

SAN FRANCISCO DISTRICT

PUBLIC NOTICE

US Army Corps
of Engineers

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

NUMBER: 24715N DATE: July 6, 2001
RESPONSE REQUIRED BY: August 5, 2001

PERMIT MANAGER: David A. Ammerman PHONE: 707-433-0855 dammerman@spd.usace.army.mil

1. INTRODUCTION: The Coast Indian Community of the Resighini Rancheria, P.O. Box 529, Klamath, California 95548, and Jaxon Enterprises (Contact Mr. Robert Towne of Jaxon Enterprises at 707-482-2431) has applied for a Department of the Army permit to extract, annually over a ten-year period, approximately 100,000 cubic yards (CY) of gravel over a 45-acre area of an existing flood overflow channel of the Klamath River, approximately ½ mile east of State Route 101, in Del Norte County, California. This application is being processed pursuant to the provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

2. PROJECT DESCRIPTION: As shown in the attached drawings, the applicant plans to extract, annually over a ten-year period, approximately 100,000 CY of sand and gravel from an existing overflow channel of the Klamath River. The area of extraction would cover approximately 45 acres (3,200 feet by 600 feet) of the overflow channel. The gravel extraction would be separated into three work areas: (1) a 16 to 20 acre upper (upstream) portion of the overflow area (called "Area 1"), previously extracted in year 2000 under Corps Letter of Permission No. 25152N; (2) other new overflow channel areas (called "Area 2") located immediately downstream of last year's extraction (not previously extracted); and (3) proposed subsurface excavations (in "Area 3") which would expand an existing open-water pond (also not previously extracted). Excavation of materials would generally be

accomplished with the use of an excavator or scrapers. Materials would be removed from the overflow channel area and stockpiled in an existing upland location (gravel processing plant). Please see Sheets 1 of 6 and 2 of 6 of the attached project drawings for locations of the proposed extraction areas and gravel processing site. The gravel processing and crushing site would be located above the Ordinary High Water mark of the overflow channel.

Gravel extraction at Area 1 would lower a portion of the eastern buffer area by four to six feet (to elev. 12 – 14 feet NGVD). Approximately 40,000 CY of gravel was extracted from this location during the summer of 2000. The applicant states that, without including replenishment, approximately 25,000 CY of gravel remains to be extracted from Area 1.

Gravel extraction at Area 2 would consist of gravel bar skimming further downstream in the overflow channel. Actual locations within Area 2 would vary from year to year. Extraction at Area 2 would result in extraction of 10,000-20,000 CY, based on current conditions.

Gravel extraction at Area 3 would consist of extracting gravel to depths that would create wetland ponds of deepwater habitat. In Area 3 gravel would be extracted down to approximately 15 feet below summer groundwater levels (as measured in off-channel ponds). The applicant estimates 50,000 CY of material could be removed. The applicant states 90,000 CY of gravel materials remain available for

extraction without any replenishment being considered. The annual extraction volumes in storage (at surface and below the channel) do not consider the additional volume available from gravel replenishment that could occur in the overflow channel annually during winter peak flows.

The start dates for gravel extraction would be determined based on annual stream conditions, location, and elevation of extraction areas. Generally, extraction would not occur before June 1st. Extraction would generally terminate by November 15th depending on annual stream and weather conditions, extraction location and elevation.

Extracted gravel would be hauled directly from the extraction site to the southerly 10 acre upland processing area and stockpiled until the material is hauled out of the area for use in unspecified road construction projects. This gravel processing area was used in past years for the same purpose. At maximum storage, a one-acre stockpile (208 feet x 208 feet) twenty feet high could contain 20,000 CY of gravel. It is anticipated that stockpiling would occur in several piles over a total 2-3 acre area. Gravel would be transported utilizing existing roads from the extraction area to the processing site (See Sheet 2 of 6). East Beach Road would be used to gain access to State Route 101 for eventual transport of the gravel to construction sites within Del Norte County or beyond. After the gravel extraction operations are completed for the season, regrading and recontouring of the extraction sites would occur in such a manner that the water flow, during the times that the overflow channel is inundated in winter, would drain towards the overflow channel thalweg and downstream towards the confluence of the overflow channel with the main channel of the Klamath River. This process is done to facilitate fish passage and prevent stranding of fish.

3. STATE APPROVALS: Under Section 401 of the Clean Water Act (33 U.S.C. Section 1341), an

Native American Tribal applicant for a Corps permit must obtain a water quality certification from the United States Environmental Protection Agency (EPA) or a Tribal Environmental Protection Agency (TEPA) delegated by EPA to administer and issue 401 water quality certifications before a Corps permit may be issued. The applicant is notified by this Public Notice that, unless he provides the Corps with evidence of a valid request for EPA or TEPA water quality certification to EPA or a TEPA within 30 days of the date of this public notice, the Corps may consider this application withdrawn. No Corps permit will be granted until the applicant obtains the required certification. A water quality certification shall be explicit, or it will be deemed to have occurred if EPA or the TEPA fails or refuses to act on a valid request for certification within 60 days after the receipt of a valid request, unless the District Engineer determines a shorter or longer period is reasonable for the EPA or TEPA to act.

Those parties concerned with any water quality issues that may be associated with this project should write to Mr. Tim Vendlinski, Chief, Wetlands and Sediment Management Section, United States Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, California 94105-3901, by the close of the comment period of this public notice.

4. PRELIMINARY ENVIRONMENTAL ASSESSMENT: The Corps of Engineers has assessed the environmental impacts of the action proposed in accordance with the requirements of the National Environmental Policy Act of 1969 (Public Law 91-190), and pursuant to Council on Environmental Quality's Regulations, 40 CFR 1500-1508, and Corps of Engineers' Regulations, 33 CFR 230 and 325, Appendix B. Unless otherwise stated, the Preliminary Environmental Assessment describes only the impacts (direct, indirect, and cumulative) resulting from activities within the jurisdiction of the Corps of Engineers.

The Preliminary Environmental Assessment resulted in the following findings:

a. IMPACTS ON THE AQUATIC ECOSYSTEM

(1) PHYSICAL/CHEMICAL CHARACTERISTICS AND ANTICIPATED CHANGES

Substrate: The proposed gravel extraction site is located in a braided overflow channel of the Klamath River. This overflow channel generally receives replenishment of small boulder, small to large cobble, gravel and sand when the Klamath River rises during winter storm runoff to an elevation of 18 feet Mean Sea Level (MSL). At the 18 foot MSL elevation, the river flow would overtop the upstream end of the overflow channel and flow downstream for approximately 5,000 lineal feet until the water flow rejoins the river approximately 600 feet north of the Resighini Rancheria's campground and administration facilities. Some of the water flow enters three natural ponds at the downstream end of the overflow channel. When the water level in the overflow channel recedes, water remains in the three ponds. The volume of flow required for the river to overflow its banks and enter the overflow channel is calculated at approximately 73,000 cubic feet per second (cfs).

The predominant substrate in undisturbed portions of the overflow channel that have not undergone gravel extraction include large cobble mixed with sand and smaller size gravel in unvegetated portions of the channel. Vegetated portions of the channel containing groves of small diameter willows and alders would have a gravel substrate with sand and a shallow organic layer of soil. More mature riparian stands of alder, willow and cottonwood would have a deeper organic soil layer with underlying sand and gravel. The undisturbed surfaces of the overflow channel are broken by parallel secondary channels with islands of riparian vegetation. The upstream end

of the overflow channel between the main Klamath River Bank and 1,000 feet downstream is mostly barren of vegetation and is at an elevation approximately 10 to 11 feet higher than the downstream end of the overflow channel.

The overflow channel was mined by an agent of the Bureau of Indian Affairs in 1986 and 1987. A total of 360,000 CY of aggregate was removed (Corps permit number 16188N22 and 16188N22A). Prior to excavation, site elevation ranged from 0 to 25 feet MSL. The issued permits authorized excavation down to 0 feet MSL. Cross-sectional data and field investigation (pre-extraction for 1996 and pre-extraction for 2000) indicate that the overflow channel has been replenished with gravel and fines to pre-mining elevations since 1987.

The overflow channel has received overflow from the Klamath River several times each winter since the 1996 Corps permit was issued on October 29, 1996 (Corps Permit No. 19185N22A). The highest flows recorded on the Klamath River were over 580,000 cfs on January 1, 1997, March 23, 1998: over 285,000 cfs, and February 2000: over 132,000 cfs. Each time, the overflow channel filled with water. The applicant applied for a Corps permit to extract 75,000 CY over a three year period from Area 1 (16 acre area at the upstream end of the overflow channel). Volume calculations and post-extraction cross sections indicate nearly 50,000 CY was extracted from area 1 in 2000 (authorized under Corps Letter of Permission number 25152N on July 5, 2000). Most of the gravel was extracted from the vicinity of Cross Section 3 (see Sheet 3 of 6) where the substrate was lowered from 20-24 feet MSL to just below 13 feet MSL. Downstream at cross sections 4 and 5, the extraction area narrowed and tapered as it progressed downstream. Correspondingly the extraction was done to a lower depth (approximately 11 feet MSL) but a shallower vertical area of removal. Side slopes along cross sections 4 and 5 were maintained at a 7 to 1 slope or 15 feet vertical to 100 foot horizontal.

Prior to extraction, the slope angle of the right bank of the overflow channel was steeper than post-extraction. At cross section 3 the side slope was maintained at a more moderate slope. Sheet 4 of 6 shows a longitudinal profile (post-extraction) measured in November 2000 of the overflow channel with upstream at right. The slope downstream is intended to encourage water flow towards the overflow channel's confluence with the main river channel and to assist anadromous fish passage should fish venture into the overflow channel at high flows.

The applicant proposes, for the 2001 season, to extract approximately 25,000 CY from Area 1. Volume calculations and cross sections indicate that 25,000 CY of gravel is still available from Area 1 even though the overflow channel did not sustain water flow from the main Klamath River channel during the winter of 2000-2001. There was no replenishment of gravel, sand or aggregate in the overflow channel during the 2000-2001 winter. The applicant proposes to extract approximately 10,000 to 20,000 CY of gravel from Area 2, shown on Sheet 2 of 6. The braided gravel runs of Area 2 would be skimmed for gravel, with actual extraction locations varying from year to year. The applicant expects to remove 10,000 -20,000 CY of gravel from Area 2 on an annual basis.

In addition, the applicant proposes to extract approximately 50,000 CY of gravel and aggregate from Area 3, a series of in-channel open water ponds surrounded by riparian habitat, with a narrow margin of submergent/emergent wetlands. The applicant would extract at a width and depth sufficient to create additional wetland ponds or expand the size of the open water ponds for the purpose creating new open water or wetland habitat while at the same time providing a source of commercial gravel. The applicant anticipates that the substrate adjacent to or within the ponds would be excavated approximately 15 feet below summer groundwater levels (as

measured in off-channel ponds). The annual extraction volumes currently in storage do not consider the additional volume potentially available from future gravel replenishment that could occur in the overflow channel annually during winter peak flows. The applicant would use existing access roads and gravel processing/stockpile areas during the gravel extraction season. These areas are all located above Ordinary High Water of the overflow channel. The proposed gravel extraction operation at Areas 1,2, and 3 would have neutral impacts on substrate if gravel replenishment occurs at the same volume as extracted for all areas of the overflow channel during the winter high flow peaks. Drier than normal flows after extraction for successive winters would result in a major impact on overflow channel substrate as would wetter than normal river flows. During the summer 2000 gravel extraction activity in Area 1, the access road leading to Waukell Flats was asphalted in the bottom of the overflow channel (very upstream of the channel). The asphalt was placed at this location in order to provide a year round access across the extraction area for the Yurok Tribe to reach the Waukell Flats cultural or traditional sites of importance. The asphaltting of this section of the access road was a long-term, moderate impact on the substrate within the overflow channel.

Currents/Circulation - The gravel extraction would occur in the overflow channel, which only receives Klamath River water when river flows exceed 73,000 cfs. The river makes a sharp left hand turn around the point of a large gravel bar. The outer (channelward) portion of the gravel bar contains Waukell Flat. The overflow channel cuts across the base of the point bar about 600 feet north of East Beach Road. Concerns were raised by the neighboring Yurok Tribe that extracting gravel too deeply in the overflow channel or too close to the main river channel would cause recapture of main river flow. In other words, the overflow channel

would become the main Klamath River channel. The upstream limit of gravel extraction is at least 500 feet from the Ordinary High Water mark of the main river channel. The applicant does not have plans to extract gravel all the way upstream to the river bank and the Corps would require that the gravel operator maintain the current buffer distance from the river bank to prevent the occurrence of river capture. At the present time, there is no evidence of river capture. The gravel extraction would be conducted in such a manner that the current river flow circulation in the overflow channel would only occur during the highest flows (over 73,000 cfs).

Erosion/Sedimentation Rate - Mining activities in the overflow channel, especially in the new, proposed areas to be mined (Areas 2 and 3), would break the bed armor, exposing fine sediments. This increased availability of fine particles may result in increased sedimentation downstream of the project site. Gravel extraction in the overflow channel could result in two categories of impacts - (1) bed degradation/destabilization and (2) channel capture. Sediment removed by mining is replenished primarily by material transported downriver as bedload (Corps Public Notice No. 19185N22A). Mining in excess of the rate of gravel replenishment results in degradation of the channel bed. Extraction in excess of the rate of sediment replenishment could cause degradation of the channel bed at the extraction site as well as upstream and downstream. Degradation may also occur in tributaries to the main channel. If such degradation occurred, it could undermine structures, undercut banks, alter or eliminate fish habitat, and lower the ground water table. In addition, by interrupting the supply of gravel, mining could cause erosion of bars downstream. In addition, to inducing bed degradation, mining in the overflow channel may encourage channel capture during a high flow event. This capture would increase the gradient of the main channel, destabilizing the channel bed and banks

upstream and downstream of the project site. The applicant proposes to conduct annual surveys of the project site. This survey would consist of at least six extraction and monitoring cross sections of the overflow channel and at least four or five monitoring cross sections of the main river channel taken prior to an upon completion of extraction. The survey would provide information regarding the area and volume of aggregate extraction and the rate of replenishment at the site, as well as provide data on geomorphic impacts of the main river channel upstream and downstream of the project site. Gravel extraction area and depth limits would prevent over-extraction in all three areas. The volume extracted would be limited to volumes replenished after each winter season and volumes remaining to be extracted above a floor elevation (approximately 11-15 feet) depending on location within the overflow channel.

Water Quality - Mining may increase turbidity levels in the overflow and main channels at an downstream of the project site due to removal of the armor layer in the overflow channel and aggregate processing discharges. Increased turbidity levels resulting from armor removal is expected to be episodic and minor due to the periodic flow regime of the overflow channel. In order to avoid increased turbidity generated by aggregate processing, the applicant would contain discharges in a contained basin on the processing terrace. This basin would be maintained to allow at least two feet of levee freeboard at all times. Proper maintenance of the basin would avoid adverse water quality impacts.

(2) BIOLOGICAL CHARACTERISTICS AND ANTICIPATED CHANGES

Wetlands (Special Aquatic Site)- A narrow band of submergent/emergent wetland plants thrives at the edge of the largest pond on the downstream end of the overflow channel within the proposed extraction

Area 3. The applicant proposes to extract gravel in pits down to 15 feet below the current pond elevation in undisturbed gravel areas located immediately upstream of the existing ponds. The intent is to extract large amounts of gravel while at the same time lengthening and expanding the area of open water pond, which in turn may increase the area of pond margin wetlands. The applicant has widened a western access road to the gravel processing site. The edge of this road is very close to established forested wetland (willow-alder with an understory of slough sedge). Although the applicant has not planned to either widen further or re-route this road, doing so would impact additional wetland acreage. Overall, the project as proposed would have minor, short-term adverse impacts on wetlands within the project area.

Pool and Riffle Areas (Special Aquatic Site) – Established pool and riffle areas are known in the main channel of the Klamath River. The gravel extraction operations proposed above would not impact the main channel pool and riffle areas for anadromous fish. At those intervals during winter high flows (with the exception of the 2000-2001 winter) when the overflow channel fills with flowing water, the overflow channel may exhibit pool and riffle areas in any of the parallel channels. When water levels recede, however, these pools and riffles may dry up and standing water would remain in the large ponds at the downstream end or in smaller pools scattered throughout the overflow channel created by scouring during overflow events. The proposed gravel extraction above would extract so that the downstream gradient would be maintained to drain overflow to join the main channel downstream. Extraction side slopes and longitudinal profile would prevent closed pools that would trap fish after waters recede. Extraction procedures in the applicant's extraction plan for Areas 1 and 2 would ensure that the overflow channel's longitudinal and lateral gradients would provide for fish passage to those fish straying into the overflow channel.

Endangered Species - The Corps initiated Section 7 consultation under the Endangered Species Act (ESA) as amended, (16 U.S.C. 1531 et seq), with the National Marine Fisheries Service (NMFS) regarding the potential impacts of the 2000 gravel extraction activities in Area 1 to the Federally-listed as threatened coho salmon (*Oncorhynchus kisutch*), and its critical habitat. The Klamath River is designated by NMFS as critical habitat for coho salmon. By letter dated June 12, 2000, the NMFS concurred with the Corps' determination that the 2000 gravel extraction activities (Permit No. 25152N), may affect, but would not likely adversely affect coho salmon and its critical provided special conditions are added to ensure that coho salmon and its critical habitat would not be adversely impacted.

The Corps also initiated informal consultation with the U.S. Fish and Wildlife Service (USF&WS) pursuant to Section 7 of the ESA regarding the 2000 gravel extraction project's potential impacts to northern spotted owl (*Strix occidentalis caurina*) and the marbled murrelet (*Brachyramphus marmoratus*). The applicant provided information to the Corps and USF&WS that verified that there were no nesting or roosting sites or habitat for either the spotted owl or marbled murrelet within a quarter mile of the project, and that the noise levels of the gravel extraction and gravel processing area would have no effect on spotted owl or marbled murrelet.

Due to the proposed expansion of the gravel extraction by Resighini Rancheria and Jaxon Enterprises into Areas 2 and 3, downstream of the 2000 Area 1 gravel extraction, the Corps will re-initiate Section 7 consultation under the ESA with the NMFS for potential project impacts (increase in extraction area from 16 acres to 45 acres) to listed species including coho salmon and its critical habitat.

Habitat for Fish, Other Aquatic Organisms, and Wildlife – Other species which inhabit the Klamath River, including the project reach, are chinook

salmon, steelhead, cutthroat trout, American shad, white sturgeon, green sturgeon, pacific lamprey. Three-spine stickleback, Klamath large scale sucker, Klamath small scale sucker, Klamath speckled dace, Klamath blue chub, brown bullhead, white catfish, prickly sculpin, green sunfish, yellow perch, pumpkin see, largemouth bass, and eulachon (Corps Public Notice No. 19185N22A, 1995). The main channel of the Klamath River serves as a migratory corridor and juvenile rearing habitat for the river's anadromous fish species. The overflow channel may provide these functions during high flows. The proposed mining may adversely impact anadromous fish resources by (1) increasing sedimentation into pools, (2) degrading water quality (3) altering stream flow, and (4) destabilizing the channel. Since the proposed 2001 gravel extraction activity is confined to the overflow channel, any impacts to fisheries and aquatic organisms in the main channel would be minor, short-term, predominantly indirect, adverse impacts. It is unknown what fisheries resources exist in the three deep ponds located at the downstream end of the overflow channel. When winter flows in the overflow channel recede, the ponds may trap fish that have strayed into the overflow channel. Gravel extraction proposed adjacent to these ponds may have a minor, short-term, adverse impact due to sedimentation and possibly direct striking of any resident cold water or warm water fish that may be left in these ponds. However, the proposed gravel extraction in Areas 2 and 3 would remove riparian vegetation that provide partial cover and temperature moderation for any fish that loiter in the overflow channel. With riparian vegetation replacement and replanting, the proposed project would have a long-term, moderate direct, adverse impact on the element of fish habitat that includes riparian cover.

b. IMPACTS ON RESOURCES OUTSIDE THE AQUATIC ECOSYSTEM

(1) PHYSICAL CHARACTERISTICS AND ANTICIPATED CHANGES

Air Quality - The proposed project activity would have minor, short-term impacts on air quality in the vicinity of the project site. Based on the relative minor size of the proposed project and limited to an evaluation of air quality impacts only within Corps of Engineers' (Corps) jurisdictional areas, the Corps has determined that the total direct and non-direct project emissions would not exceed the de minimis threshold levels of 40 CFR 93.153. Therefore, the proposed project would conform to the State Air Quality Implementation Plan (SIP) for California.

Noise Conditions - The proposed project would generate noise from three sources: (1) gravel processing, including crushing and washing; (2) gravel excavation, including use of scrapers, front end loaders, and dump trucks; and (3) transport of gravel by truck from the processing site on local roads onto Highway 101 to points north or south, and return of empty trucks to the processing site. All gravel hauling and gravel extraction activities would be restricted to daylight hours and weekdays only to eliminate noise impacts at night or on weekends. Despite these restrictions, residents living adjacent to the project would be subject to the noise from all three sources during the weekday.

(2) BIOLOGICAL CHARACTERISTICS AND ANTICIPATED CHANGES

Riparian Habitat (Not in Corps Jurisdiction) - During the 2000 gravel extraction of Area 1, the applicant succeeded in avoiding removal of riparian groves of willows/alders that exist adjacent to the extraction site, except for smaller trees of less than a foot diameter that normally wash out during high flood events within the overflow channel. For the 2001 gravel extraction season, the applicant proposes to increase the area of extraction (45 acres total). The proposed gravel extraction in Areas 2 and 3 would remove substantial amounts of riparian vegetation, including some areas adjacent to the largest downstream pond in the overflow channel that have

multi-storied, mature riparian canopies. The applicant has not provided a numerical estimate of the area of riparian vegetation that would be removed. Corps review of aerial photos and overlain extraction areas indicate that there would be (for Areas 2 and 3 combined) approximately 10 –15 acres of relatively continuous riparian groves that would be either destroyed or damaged. The exact figure must be delineated by the applicant and provided to the Corps and other resource agencies for review. The applicant proposes to transplant riparian vegetation to previous extraction areas (parts of Areas 1 and 2) as mitigation. The applicant is preparing a revegetation and restoration plan for review by the Corps and Federal resource agencies. The applicant states that, where riparian vegetation removal is unavoidable, mining activities would be delayed until after August 15 or, as an alternative, a qualified ornithologist would survey the site for the presence of active nests of migratory birds that may use the adjacent riparian zones of the project area. At least 10 days prior to the removal of any vegetation, prior to August 15th, a report would be submitted by the operator that documents the location of any active bird nests along with survey results. The survey report would be provided to the Corps, NMFS, and USF&WS for review. The USF&WS would review the proposed riparian impacts pursuant to the Migratory Bird Treat Act (16 U.S.C. 703-712) and the Fish and Wildlife Coordination Act (16 U.S.C. 661-667e, as amended).

Overall, the proposed project's impacts to riparian habitat (Areas 1,2, and 3) would, including with mitigation efforts, would be long-term, moderate, direct, and adverse.

(3) SOCIOECONOMIC CHARACTERISTICS AND ANTICIPATED CHANGES

Aesthetic Quality - The proposed gravel extraction activity would be visible from local roads (the extraction plant and stack exhausts may be

partly visible from Highway 101), to boaters that transit via the main Klamath River channel, and to persons fishing within the vicinity.

Economics - The applicant, the Coastal Indians of Resighini Rancheria, have indicated that the Rancheria has a financial interest in the proposed gravel extraction. The Rancheria is a co-applicant with Jaxon Enterprises, the gravel operators, for the above project. In turn Jaxon Enterprises, an aggregate business, would benefit economically as they are under contract to supply gravel to government and commercial entities involved in road construction, road repair, or other types of construction activities that require the use of aggregate on the North Coast. On the other hand, there would be adverse impacts to recreational opportunities, such as increased noise and degrading of air and aesthetic qualities, which may result in fewer sports or subsistence fishing by local and outside fishing interests. This reduction may reduce tourism-based income available in Klamath Glen and surrounding areas. In addition to the community as a whole, this reduction would affect local business owners who rely on the tourism trade.

Employment - The above proposed project would have short-term, moderate, beneficial impacts on employment in Del Norte County by providing employment for equipment operators, laborers, truck drivers, contractors, and environmental restoration specialists.

Public Health and Safety - During the gravel extraction operations, there would be the increased risk of industrial accidents to the gravel operators themselves and possible accidents involving commercial gravel hauling trucks and the general public in private vehicles on local roads and Highway. The impact on public health and safety from this project would be greatest between June and October during which gravel extraction activity would peak. The gravel extraction would occur

every summer season over a ten year duration as requested by the applicant.

Recreational Opportunities - This reach of the Klamath River is used extensively for camping and waterborne day use activities. There are several campgrounds including one located on the Resighini Rancheria that are open in particular to sports fishing interests. Sight-seeing, hiking, and casual boating also take place on this reach of the Klamath River between the mouth of the Klamath River upstream to Klamath Glen and beyond. There are several boat ramps that are used for boating ingress and egress onto the Klamath River. Because the gravel extraction is on the overflow channel for the Klamath River, there would be less interference with public and private recreational opportunities with the exception of access used by the Yurok Tribe across the gravel extraction (Area 1). The Yurok Tribe uses an access road provided under an easement agreement with the Resighini Rancheria to reach ceremonial and traditional fishing grounds on Waukell Flat located immediately north of the gravel extraction area (See "Historic - Cultural Characteristics and Anticipated Changes"). The gravel operators has made an effort to keep this road open to the Yurok Tribe during gravel operations, however, truck traffic may temporarily delay Yurok Tribe access to Waukell Flats as the traffic is a continuous circuit during working hours.

Recreational Fishing - See "Recreational Opportunities" above.

Traffic/Transportation - During gravel extraction operations (July through October), the traffic to local roads and Highway 101 would increase with the nearly constant flow of full and empty gravel trucks and other associated traffic. Due to the proposed, expanded area of extraction, the amount of gravel hauling would likely be higher in frequency and volume (e.g., in excess of 1,000 CY of gravel hauled per day, using 10 cubic yard

trucks, generating at least 100 one way (200 round trip) trips per day on Highway 101 and local roads).

Wild & Scenic Rivers - The Klamath River is included in the California and Federal Wild and Scenic Rivers systems for its anadromous fisheries, recreational, scenic, and cultural resources values. The project reach is designated as "recreational" Gravel extraction, processing, and hauling may adversely impact the recreational, scenic, anadromous fisheries, and cultural resource values of the reach.

(4) HISTORIC - CULTURAL CHARACTERISTICS AND ANTICIPATED CHANGES

The Yurok Tribe, a separate and neighboring tribal entity from the project applicant, the Coast Indians of the Resighini Rancheria, has expressed concerns to the Corps that the 2000 gravel extraction activity, as well as any future gravel extraction activity (including the proposed 2001 activity) would have substantial adverse impacts to cultural resources important to the Yurok Tribe. The Tribe has asked the Corps to suspend processing of any gravel extraction permits to the Resighini Rancheria. The Yurok Tribe cites at least three main concerns: (1) The gravel extraction activity has blocked access to traditional fishing and ceremonial/cultural areas that exist on Waukell Flat north of the project site, (2) the gravel extraction activity would cause high winter flows to erode the overflow channel banks toward the Yurok Tribe's traditional cultural properties, and (3) the gravel extraction would cause recapture of the Klamath River into the overflow channel.

The Corps of Engineers archaeologist will be asked to address the above concerns and to initiate Section 106 consultation with the Yurok Tribal Historic Preservation Office (THPO) pursuant to National Historic Preservation Act (NHPA)(33 CFR Part 325). Review under Section 106 would include a cultural

resources assessment of the permit area, involving review of published and unpublished data on file with city, State, Federal, and tribal agencies. If, based upon assessment results, a field investigation of the permit area is warranted, and cultural properties listed or eligible for listing on the National Register of Historic Places are identified during the inspection, the Corps of Engineers will coordinate with the THPO to take into account any project effects on such properties.

c. SUMMARY OF INDIRECT IMPACTS

None have been identified.

d. SUMMARY OF CUMULATIVE IMPACTS

The reach of the Klamath River from Klamath Glen downstream to the mouth of the river has been subject to substantial cumulative impacts from a variety of human activities and natural events. This area has been settled by the Yurok Tribe and related or adjoining Native American tribes since pre-historic times. Tribal villages and significant traditional/ceremonial sites existed and are still active in this reach of the river. The period of contact with the arrival of white settlers around the mid-1800's brought changes to the river landscape in terms of housing settlements, displacement of Native American tribes, logging, mining, and other commercial ventures. Since the Second World War, the Klamath River has seen an increase in recreational development including campgrounds, fishing access, boat ramps, resorts, stores, restaurants, and housing settlements oriented around the tourism or commercial recreation industry (jet boat tours, smoked salmon retail businesses, and hunting/fishing guides). The major floods on the Klamath River in 1955 and 1964 caused major damage to or losses of settlements in businesses clustered near the banks of the river. Completely destroyed by the 1964 floods were the communities of Klamath, Klamath Glen, Requa, and Camp Klamath, leaving many residents

homeless. Major bridges were rebuilt, including the Klamath's Douglas Memorial concrete arch bridge. In response to the major floods and to prevent future inundation of local communities, the Corps of Engineers constructed the Klamath Glen levee on the north shore of the Klamath River, upstream of Highway 101. This levee has undergone inspections and repairs since its construction, including recent repairs between 1998 and 2000. The town of Klamath Glen was relocated behind this levee after the 1964 flood. Since 1964, the Klamath River has seen economic recovery, with expanded recreational facilities and related businesses in the Klamath and Klamath Glen areas. In 1987-88 and again in 1995-1996, the Corps of Engineers' Regulatory Branch was approached with permit applications for various developments and activities requiring Corps permits under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. One application requested permits to place rock slope protection against the south bank of the Klamath River to protect a private campground. Del Norte County also requested a Corps permit to breach the Klamath River. In January 1997, a major winter storm caused flood damage in the project reach and downstream of Highway 101. The private campground was destroyed and not re-built afterwards. Flood damage and deposit of flood sediment occurred on both banks of the river and affected several other private commercial and public recreational facilities. The Corps processed a permit since then for reconstruction or improvement of a county public boat ramp on the north shore of the Klamath River. The remainder of the area under flood damage recovery under other Federal or state agency assistance or funding.

The Corps has issued previous permits for aggregate mining in the Klamath River. In 1986 and 1987, the Bureau of Indian Affairs and Tudor-Saliba-Perini were authorized to extract 360,000 CY of aggregate from the overflow channel adjacent to the proposed project site (permit numbers 16188N22 and

16188N22A). In 1992 and 1993, Kiewit -Pacific was authorized to remove 350,000 CY from the Blake Bar, approximately 1.5 miles upstream from the Resighini Rancheria (permit numbers 18775N22B and 18775N22C). Morgan Redi-mix, a Smith River gravel business, has requested authorization under the Corps of Engineers' Letter of Permission Procedures (LOP96-2) to extract 100,000 CY of gravel from Blake Bar. This permit application is currently pending.

Since the 1930's, aggregate extraction rates from the Klamath River, not including its tributaries, have averaged 350,000 CY per decade (McBride, 1989). In recent decades, extraction has exceeded this average. Estimated extraction rates are as follows:

(1960-1969) 430,000 CY
(1970-1979) 900,000 CY
(1980-1989) 600,000 CY
(1990-1993) 350,000 CY

The Resighini Rancheria was granted a Corps permit (Permit number 19185N22A) in 1996 to extract 130,000 CY of gravel over a three year period. However, the actual amount extracted for the three year permit duration total was less than 10,000 CY.

The above proposed project to extract 100,000 CY per year with use of all three areas over a ten year period would be a recurring, long-term moderate to major cumulative impact on anadromous fisheries, cultural resources, wild and scenic river values, local transportation and traffic, loss or disturbance of riparian habitat, noise and adverse aesthetic impacts. The project would require extensive monitoring and, special attention to maintaining anadromous fish passage and habitat, mitigation for riparian impacts, and resolution of cultural resources issues, particularly with the Yurok Tribe.

e. CONCLUSIONS AND RECOMMENDATIONS

Based on an analysis of the information available, Corps of Engineers has determined that additional data is needed before the significance of the impacts upon the quality of the human environment can be determined. No decision regarding the need for an Environmental Impact Statement (EIS) can, therefore, be made until the Final Environmental Assessment (EA) has been completed.

5. EVALUATION OF ALTERNATIVES:
Evaluation of this activity's impacts includes application of the guidelines promulgated by the Administrator of the Environmental Protection Agency under Section 404(b)(1) of the Clean Water Act (33 U.S.C. 1344(b)). An evaluation under the 404(b)(1) Guidelines indicates the project is water/wetland dependent (sustained yield for gravel extraction requires high winter flows in the overflow channel for recruitment of gravel and extracting the area in a manner that would aid recruitment/replenishment). Alternatives to the proposed project are very limited within the Klamath River basin. Another gravel business has applied to extract gravel from the Blake Bar, so at the present time the Blake Bar is not an option to Resighini Rancheria, plus the Blake Bar is within Yurok Tribe sphere of political or legal influence (trust lands under Bureau of Indian Affairs administration or review). Even if Morgan Redi-mix were to abandon the 2001 project, allowing use of the Blake Bar by Resighini Rancheria would be problematic. Gravel extraction on other gravel bars in the lower Klamath River upstream or downstream of the project site has not been considered at this time. It is questionable that such gravel bars would be feasible due to ownership issues, substantial fish habitat concerns, and potential impacts on riparian habitat and impacts to cultural resources. Gravel extraction has occurred on Hunter Creek (Lowell Martin), a tributary to the Klamath River. However, the Hunter Creek site has been observed by the Corps and the National Marine Fisheries Service to require fish and riparian habitat restoration. It is unlikely that gravel extraction would

be permitted in the near future on Hunter Creek until remediation of that site has occurred. It appears that the Klamath overflow channel near Resighini Rancheria property is the only current alternative available to Resighini Rancheria and Jaxon Enterprises for gravel extraction in the Klamath River basin.

6. PUBLIC INTEREST EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts which the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each particular case. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so the conditions under which it will be allowed to occur, are therefore determined by the outcome of the general balancing process. That decision will reflect the national concern for both protection and utilization of important resources. All factors which may be relevant to the proposal must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

7. CONSIDERATION OF COMMENTS: The Corps of Engineers is soliciting comments from the public, Federal, State and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed

activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

8. SUBMISSION OF COMMENTS: Interested parties may submit in writing any comments concerning this activity. Comments should include the applicant's name, the number, and the date of this notice and should be forwarded so as to reach the Eureka Field Office of the Corps within the comment period specified on page one of this notice. Comments should be sent to the Eureka Field Office, Regulatory Branch, P.O. Box 4863, Eureka, California 95502. It is Corps policy to forward any such comments which include objections to the applicant for resolution or rebuttal. Any person may also request, in writing, within the comment period of this notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Additional details may be obtained by contacting the applicant whose address is indicated in the first paragraph of this notice, or by contacting David Ammerman of our Eureka Office at telephone 707-443-0855 or E-mail: dammerman@spd.usace.army.mil. Details on any changes of a minor nature which are made in the final permit action will be provided on request.