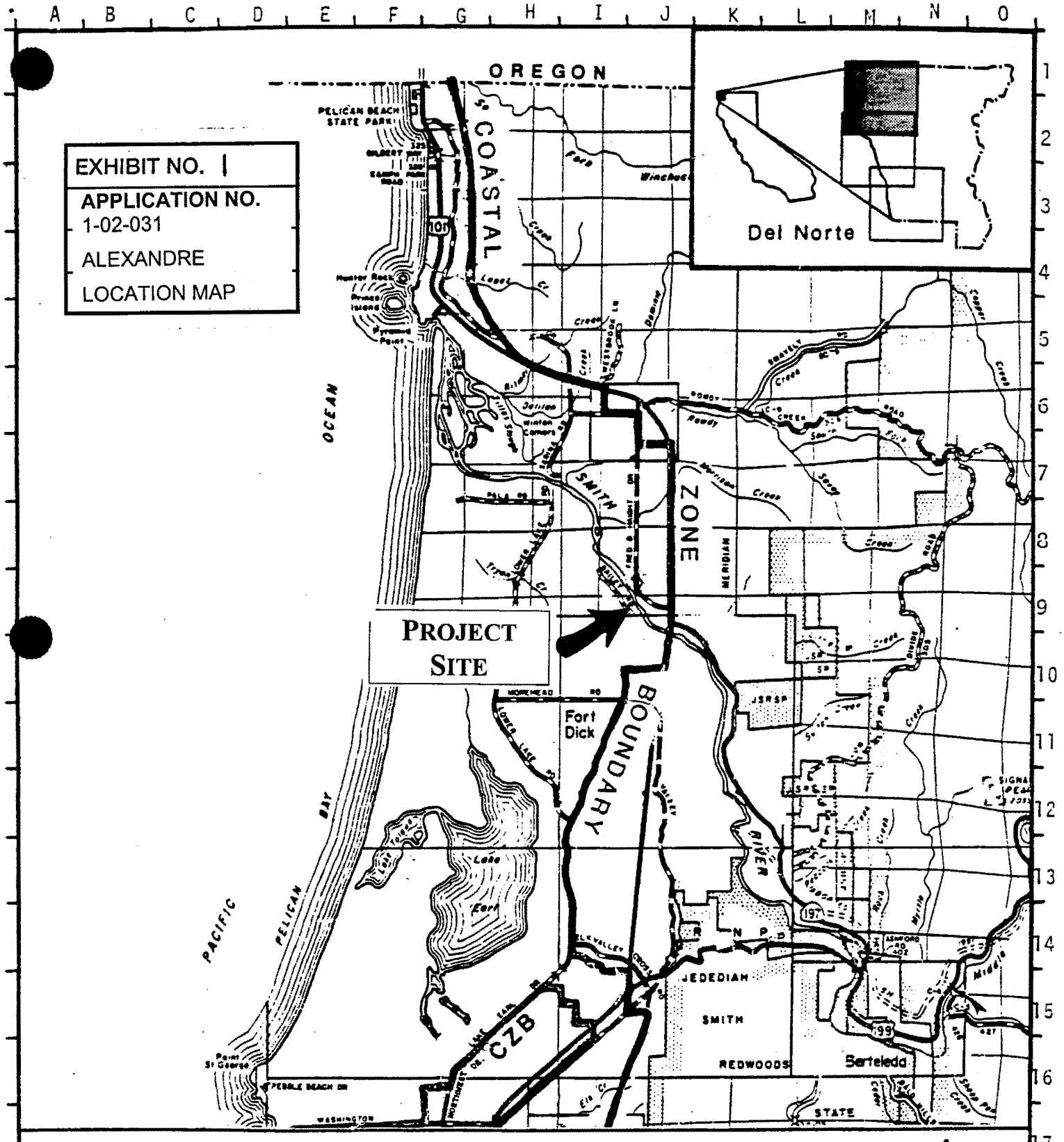
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable amount of time. Application for extension of the permit must be made prior to the expiration date.

3. Interpretation. Any questions of intent of interpretation of any condition will be resolved by the Executive Director of the Commission.

4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

EXHIBIT NO. 1
APPLICATION NO. 1-02-031 ALEXANDRE LOCATION MAP



California Coastal Commission

LOCATION MAP

County of Del Norte

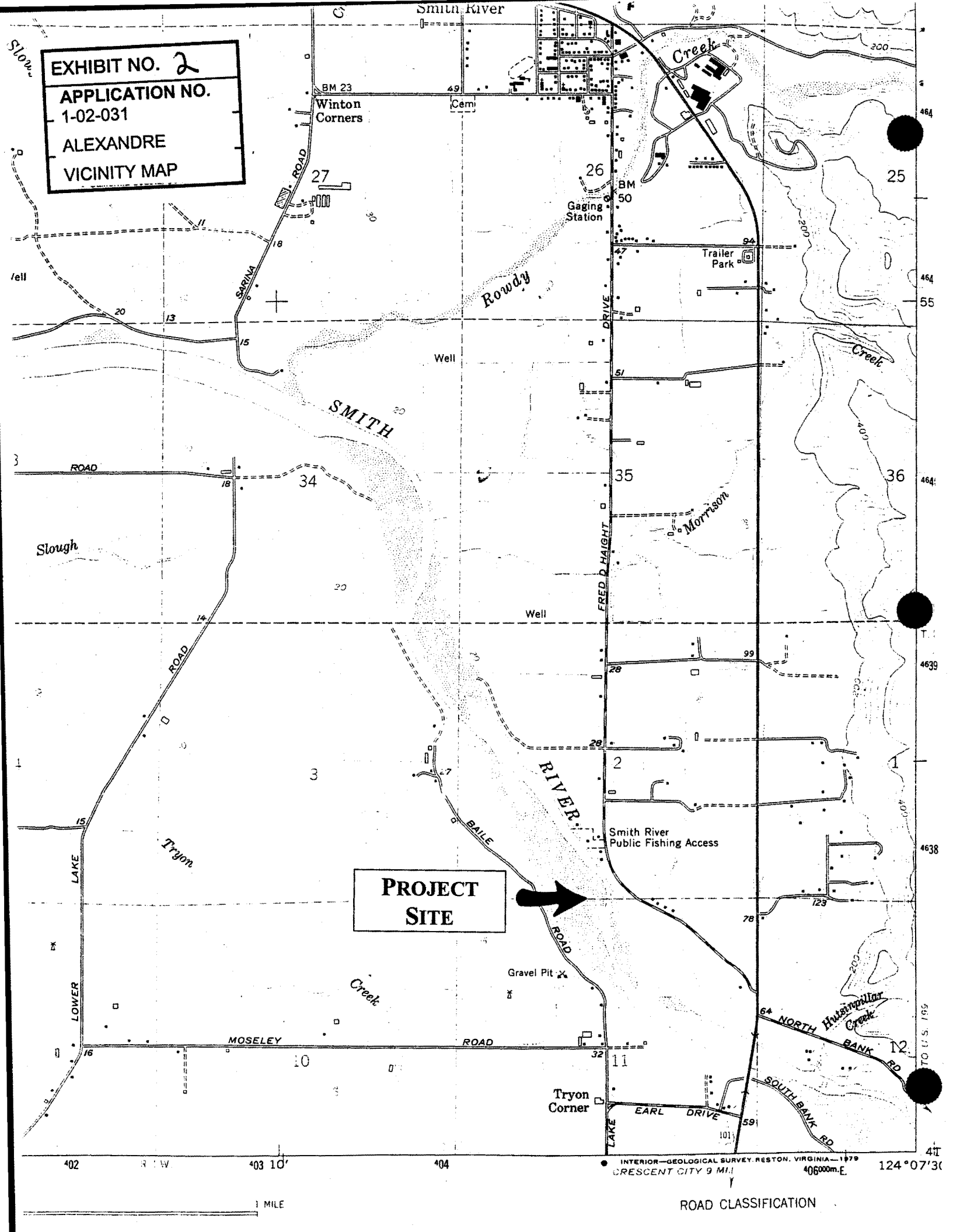


EXHIBIT NO. 2
APPLICATION NO.
1-02-031
ALEXANDRE
VICINITY MAP
Smith River
Winton Corners
Cem
BM 23
Creek
BM 50
Gaging Station
Trailer Park
Rowdy Creek
SARINA ROAD
DRIVE
Well
SMITH
ROAD
Slough
Morrison Creek
FRED D HAIGHT
RIVER
Smith River Public Fishing Access
BAILE ROAD
PROJECT SITE
Tryon
LAKE
LOWER
Creek
Gravel Pit
MOSELEY ROAD
Tryon Corner
EARL DRIVE
LAKE
SOUTH BANK RD
NORTH BANK RD
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INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1979
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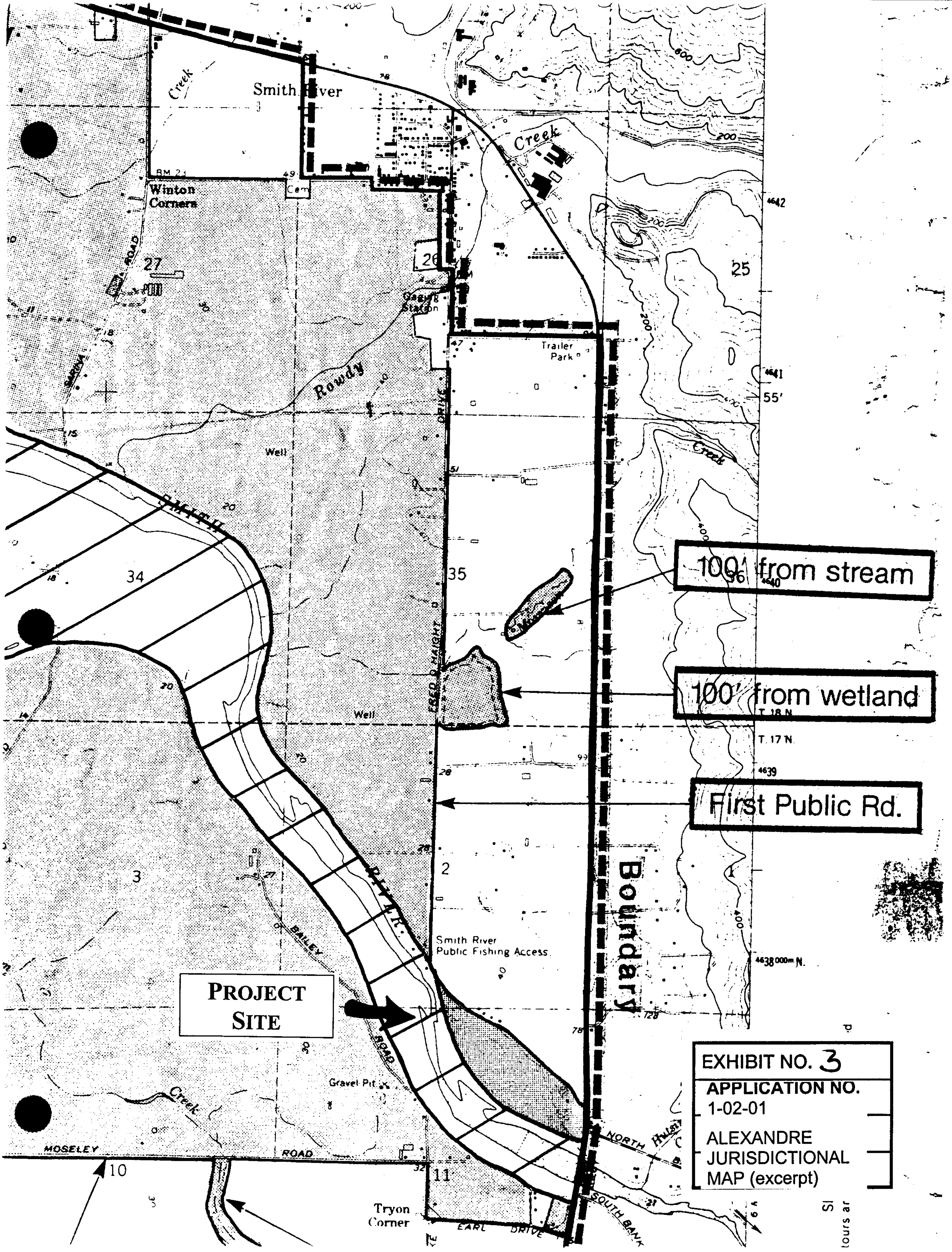


EXHIBIT NO. 3

APPLICATION NO.
1-02-01

ALEXANDRE
JURISDICTIONAL
MAP (excerpt)

Mining Operations Plan

An alcove trench and minimal skimming was prescribed for Saxton Bar by a Del Norte County contracted hydrologist in May of 2001 (Dr. D. Jager, 2001). The trench will be located at the lowermost portion of Saxton Bar (see diagram) and no riparian plant species greater than one-inch diameter at breast height will be removed. The alcove trenching technique has not been implemented at this site and was historically the location of the Rooney Hole. No gravel extraction has occurred at Saxton bar for 5 years.

No new roads are necessary for work at Saxton Bar. Access to Saxton Bar is located on North Fred Haight Drive, approximately 0.75 miles from Highway 101 (See attached site map).

Alcove Trench

a. A "U" shaped trench will be excavated to a maximum depth of 15 feet and have a width no greater than 40 feet. The total length of the trench will be no greater than 300 feet.
b. The gravel bar side of the alcove trench will be sloped 1:1 with extracted gravel. The upper portion of the alcove will be sloped less than 1:1 then gradually increase to 1:1 towards the downstream end of the alcove (see figure).
c. No more than 7,000 cubic yards will be removed using the alcove trenching technique.
d. Extracted material may be temporarily stockpiled on the bar and removed at a later time
e. The alcove will have at least a five-foot buffer from the wetted edge of the Smith River and will be delineated by staking and flagging for equipment operators, with the approval of the California Department of Fish and Game representative, prior to commencing work.
f. Filling of the alcove trench with water is anticipated since the depth of the trench will be deeper than the adjacent Smith River Channel. A berm will be constructed utilizing material from the alcove trench to ensure that no turbid water enters the river. This berm will be maintained throughout the extraction season to allow any sediment to settle.
g. After completion of material extraction operations and suspended sediment has settled, the berm will be breached at the downstream end of the trench to ensure no stranding of fish. The breach will be at least 10 feet wide and at least 5 feet deep with sides sloped at a minimum ratio of one.
h. A supply of absorbent pads will be maintained and pads will be placed on the impounded water while suspended sediment settles and before breaching occurs.
i. Large woody debris consisting of spruce root wads will be placed in the alcove for fish habitat following the completion of operations.

EXHIBIT NO. 4
APPLICATION NO.
1-02-031
PROJECT NARRATIVE & MINING SITE PLANS (1 of 4)

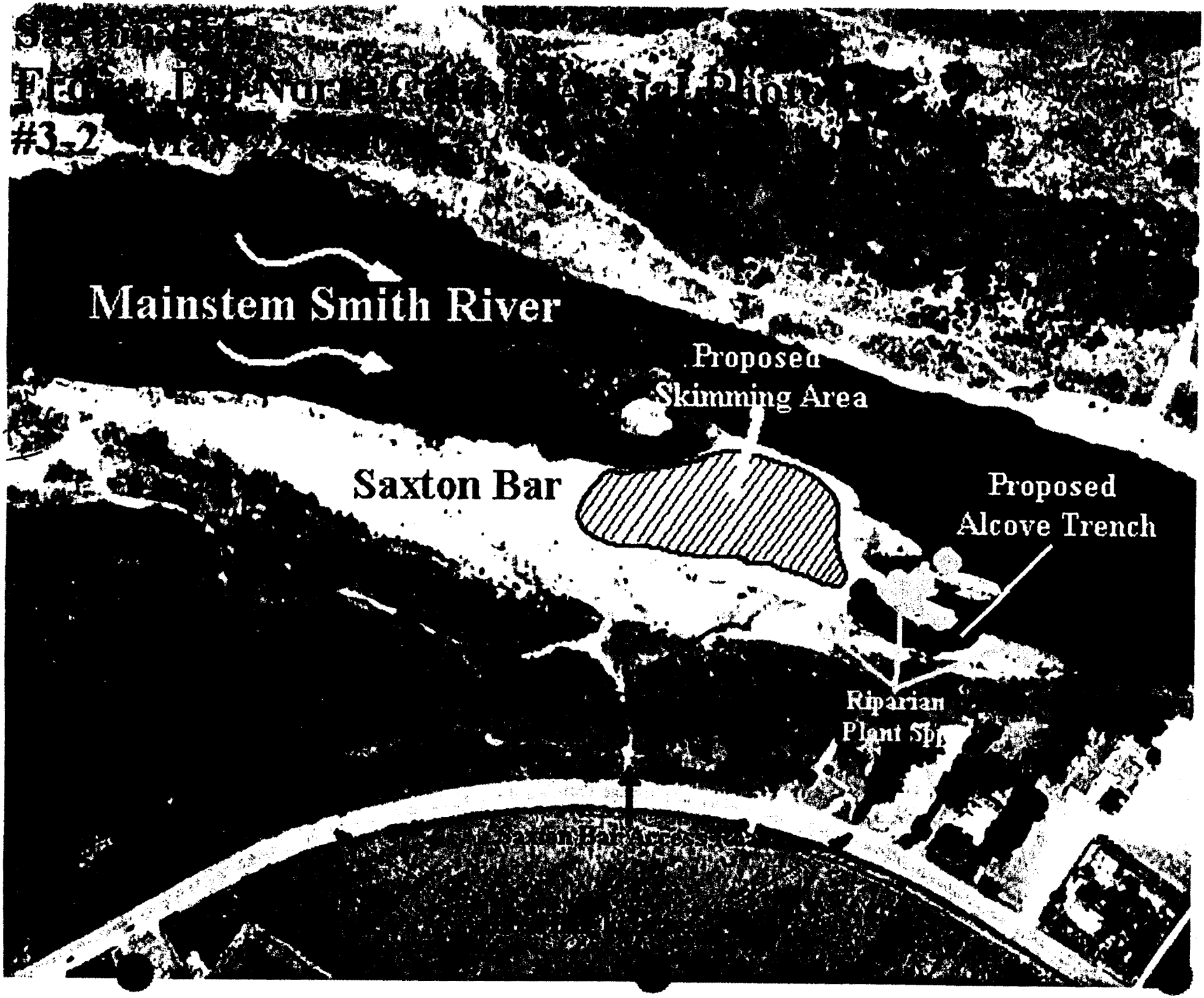
Skimming

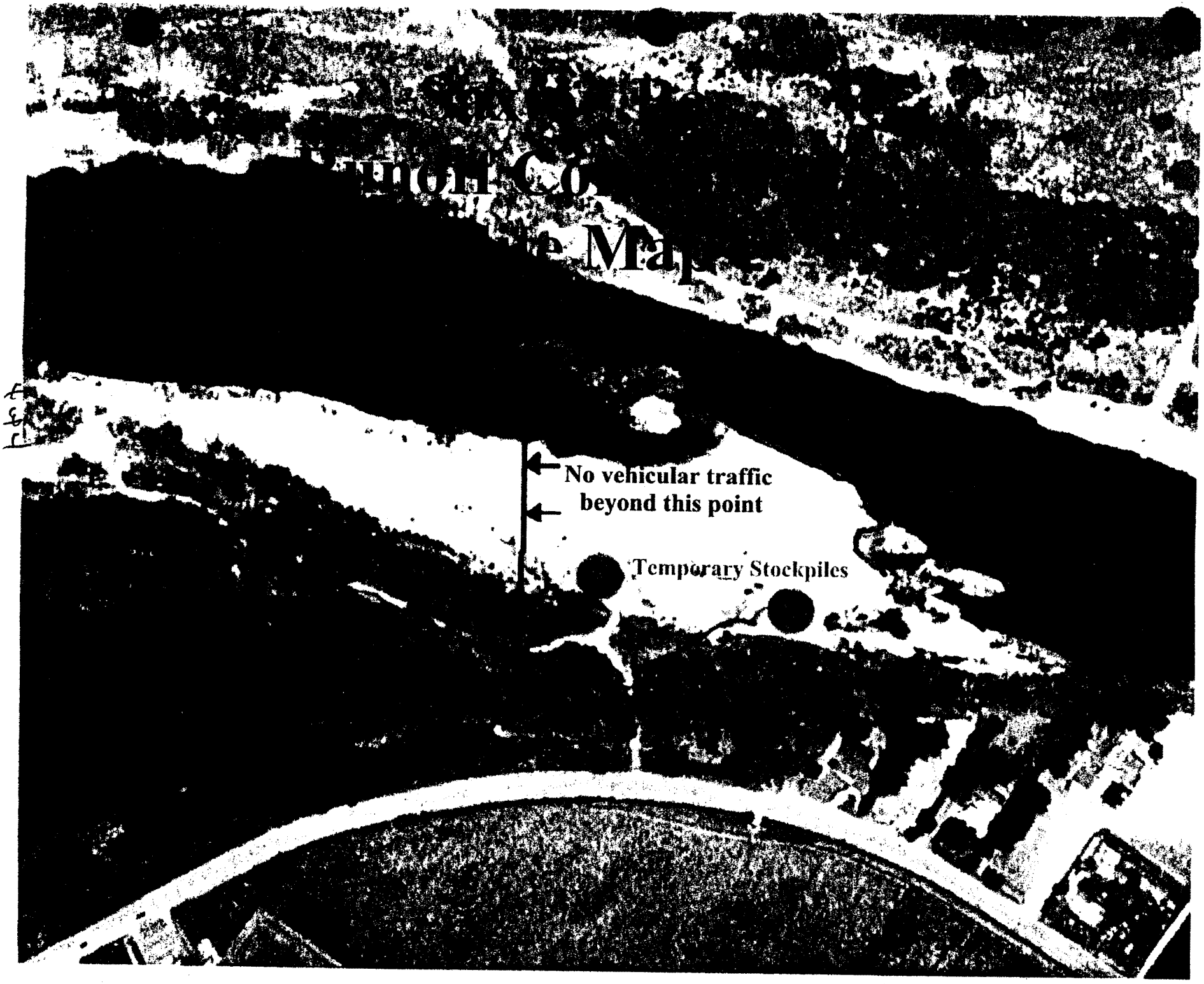
"Skimming" or scalping of gravel from exposed gravel bars involves the use of excavating equipment to remove the uppermost layer of gravel.

a. Prior to material extraction, survey of elevations will determine the desired post extraction elevations and contours.
b. No more than 7,000 cubic yards will be removed using the skimming technique.
c. Extracted material may be temporarily stockpiled on the bar and removed at a later time
d. The skimmed area will have at least a five-foot buffer from the wetted edge of the Smith River and will be delineated by staking and flagging for equipment operators, with the approval of the California Department of Fish and Game representative prior to commencing work..
e. Saxton Bar will be left smooth, free of depressions, and sloped towards the active river channel.
f. Skimming will occur no closer than 5 feet from the wetted edge of the Smith River channel and no closer than 300 feet from the upstream break.
g. The elevation of the skimmed bar will be no less than one foot above the adjacent water surface elevation of the Smith River.
h. The slope of the extracted bar will be left at least a one percent grade.

Runoff Control Plan

a. Runoff from mining operations at Saxton Bar will Be controlled to avoid entrance of turbid water or pollutants in to the Smith River; berms will be constructed using extracted material along buffer strips that separate the main channel of the Smith River from the extraction areas.
b. A supply of absorbent pads will be maintained for temporary runoff control measures and pads will be placed on the impounded water while suspended sediment settles and before breaching occurs.
c. No equipment fuel will be stored on or near the proposed extraction areas.
d. Vehicles will be maintained according to regulations and will be checked off-site on a daily basis to ensure no fuel or fluid leakage prior to commencing work.
e. The installation of berms around main channel buffer areas will occur prior to extraction and will be removed after project completion.
f. If any leaks or spills occur, appropriate agency personnel and California Department of Fish and Game representatives will be notified immediately.
g. Location of the temporary runoff control measures are identified on the site map/photo.


Mainstem Smith River
Proposed
Skimming Area
Saxton Bar
Proposed
Alcove Trench
Riparian


No vehicular traffic
beyond this point
Temporary Stockpiles

GERALD LARUE
Hydrologist
19921 Whaleshead Road
Brookings, OR 97415

June 13, 2002

Dear Blake:

Attached, please find the following:

Plots of current cross-sections

Computation sheet with current volume and volumes for skimming, trenching and pitting proposal.

Photograph with plotted cross-section locations, for trenching and pitting proposal.

I would recommend limited skimming along the lower end of the bar. This operation would begin at station 9+00 and end at station 11+50 and would extend from the low water surface back to the right 60 feet with a 2% slope. This should yield at least 1,500 cubic yards. A 30 foot wide trench would begin at station 9+00 and extend downstream to station 13+50. Should this trench be dug to a depth of 14 feet, there would be a yield of about 7,000 cubic yards. A pit could also be dug just above the riparian growth at the very lower end of the bar. If this pit were 100 feet square and 14 feet deep, there would be a yield of about 5,200 cubic yards.

I understand that you intend to use your material for ranch roads. Even then, this should be but a small portion of the 13,700 cubic yards that would be available to you should you wish to market it.

Please feel free to contact me should you have any questions or problems.

Sincerely,

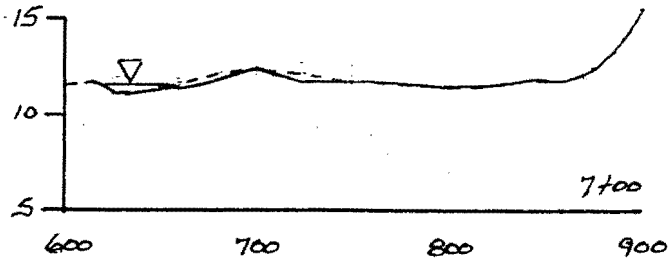
Gerald Larue

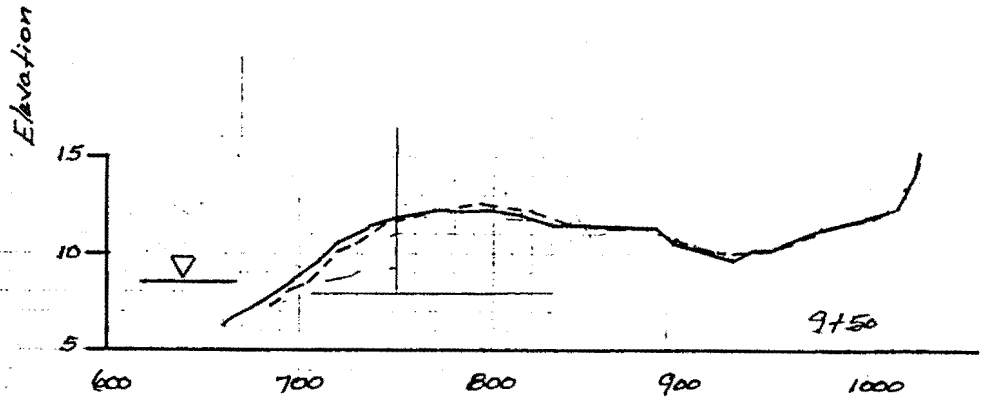
EXHIBIT NO. 5
APPLICATION NO.
1-02-031
PRE-EXTRACTION & MONITORING CROSS-SECTIONS (1 of 8)

Saxton Bar

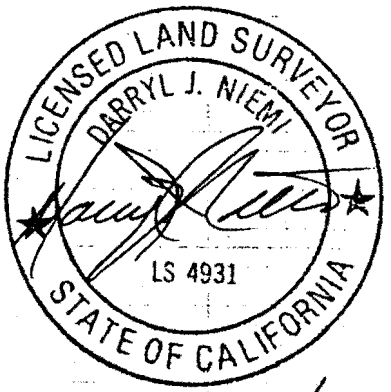
System Smith River
Datum NAVD
Survey date June 6, 2002
Flow 729 ft³/sec

——— June 6, '02
- - - - - - May 25, '01
——▽—— Water Surface



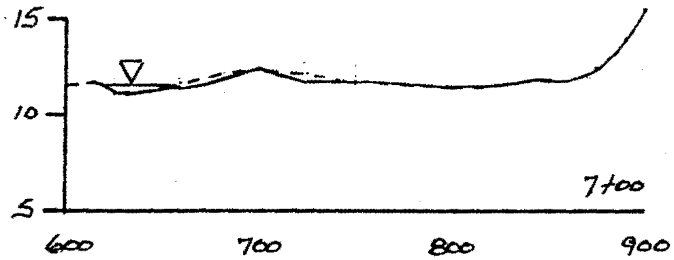


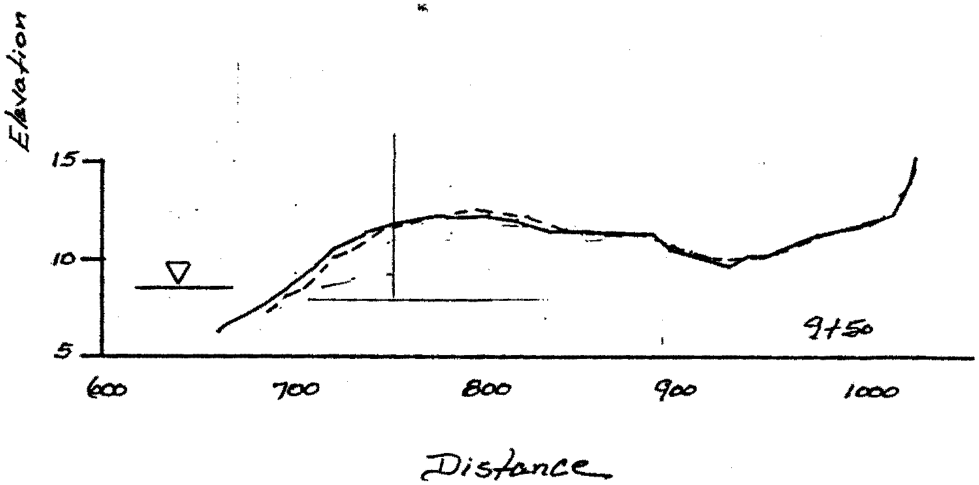
Distance



RENEW 12-31-04

Prepared by G.W. Tatum
Hydrologist





Saxton Bar

System Smith River
Datum NAVD
Survey/date June 6, 2002
Flow 729 ft³ sec

——— June 6, '02
- - - - May 25, '01
—▽— Water Surface

LICENSED LAND SURVEYOR
DARRYL J. NIEMI
LS 4931
STATE OF CALIFORNIA

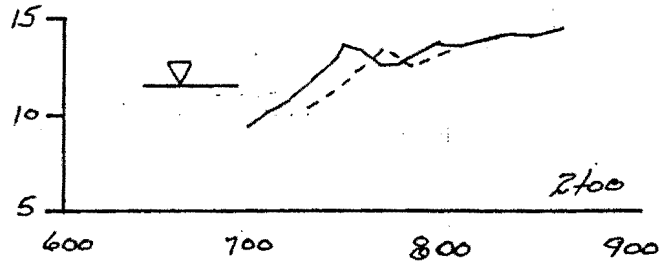
RENEW 12-31-04

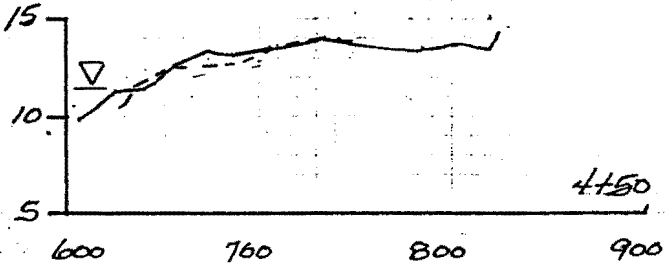
Prepared by G.W. Lake
Hydrologist

Saxton Bar

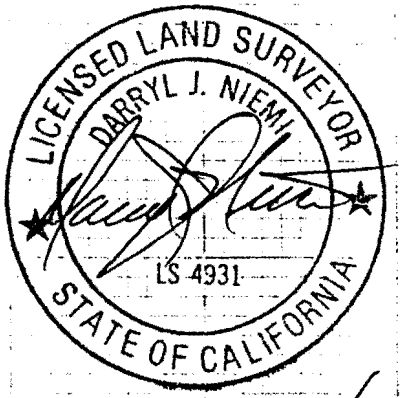
System Smith River
Datum NGVD
Survey date June 6, 2002
Flow 729 ft³/sec

——— June 6, '02
- - - - - - May 25 '01
——▽—— Water Surface





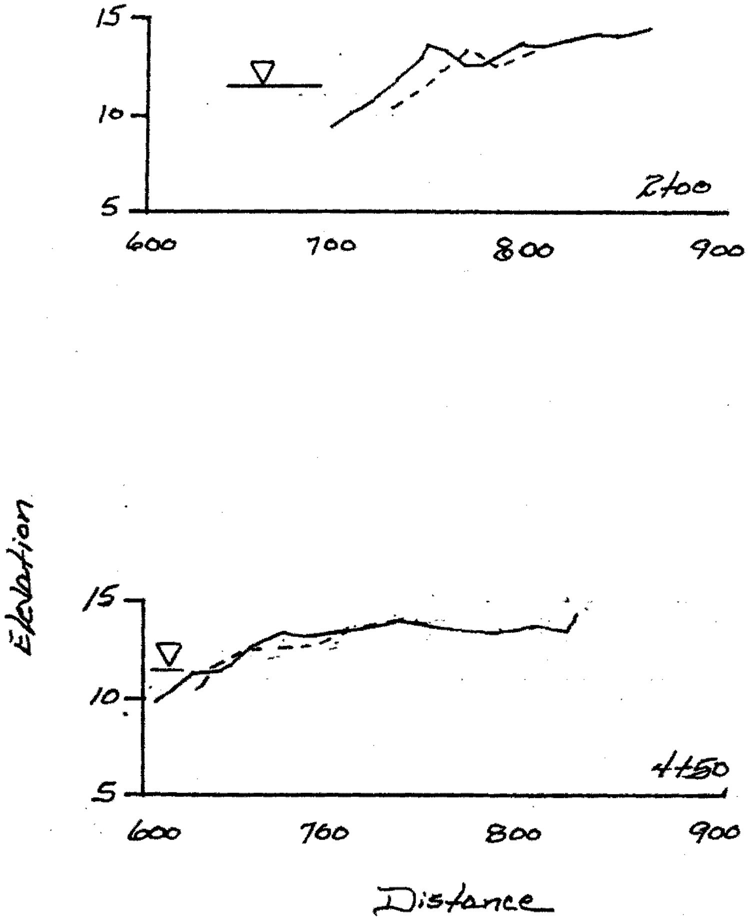
Profile
Elevation
Distance



revised 12-31-04

Prepared by G.W. LaRue
Watershed

5 of 8



Saxton Bar

System Smith River
Datum NGVD
Survey date June 6, 2002
Flow 729 ft³ sec

——— June 6, '02

- - - - May 25 '01

—▽— Water Surface

LICENSED LAND SURVEYOR
DARRYL J. NIEMI
LS 4931
STATE OF CALIFORNIA

RENEW 12-31-04

Prepared by [illegible] W. LaRue
Hydrologist

Smith River

Sexton Bar — June 2008

Station	Extration			
	End Area (ft^2)	Sum Readings (ft^2)	Interval (ft)	Quantity (yd^3)
2+00 −100	300	194	350	2,514
4+50	88			
4+50	88	164	250	1,519
7+00	240			
7+00	240	329	450	5,483
9+50 +200	418			
			Total	9,516
Trench		Proposed Removal		
9+00	420	420	450	7,000
13+50	420			
Pot Hole				
100^2 x 14'				5,190
Skim				
9+00	162	162	250	1,500
11+50	162			
			Removal	
			Total	13,690

Available to Skim + 2000 lbs since 2001

Prepared by: S.W. McRae

Hydrologist

LICENSED LAND SURVEYOR
DARRYL J. NIEMI
LS 4931
STATE OF CALIFORNIA

RCNee
12-31-04

Smith River

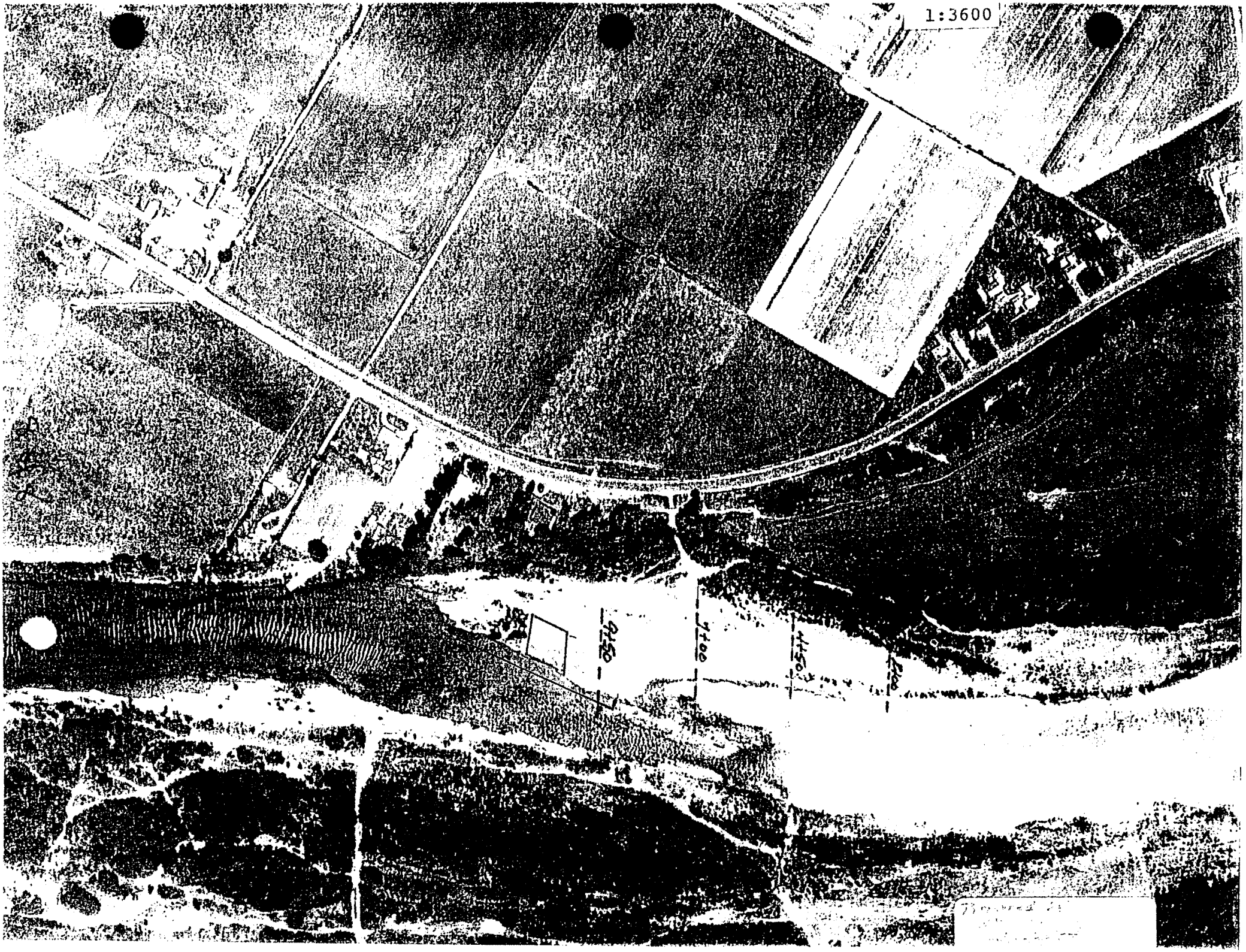
Sexton Bar — June 2008

Station	Extraction			
	End Area (ft^2)	Sum Reading (ft^2)	Interval (ft)	Quantity (yd^3)
2+00 − 100	300			
4+50	88	194	350	2,514
4+50	88	164	250	1,519
7+00	240			
7+00	240			
9+50 +200	418	329	450	5,483
			Total	9,516
Trench		Proposed Removal		
9+00	420	420	450	7,000
13+50	420			
Pot Hole				
100^2	x 14'			5,190
Skim				
9+00	162	162	250	1,500
11+50	162			
Prepared by: G.W. LaRue				
Hydrologist			Removal	
			Total	13,690

Available to Skim + 2000 yds since 2001

LICENSED LAND SURVEYOR
DARRYL J. NIEMI
LS 4931
STATE OF CALIFORNIA

Reviewed 12-31-04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US Army Corps of Engineers

SAN FRANCISCO DISTRICT

PUBLIC NOTICE

NUMBER: LOP 96-2a **DATE: July 26, 2002**
(File Number 26813N)

Regulatory Branch
333 Market Street
San Francisco, CA 94105-2197

LETTER OF PERMISSION PROCEDURE
GRAVEL MINING ACTIVITIES WITHIN DEL NORTE COUNTY

1. **INTRODUCTION:** On May 1, 2002, the San Francisco District, U.S. Army Corps of Engineers (Corps) issued a public notice proposing a new Letter of Permission (LOP) Procedure (LOP 2002-2) for gravel mining activities in Del Norte County, California. LOP 2002-2 was intended to supercede LOP 96-2, which authorized many gravel extraction activities in Del Norte County between 1997 and 2001. Attempts to resolve several issues connected with LOP 2002-2 have delayed its implementation. In order to authorize gravel mining activities during the 2002 extraction season, the Corps is hereby extending Letter of Permission Procedure 96-2 to LOP 96-2a with special conditions (see below). The extension shall expire December 31, 2002. The Corps informally coordinated with other federal resource agencies prior to extending the expiration date of LOP 96-2a. We anticipate that LOP 2002-2 will be implemented prior to the 2003 gravel extraction season.

2. **BACKGROUND:** On March 28, 1997, the Corps adopted an LOP procedure for the authorization of certain gravel extraction activities in Del Norte County. Except for the mitigating measures described below, the LOP 96-2 procedure was described in a public notice dated, March 28, 1997. The purpose of the LOP 96-2 procedure is to streamline authorizations pursuant to Section 10 of the Rivers and Harbors Act (33 U.S.C. 403) and Section 404 Clean Water Act (33 U.S.C. Section 1341) for gravel extraction activities and related work not posing significant adverse individual or cumulative impacts. The LOP 96-2 procedure was originally valid until March 28, 2002. With authorization of LOP 96-2a, the Corps is extending the procedure until December 31, 2002.

3. **ENDANGERED SPECIES:** The Corps will request the National Marine Fisheries Service (NMFS) amend its biological opinion for LOP 96-2a to include the new expiration date of December 31, 2002. The Corps will also consult as appropriate with the U.S. Fish and Wildlife Service on endangered species issues.

Additional Mitigating Measures: The NMFS biological opinion, dated September 12, 1997 and amended September 5, 2000, for LOP 96-2 prohibited gravel extraction within the wetted channel as well as activities that might divert the low flow channel. After further review, NMFS has provided the following mitigating measures that could offset the adverse impacts from wet trenching and/or low flow channel diversion. The wet trenching and/or low flow channel diversion may be authorized on a case-by-case basis. Based on an analysis of the information available, the Corps has determined that the procedure shall be extended until December 31, 2002 and may authorize trenching with the following conditions:

1) Proposed extraction areas shall be located where geomorphic and riverine processes would normally result in pool formation and maintenance, as determined by a qualified hydrologist or

EXHIBIT NO. 6
APPLICATION NO.
1-02-031
PUBLIC NOTICE – EXTEN. OF LOP NO. LOP 96-2a (1 of 2)

geomorphologist. Similarly, as recommended by the hydrologist or geomorphologist, runs may be utilized if that type of habitat can be maintained and not altered to unnatural pool habitat. In all cases, trenches shall not be located in riffles and shall be located at sufficient distance that head cutting of the trench will not affect riffle elevation and stability.

2) Proposed extraction areas shall be located where diversion of the stream channel to a natural side or overflow channel is possible and appropriate.

3) Proposed extraction shall be conducted in an area that is dry or otherwise devoid of streamflow, following diversion.

4) Instream trenching operations shall be limited to the period from July 15 through August 30 to minimize and buffer against impacts to migrating or rearing adult and juvenile salmonids.

5) Following extraction, all trenches created in the low flow channel shall have large woody debris placed within to reduce illegal fish poaching and provide habitat for holding or rearing adult and juvenile salmonids. Alternatively, boulders may be used in place of large woody debris.

6) On the day of diversion, the proposed extraction site must be herded and seined repeatedly until no further fish are captured, then electrofished by a qualified fishery biologist. Fish must be identified to species and immediately placed downstream of the extraction site. A quantitative report detailing the date of capture, species, and physical condition of all relocated fish shall be submitted to NMFS within one week of completion of electro fishing.

7) In addition to the existing monitoring requirements in LOP 96-2, the elevation and location of the stream channel thalweg and adjacent trench shall be mapped completely for a distance of at least 150 feet upstream and downstream of the extraction area before and immediately following extraction and at least once during the following winter high flows, using the same datum as cross-sectional information. Surveyed profiles and cross sections shall include riffles located upstream and downstream of the trench in reaches where such habitat types are present. This may require surveying beyond 150 feet. The additional survey information shall be included in the pre- and post-extraction reports, whichever is soonest, and submitted to the Corps and NMFS concurrently.

8) All proposed extractions using instream trenching shall be submitted to NMFS for approval. Extraction designs shall follow Corps procedures and also include the thalweg profile as described above.

4. **OTHER AGENCIES:** The State of California has ownership or interest in numerous rivers and waterways in Del Norte County. Operators should send a copy of the pre-extraction report to the State Lands Commission concurrently with the submission to the Corps. The Commission may be contacted at 100 Howe Avenue, Suite 100 South, Sacramento, CA 95825-8202.

The National Park Service oversees consistency determinations on portions of the Smith and Klamath Rivers in Del Norte County. Each operator on these rivers should send a copy of the pre-extraction report to Attention: Mr. Harry Williamson, National Park Service 801 "I" Street, Suite 156B, Sacramento, California 95814

FOR MORE INFORMATION: For copies of the LOP procedure, please contact Mr. Michael Shirley at 707-443-0855. Telephone inquiries may be directed to Mr. Kelley Reid at the same number or e-mail kelley.reid@spd02.usace.army.mil.

Endangered Species Act - Section 7 Consultation

Amendment Two
to the Biological Opinion

Letter of Permission Procedure
Gravel Mining and Excavation Activities
within Del Norte, California
LOP 96-2a

Action Agency
U.S. Army Corps of Engineers
San Francisco District

Consultation Conducted by
National Marine Fisheries Service
Southwest Region

Date Issued: AUG 16 2002

EXHIBIT NO. 7
APPLICATION NO.
1-02-031
AMEND. TWO TO BIOLOGICAL OPN.
(1 of 10)

Consultation History

The National Marine Fisheries Service (NMFS) originally issued a September 12, 1997, Biological Opinion (Opinion) on the LOP 96-2 procedure. Subsequent to this Opinion, critical habitat was designated for Southern Oregon/Northern California Coast (SONCC) coho salmon (May 5, 1999, 64FR 24049). Reinitiation of consultation is required if a new species is listed or critical habitat is designated that may be affected by the identified action [50 CFR 402.16(d)]. On September 23, 1999, the Army Corps of Engineers (Corps) requested reinitiation of consultation on LOP 96-2 for impacts related to SONCC coho salmon designated critical habitat (letter from C. Fong, Corps, to R. McInnis, NMFS dated September 23, 1999). That Opinion was issued on September 5, 2000.

The Corps then requested (letter from C. Fong, Corps, to R. Lent, NMFS, dated June 25, 2001) that the Opinion be amended to add an additional mining site. NMFS amended the Opinion on September 19, 2001.

Status of the Species and Environmental Baseline

The status of the SONCC coho salmon and their critical habitat and the environmental baseline has not measurably changed since the preparation of the September 5, 2000, Opinion.

Project Description

Extension

The Corps is requesting an amendment to the duration of the Opinion, due to the extension of LOP 96-2a through December 31, 2002. As described in LOP 96-2, the Corps has the option of extending the LOP authorization past the March 28, 2002 expiration date. The Corps is utilizing this extension option in order to provide continuity to the permitting process through the 2002 gravel mining season. The continuation of the proposed action for one additional mining season changes the project description only in extent of duration.

Stream Diversion and Wet Trenching

LOP 96-2 described conditions for stream channel diversion and wet trenching as a gravel extraction method. The September 5, 2000 Opinion analyzed the effects of this activity and provided terms and conditions that precluded the use of stream channel diversion and wet channel trenching. Subsequently, NMFS reevaluated the use of stream channel diversion and wet channel trenching and has concluded that, in some cases, stream diversion and trenching offers an opportunity for gravel extraction that may be preferable because impacts to stream channel form and function may be less than that which would result from other gravel extraction methods, such as bar skimming.

NMFS provided the Corps with recommendations for conducting stream channel trenching in anticipation of the Corps' proposal to extend LOP 96-2 (letter from I. Lagomarsino, NMFS, to C. Fong dated April 9, 2002). The Corps included these recommendations in LOP 96-2a as "Additional Mitigating Measures." The additional measures the Corps included in LOP 96-2a include the following:

> (1) proposed extraction areas will be located where geomorphic and riverine processes would normally result in pool formation and maintenance, as determined by a qualified hydrologist or geomorphologist. Similarly, as recommended by the hydrologist or geomorphologist, runs may be utilized if that type of habitat can be maintained and not altered to unnatural pool habitat. In all cases, trenches will not be located in riffles and shall be located a sufficient distance from riffles such that head cutting of the trench will not affect riffle elevation and stability;
>
> (2) proposed extraction areas shall be located where diversion of the stream channel to a natural side or overflow channel is possible and appropriate;
>
> (3) proposed extraction shall be conducted in an area that is dry or devoid of streamflow, following diversion;
>
> (4) instream trenching operations shall be limited to the period from July 15 through August 30 to minimize and buffer against impacts to migrating or rearing adult and juvenile salmonids;
>
> (5) following extraction, all trenches created in the low flow channel shall have large woody debris or boulders placed within them to reduce illegal fish poaching and provide habitat for holding or rearing adult and juvenile salmonids.

On the day of diversion, the proposed extraction site must be herded and seined repeatedly until no further salmonids are captured, then electrofished by a qualified fishery biologist. Salmonids must be identified to species and immediately placed downstream of the extraction site. A quantitative report detailing the date of capture, species, and physical condition of all relocated fish will be submitted to NMFS within one week of completion of electrofishing. Also, in addition to the existing monitoring requirements in LOP 96-2, the elevation and location of the stream channel thalweg and adjacent trench will be mapped for a distance of at least 150 feet upstream and downstream of the extraction area before and immediately following extraction and at least once following winter high flows, using the same datum as cross-sectional information. Surveyed profiles shall include riffles located upstream and downstream of the trench in reaches where such habitat types are present. This may require surveying beyond 150 feet. The additional survey information will be included in the pre- and post-extraction reports, whichever is soonest, and submitted to the Corps and NMFS concurrently. Finally, all proposed extractions using instream trenching will be submitted to NMFS for approval. Extraction designs shall follow Corps procedures and also include the thalweg profile as described above.

Effects of the Action

Diversion and consequent dewatering of the stream channel will result in temporary reduction in invertebrate production in the affected area. This decrease in production is not anticipated to have measurable impacts to coho salmon. The affected area could be further reduced by not completely diverting the stream channel to a side or overflow channel, but, rather, isolating the extraction area only by deploying silt curtains around the site. Fish moved from the site may be injured or temporarily disoriented during capture and relocation. We anticipate few injuries that would lead to death or loss of production. Additionally, relocated fish may temporarily affect coho salmon residing in or near the relocation site during competition for rearing space. We anticipate the impact to be negligible given the likelihood that current habitat is underutilized. Again, the affected area and number of fish could be further reduced by not diverting the stream channel, but using other site isolation techniques instead.

NMFS thinks instream trenching in selected sites reduces the potential for habitat degradation often associated with other extraction methodologies and may, in fact, reestablish pool habitat that occurred in the past, thereby increasing habitat diversity which will benefit coho salmon. The addition of large woody debris and/or boulders will provide further complexity to these newly created habitats. Other extraction techniques, such as skimming, may inhibit the formation and maintenance of pool habitat because of the potential loss of hydraulic control necessary for scour.

Synthesis of Effects

The continuation of the proposed action for one additional mining season does not appreciably change the effects of the action as analyzed in the Opinion. Though project duration is one component of the effects analysis, as described in the Opinion, many of the potential effects of the proposed action are chronic in nature, and have the potential to occur slowly over time (e.g., changes to channel morphology that may simplify juvenile rearing habitat). Other potential effects of the proposed action (e.g., a pulse of sediment from stream crossing construction) occur at the time of project implementation. The continuation of the proposed action for one additional mining season does not accelerate the potential for chronic effects, as changes to salmonid habitat quality typically occur over a multi-year time frame. In addition, NMFS expects that the potential effects of the proposed action will be the same during 2002 as they were during 2001, as analyzed in the Opinion.

NMFS anticipates minor and temporary changes to invertebrate production as a result of trenching, but these changes are not expected to result in adverse effects to coho salmon as the duration of the activity and size of the area will be limited. Some coho salmon juveniles may be temporarily disoriented and forced to compete with other fish as a result of capture and relocation associated with diversion of the stream channel or isolation of the extraction area, but these effects are not expected to be permanent or result in a reduction in coho salmon production.

4410

Due to low gravel replenishment rates at mining sites over the last few winters, mining opportunities are relatively limited in Del Norte County this year. NMFS has been working closely with the California Department of Fish and Game, and with the Corps, to identify and recommend mining opportunities that are consistent with LOP 96-2a, and with the project description and effects analyzed in the Opinion. This review process further ensures that the potential for effects as analyzed in the Opinion will not be greater in magnitude, nor change appreciably, due to the increased duration of the proposed action and the addition of conditions for trenching.

Conclusion

Based on our review during the amendment process, NMFS concludes that LOP 96-2a for gravel mining operations during 2002 is not likely to jeopardize the continued existence of SONCC coho salmon or destroy or adversely modify its designated critical habitat.

August 2002 Amended Incidental Take Statement for the September 5, 2000 Biological Opinion for Gravel Mining in Del Norte County, California

Take is defined as harass, harm, pursue, hunt, shoot, kill, trap, capture or collect, or attempt to engage in any such conduct of listed species of fish or wildlife without a special exemption. NMFS further defines "harm" as an act which kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding or sheltering. Incidental take is any take of listed animal species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or an applicant. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered a prohibited taking provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below are non-discretionary and must be undertaken by the Corps so that they become binding conditions of any grant or permit issued to an applicant, as appropriate, for the exemption in section 7(o)(2) to apply. The Corps has a continuing duty to regulate the activity covered by this incidental take statement. If the Corps (1) fails to assume and implement the terms and conditions or (2) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the Corps must report the progress of the action and its impact on the species to the NMFS as specified in the incidental take statement [50 CFR § 402.14(i)(3)].

A. Amount or Extent of the Take

NMFS anticipates that gravel mining operations under LOP 96-2a during the year 2002 will result in take of listed salmonids. This take will primarily be in the form of harm to salmonids by impairing their essential behavior patterns as a result of reductions in the quality or quantity of their habitat. NMFS anticipates that the number of individuals harmed will be low. In addition, NMFS anticipates that a small number of juveniles may be killed, injured, or harassed during construction and removal of channel crossings or during relocation of juveniles for trenching.

The take of listed salmonids will be difficult to detect because finding a dead or injured salmonid is unlikely as the species occurs in habitat that makes such detection difficult. The impacts of gravel mining under LOP 96-2 will result in changes to the quality and quantity of salmonid habitat. These changes in the quantity and quality of salmonid habitat are expected to correspond to injury to, or reductions in, survival of salmonids by interfering with essential behaviors such as spawning, rearing, feeding, migrating, and sheltering. Because the expected impacts to salmonid habitat correspond with these impaired behavior patterns, NMFS is describing the amount or extent of take anticipated from the proposed action in terms of limitations on habitat impacts. NMFS expects that physical habitat impacts will be: consistent with the areas described in Table 1 below, compliant with the terms and conditions of LOP 96-2a and this incidental take

statement, and within the expected effects of gravel mining operations as described in this Opinion.

Table 1. For each river, gravel bar sites are listed from the most downstream site to the most upstream site, and are not necessarily contiguous.

Stream	Gravel Bar Site Name
Smith River	Ranch Bar
	Tedsen Bar
	Crockett Bar
	Woodruff Bar
	Saxton Bar
	Simpco Bar
	Huffman Bar
	Sultan Bar
Rowdy Creek	Maris Pit
	Rowdy Creek Bars
Klamath River	Blake's Bar

Anticipated incidental take will be exceeded if gravel mining operations extend beyond the areas described in Table 1 above, or are not in compliance with the terms and conditions of LOP 96-2a or this incidental take statement, or if effects of gravel mining operations are exceeded or different than the expected effects described in this Opinion.

B. Effect of the Take

In the accompanying Opinion, NMFS determined that the amount of anticipated take is not likely to result in jeopardy to SONCC coho salmon, or result in the destruction or adverse modification of SONCC coho salmon designated critical habitat.

C. Reasonable and Prudent Measures

NMFS believes that the following reasonable and prudent measures are necessary and appropriate to minimize take of SONCC coho salmon.

The Corps shall:

1. Ensure that channel form and function is retained, thereby minimizing declines in the quality or quantity of salmonid habitat.
2. Ensure that project design features and mitigation measures that minimize adverse effects to proposed and listed species and designated critical habitat are implemented as part of the LOP 96-2a procedure.

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3. Ensure that project design features, mitigation measures, and enhancement recommendations that minimize impacts to salmonids are reviewed and approved by NMFS and other involved agencies before implementation.
4. Begin to track changes to salmonid habitat quality and quantity that are due gravel extraction operations by beginning to update the monitoring plan.

D. Terms and Conditions

The Corps, and their permittees, must comply with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are non-discretionary.

RPM 1. Ensure that channel form and function is retained, thereby minimizing declines in the quality or quantity of salmonid habitat.

a. All projects authorized under LOP 96-2a must undergo an annual comprehensive hydrologic and geomorphic review by CDFG, NMFS, and the Del Norte County hydrologist.

b. All projects must be based on the sustained yield monitoring as per annual cross-sectional data specified under LOP 96-2 to ensure that channel degradation or adverse impacts to SONCC coho salmon do not result from operations permitted under LOP 96-2a.

RPM 2. Ensure that project design features and mitigation measures that minimize adverse effects to proposed and listed species and designated critical habitat are implemented as part of the LOP 96-2a procedure.

a. Maximize low flow channel confinement by utilizing the siltline, where available and appropriate, in designing the vertical offset, and by ensuring that permittees are aware that a one foot vertical offset is a minimum value, and that a larger vertical offset may be necessary to maximize the low flow channel confinement.

b. Protect gravel bar stability by minimizing extraction on the upstream one-third of gravel bars.

c. All skimming operations shall be graded free of depressions and sloped towards the low flow channel with a minimum of two percent grade

d. Require, where possible and safe, that a person wade the stream ahead of heavy equipment crossing the wetted low-flow channel to scare any

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rearing juvenile salmonids out of the crossing area.

c. Isolation of trenching operations should be done using silt curtains or other methods unless stream diversion is only method available to minimize effects.

RPM 3. Ensure that project design features, mitigation measures, and enhancement recommendations that minimize impacts to salmonids are reviewed and approved by NMFS and other involved agencies before implementation.

a. Ensure that prior approval is granted by NMFS for extensions to the June 1-October 15 season for gravel extraction operations.

b. Ensure that culvert requests and information describing the need for culverts are supplied to NMFS for review and approval of salmonid impact minimization measures.

RPM 4. Begin to track changes to salmonid habitat quality and quantity that are due to gravel extraction operations by beginning to update the monitoring plan.

a. All trenches shall be monitored for adult and juvenile salmonid use by direct observation at least once prior to onset of high flows.

b. In order to adequately characterize channel topography, and salmonid habitat, ensure that additional cross-sections for trenching are submitted as required under LOP 96-2a.

c. Ensure that all required monitoring is completed and that monitoring reports are provided to NMFS. Reports shall be submitted to:

Irma Lagomarsino
Supervisor, Arcata Field Office
National Marine Fisheries Service
1655 Heindon Road
Arcata, CA 95521-4573

Reinitiation of Consultation

This concludes formal consultation on this amendment of the September 5, 2000, LOP 96-2 Opinion. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the extent of incidental take is exceeded, or is expected to be

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exceeded; (2) new information reveals effects of the agency action may affect listed species or critical habitat in a manner or to an extent not considered in this Opinion; (3) the agency action is modified in a manner that causes an effect to the listed species or critical habitat not considered in this Opinion; or (4) a new species is listed or critical habitat is designated that may be affected by the action. In instances where the amount of incidental take is exceeded, consultation shall be reinitiated immediately.

Conservation Recommendations

Section 7(a)(1) of the Endangered Species Act directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of the threatened and endangered species. Conservation recommendations are discretionary measures suggested to minimize or avoid adverse effects of a proposed action on listed species, to minimize or avoid adverse modification of critical habitat, or to develop additional information.

The NMFS thinks the following conservation measures are consistent with these obligations, and therefore should be implemented by the Corps:

1. The Corps, in conjunction with NMFS and other involved agencies, should begin to develop updated monitoring protocols, in addition to additional cross-sections and the longitudinal profile, that begin to answer questions regarding changes in habitat quantity and quality that are due to gravel extraction operations. An important relationship to begin to monitor is that between river stage and discharge that is required to overtop skimmed gravel bar surfaces.

2. The Corps should begin to update, in conjunction with NMFS and other involved agencies, the LOP procedure for 2003 and beyond.

In order for NMFS to be kept informed of the actions minimizing or avoiding effects or benefitting listed species or their habitats, NMFS requests notification of the implementation of any conservation recommendations.

U.S. Army Corp of Engineers ("Corps") regarding a . Mine in Riverside County with the California Endan- ;A") pursuant to Fish and ;.1. On March 9, 2001 the indum (1-6-00-F-715.2) in inion (1-6-00-F-715) speci- ndertaken by the project mpacts of the project to the -listed threatened reptile, desert tortoise (*Gopherus agassizii*). If the Department determines that the federal biological opinion is consistent with CESA, the applicant will not be required to obtain an incidental take permit (Fish and Game Code Section 2081) for project impacts to this species.

DEPARTMENT OF FISH AND GAME

PUBLIC INTEREST NOTICE

CESA CONSISTENCY DETERMINATION FOR RAMONA AIRPORT IMPROVEMENT PROJECT, SAN DIEGO COUNTY, CALIFORNIA

The Department of Fish and Game ("Department") received a request, on April 16, 2001 from the project applicant, Federal Aviation Administration ("FAA"), that consultations between the U.S. Fish and Wildlife Service ("Service"), the Department, and the U.S. Army Corp of Engineers ("Corps") regarding a proposed Ramona Airport Improvement Project in San Diego County be considered consistent with the California Endangered Species Act ("CESA") pursuant to Fish and Game Code Section 2080.1. On March 16, 2001 the Service issued a biological opinion (1-6-98-F-833.3-R1) to supplement the original biological opinion (1-6-98-F-46) specifying measures to be undertaken by the project applicant to mitigate any impacts of the project to the federally-listed endangered San Diego fairy shrimp (*Branchinecta sandiegonensis*; shrimp) and the state-listed threatened, federally-listed endangered Stephen's kangaroo rat (*Dipodomys stephensi*; SKR). If the Department determines that the federal biological opinion is consistent with CESA, the applicant will not be required to obtain an incidental take permit (Fish and Game Code Section 2081) for project impacts to this species.

FISH AND GAME COMMISSION

NOTICE OF FINDINGS

NOTICE IS HEREBY GIVEN that, pursuant to the provisions of Section 2074.2 of the Fish and Game Code, the California Fish and Game Commission, at its April 5, 2001, meeting in Monterey, accepted for consideration the petition submitted to list coho salmon (*Oncorhynchus kisutch*) north of San Francisco as endangered. Pursuant to subdivision (a)(2) of Section 2074.2 of the Fish and Game Code, the aforementioned species is hereby declared a candidate species as defined by Section 2068 of the Fish and Game Code.

Within one year of the date of publication of this notice of findings, the Department of Fish and Game shall submit a written report, pursuant to Section 2074.6 of the Fish and Game Code, indicating whether the petitioned action is warranted. Copies of the petition, as well as minutes of the April 5, 2001, Commission meeting, are on file and available for public review from Robert R. Treanor, Executive Director, Fish and Game Commission, 1416 Ninth Street, Box 944209, Sacramento, California 94244-2090, phone (916) 653-4899. Written comments or data related to the petitioned action should be directed to the Commission at the aforementioned address.

Fish and Game Commission

Robert R. Treanor
Executive Director

April 17, 2001

FISH AND GAME COMMISSION

NOTICE OF RECEIPT OF PETITION

NOTICE IS HEREBY GIVEN that, pursuant to the provisions of Section 2073.3 of the Fish and Game Code, the California Fish and Game Commission, on October 25, 2000, received a petition from the Milo Baker Chapter of California Native Plant Society to uplist the North Coast Semaphore Grass (*Pleuropogon hooverianus*) from threatened to an endangered species. At present, the North Coast Semaphore Grass is known from only four sites: two sites within Mendocino County, one site in Sonoma County and one site in Marin County. The North Coast Semaphore Grass is associated with wet, grassy areas within redwoods and mixed hardwood forests and along wet edges of forests.

Pursuant to Section 2073 of the Fish and Game Code, on October 31, 2000, the Commission transmitted the petition to the Department of Fish and Game for review pursuant to Section 2073.5 of said Code. The Department's evaluation and recommendation relating to the petition was received by the Commission at its April 5, 2001, meeting in Monterey. Interested parties may contact Ms. Sandra Morey, Chief, Habitat Conservation Planning Branch, Department of Fish and Game, at telephone (916) 653-4875

Section 749.1 is added to Title 14, CCR, to read:

749.1. Special Order Relating To Incidental Take Of Coho Salmon (*Oncorhyn* Candidacy Period.

The commission finds that, based on current knowledge and protection and management efforts outlined in this regulation, including **Exhibits A through D***, the level of habitat loss and take of coho salmon which is likely to occur during the period that this regulation is in effect will not cause jeopardy to the continued existence of the species.

(a) **Take Authorization.**

Based upon the above findings, the commission authorizes the take of coho salmon north of San Francisco **(Exhibit A)** during the candidacy period subject to the terms and conditions herein.

(1) **Inland and Ocean Sport and Commercial Fishing.**

Coho salmon may not be retained during sport or commercial fishing in any waters of the State. Incidentally hooked or netted coho salmon must be immediately released unharmed to the waters where they are hooked or netted.

(2) **Suction Dredging.**

Incidental take of coho salmon during suction dredging that complies with Section 228, Title 14, CCR, is authorized during the candidacy period.

(3) **Research and Monitoring.**

(A) Take of coho salmon by department personnel in the course of research and monitoring is authorized pursuant to Section 783.1(c), Title 14, CCR.

(B) Take of coho salmon in the course of research and monitoring by public agencies and private parties is authorized subject to restrictions in **Exhibit B.**

(4) **Hatchery Operations.**

Take of coho salmon by the Department of Fish and Game for hatchery management purposes is authorized pursuant to Section 783.1(c), Title 14, CCR.

(5) **Habitat Restoration.**

(A) Incidental take of coho salmon resulting from planning, assessment, inventory, construction, maintenance and monitoring activities related to the Department of Fish and Game Fisheries Restoration Grants Program and carried out in the manner prescribed in the department's "California Salmonid Stream Habitat Restoration Manual - Third Edition, January 1998", is authorized. Incidental take resulting from Fisheries Restoration Grants Program activities not carried out in such manner is authorized only if the activity is performed under the supervision or oversight of, or is funded by the department.

(B) Incidental take resulting from activities performed by department employees related to constructing,

installing, operating and maintaining facilities or stream features designed to eliminate or minimize barriers to fish migration and fish rescue operations is authorized pursuant to Section 783.1(c), Title 14, CCR.

(6) **Extraction of Gravel Resources.**

Incidental take of coho salmon resulting from the extraction of gravel resources in a stream or river, is authorized for the coho candidacy period provided that such activities are conducted in accordance with the measures specified in **Exhibit C.**

(7) **Water Diversions.**

Incidental take of coho salmon resulting from diversion of water, for any purpose, is authorized during the candidacy period, subject to the following conditions:

(A) Existing unscreened diversions may continue in operation through the candidacy period. Upon any future determination by the commission that coho salmon shall be added to the list of threatened or endangered species, incidental take for such diversions must be authorized under Fish and Game Code Section 2081(b) or be determined exempt from the permitting requirement under Fish and Game Code Section 2080.1.

(B) Diversions approved and constructed after the effective date of this section shall be screened and shall meet the Department of Fish and Game Fish Screening Criteria (dated June 19, 2000) included in this regulation as **Exhibit D.**

(C) Existing fish screens that are repaired, upgraded, or reconstructed during the candidacy period must meet the Department of Fish and Game Fish Screening Criteria (dated June 19, 2000) included in this regulation as **Exhibit D.**

(8) **Department of Fish and Game Streambed Alteration Agreements.**

Incidental take of coho salmon during the candidacy period is authorized for any project carried out in compliance with section 1601 or 1603 of the Fish and Game Code, for which a Lake or Streambed Alteration Agreement (Agreement) has been entered into between the department and the party undertaking the activity, provided that:

(A) any measures identified by the department as necessary to protect coho salmon are incorporated into the signed Agreement and are fully implemented by the party undertaking the activity; and

(B) the project otherwise complies with other relevant provisions of this section. Projects that will involve the extraction of mineral resources shall also comply with subsection (a)(6), and projects involving water diversions shall also comply with subsection (a)(7) of Section 749.1, Title 14, CCR.

(9) **Pacific Lumber Company Habitat Conservation Plan.**

Incidental take of coho salmon resulting from activities within the Plan and Permit Area described as Covered Activities in the "Habitat Conservation Plan for the Properties of The Pacific Lumber Company, Scotia Pacific Holding Company, and Salmon Creek Corporation, February 1999", is authorized during the candidacy period insofar as activities are conducted in accordance with the relevant Operating Conservation Plans.

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(10) **Forest Practices.**

Incidental take of coho salmon is authorized during the candidacy period for otherwise lawful timber operations that comply with conditions specified in the revised final rule language, "Protection for Threatened and Impaired Watersheds, 2000", sections 895, 895.1, 898, 898.2, 914.8, 934.8, 954.8, 916, 936, 956, 916.2, 936.2, 956.2, 916.9, 936.9, 956.9, 916.11, 936.11, 956.11, 916.12, 936.12, 956.12, 923.3, 943.3, 963.3, 923.9, 943.9 and 963.9, Title 14, CCR (which can be found on the Board of Forestry website at www.fire.ca.gov/BOF/pdfs/FRLZ00011814.pdf).

(11) **Additions, Modifications or Revocation.**

(A) Incidental take of coho salmon north of San Francisco from activities not addressed in this section may be authorized during the candidacy period by the commission pursuant to Fish and Game Code Section 2084 or by the department pursuant to Fish and Game Code Section 2081, on a case-by-case basis.

(B) The commission may modify or repeal this regulation in whole or in part, pursuant to law, if it determines that any activity or project may cause jeopardy to the continued existence of coho salmon north of San Francisco.

*A copy of Exhibits A through D which are referenced in this regulation is available upon request from the Fish and Game Commission, 1416 Ninth Street, Box 944209, Sacramento, CA 94255-2090 (Telephone 916 653-4899).

NOTE

Authority: Sections 200, 202, 205, 240 and 2084, Fish and Game Code. Reference: Sections 200, 202, 205, 240 and 2084, Fish and Game Code.

EXHIBIT C

Incidental Take Authorization Standards
For In-Stream Gravel Extraction
During The Candidacy Period For Coho Salmon

1. A gravel extraction plan including design features, mitigation measures, and enhancement recommendations that minimize impacts to salmonids shall be prepared by the operator and submitted to the Department for review and approval before extraction may begin. The maximum amount permitted to be removed shall be no more than the amount of sand and gravel that is annually replenished in the proposed extraction area, and cumulative extraction quantities shall be consistent with the long-term average annual sustained yield based on estimates of mean annual recruitment.

2. Extraction of gravel shall be accomplished by "skimming" or grading of gravel from bars above the low water channel unless another technique is approved in advance by the Department. The gravel bars shall be sloped from the bank down towards the thalweg and downstream to avoid stranding of salmonids. No holes or depressions shall be allowed to remain in the extraction area. No extraction of the streambanks shall be allowed.

3. Low flow channel confinement shall be maximized by utilizing the low flow silt line, where available, in designing the vertical offset. The silt line measurement shall be taken on or before July 15th of any year unless an alternate date is approved, in advance, by the Department. The vertical offset shall be at least one foot. A larger vertical offset, as determined by the Department, may be necessary to maximize the low flow channel confinement.

4. Gravel bar stability shall be protected by minimizing extraction on the upstream one-third of gravel bars. No extraction shall be allowed in riffle sections. The Department shall review proposed gravel extraction plans during an annual site inspection and make specific recommendations to protect salmonid habitat.

5. Channel crossing construction shall not begin before June 15. Removal of channel crossings shall be completed by September 30. If temporary culverts are installed, they will be installed in such a manner so that they will not impede the passing of fish up and down stream.

6. Large woody debris (LWD) shall be stockpiled before gravel extraction begins and redistributed on the gravel bar after the extraction site has been reclaimed at the end of the extraction season. To the extent possible, vehicular access onto gravel mining sites shall be controlled to minimize the loss of LWD from firewood collectors.

7. Trees exceeding 1 inch DBH shall not be removed, and clumps of smaller trees shall not be removed except by prior approval of the Department. The disturbance or removal of vegetation shall be minimized, shall not exceed that necessary to complete operations and shall be limited to areas where extraction has occurred within the past two years.

8. The project shall comply with Section 1601 or 1603 of the California Fish and Game Code, and a Lake or Streambed Alteration Agreement shall be obtained from the Department. Any measures identified by the Department as necessary to protect coho salmon shall be incorporated into the signed agreement and shall be fully implemented.

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