PLAN OF OPERATION Pacific Lumber Gravel Bar – Eel River at Dyerville (Updated 3/3/2025)

Introduction

The project is extraction of gravel from the river bar for use in County road maintenance activities in the region. This permit renewal application proposes extraction of up to 28,000 cubic yards (cy) of gravel every 3 years, as frequently as annually, for 15 years.

Past Mining Activities

A surface mining permit was issued by the Planning Commission on January 5, 1992 (Permit #SMR-01-92/CUP-09-92) for the extraction of 28,000 cy of gravel from the bar every 3 years for 15 years. The Permit was renewed in 2007 for a further 15 years under the same terms.

Humboldt County Public Works (HCPW) has not performed an extraction at the site since 1994. However, permanent monitoring cross sections were established on the bar in 1996. These cross sections have been surveyed annually since that time.

Proposed Mining Activities

HCPW proposes to extract up to 28,000 cy of gravel every 3-5 years, as frequently as annually, over a period of 15 years.

Gravel Extraction

Skimming is the preferred extraction method for this site, based on extraction history and National Marine Fisheries Service (NMFS) recommendations. Other extraction methods that may be used for the site include narrow skim, trenching, horseshoe skim, alcove, and wetland pit methods. The volume, location and extraction method will be determined using the recommendations made by the County of Humboldt Extraction Review Team (CHERT) and the capabilities of the equipment used.

In the spring, CHERT will visit the site with HCPW staff to evaluate the availability of gravel, best location for an extraction, volume to be extracted, and type of extraction to perform. Following the CHERT site visit, a pre-extraction report will be prepared for CHERT and other participating regulatory agencies. Pre-extraction cross-sections will be surveyed and superimposed on an aerial photograph of the site. A discussion of the proposed extraction methodology will be included in the report, along with a work plan for the proposed action.

Upon approval of the pre-extraction report, and prior to extraction, survey cut stakes will be set throughout the extraction area to guide equipment and set boundaries for the operation.

The haul road to the extraction site will be the existing gravel bar access/haul road on the west side of the bar, and the shortest route on the bar from the access/haul road to the extraction area.

Equipment used for the extraction will consist of a bulldozer, front-end loader and dump trucks. The bar will be accessed via the designated haul road. Working within the preset cut stakes, the bulldozer will remove gravel from the area and create temporary piles on the bar. The front-end loader will load the piled gravel into dump trucks for transport to the existing established stockpile location for processing.

Gravel extraction activities will be conducted between September 16 and November 1 to avoid the northern spotted owl and marbled murrelet nesting periods, and ensure completion of work before the winter rainy season. The work period for each extraction will be approximately two to three weeks.

Dust control measures will consist of watering the access road, haul road, and extraction area(s) as needed with a water truck using an offsite water source or drafting from a temporary hole dug in the bar away from the low-flow channel.

Following completion of the extraction, the extraction area will be reclaimed according to permit requirements and CHERT recommendations. This includes grading the entire extraction area to drain freely and filling in depressions. Temporary stockpiles will be removed from the bar. Haul roads on the bar will be scarified to reduce compaction. Post-extraction cross-sections will also be surveyed.

Gravel Processing

A portable crusher assembly, consisting of a jaw crusher, conveyors, and a generator trailer will be temporarily located adjacent to the existing stockpile area. Gravel from the bar will be transported to the crusher via dump truck and/or front-end loader. Crushed rock will be stockpiled on-site, or transported to another storage facility or construction site. Crushing activities will take place between September 16 and November 1 to avoid nesting periods for northern spotted owls and marbled murrelets. Once crushing activities are completed, the crusher assembly will dismantled and removed from the area.

Traffic Control

Traffic control will consist of placing warning signs along Dyerville Loop Road on both sides of the stockpile/gravel bar access road. It will not be necessary to detour traffic, or restrict vehicles to one lane. Minor traffic delays may occur as vehicles slow down when they encounter trucks entering or exiting Dyerville Loop Road from the stockpile access road. Delays will be temporary, ending when extraction and reclamation activities are completed and trucks/equipment leave the area.

Monitoring and Reporting Activities

Monitoring will consist of surveying the pre-established monitoring cross sections as required by the permitting agencies, with results submitted to the Corps of Engineers and NMFS. Following permit expiration or final closure of the site, no subsequent monitoring will be performed.

Reclamation

Interim Management During Idle Periods

Mining operations at the Pacific Lumber bar at Dyerville have been idle since 1995. There is an Interim Management Plan (IMP) in place and interim measures from the plan

have been implemented. These measures include regular site inspections, annual monitoring cross section surveys, and maintaining limited access to the bar.

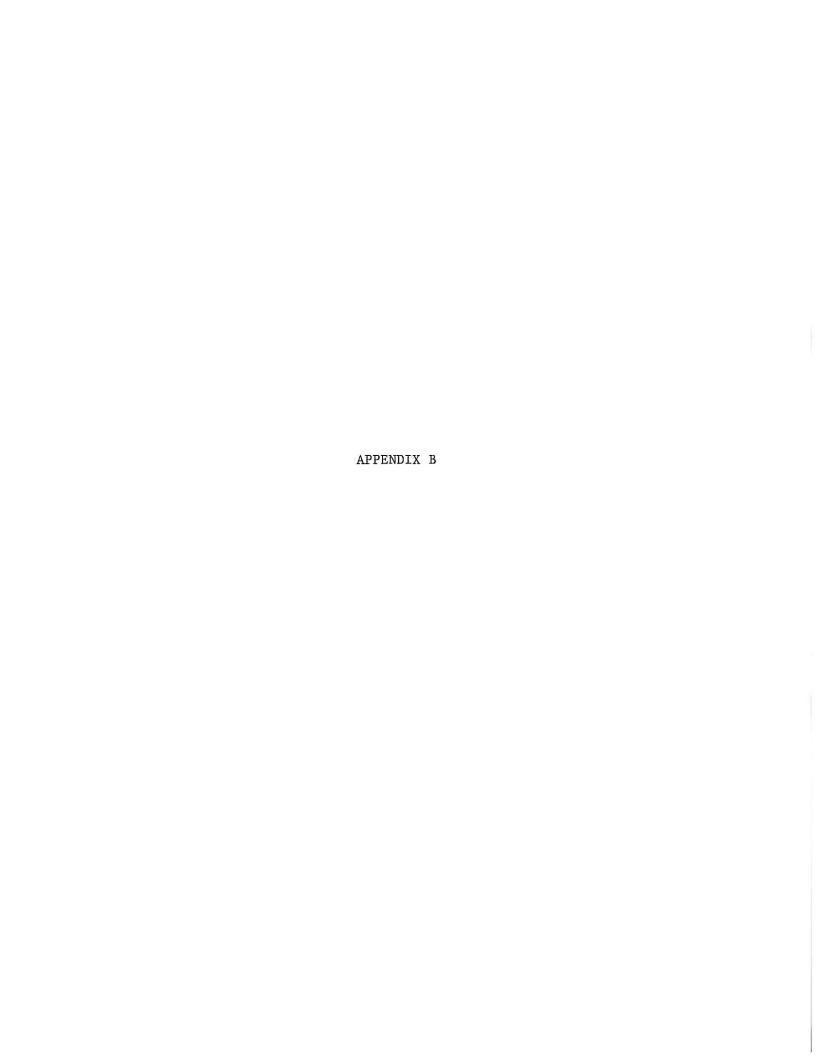
Final Reclamation

Following the final extraction the bar will be reclaimed and all equipment removed. The area around the extraction will be graded to fill in depressions. Equipment and temporary stockpiles will be removed from the bar, and the haul roads will be scarified to reduce compaction.

No changes to the existing, approved Reclamation Plan are proposed. No substantial changes in mining or reclamation activities will occur during the proposed renewal period. State Mining and Geology Board Reclamation Regulations, Article 1 §3502(d) states "An amended reclamation plan shall be approved by the lead agency prior to commencement of activities determined to be a substantial deviation from the approved plan." A substantial deviation includes changes to the operation that substantially affect completion of the previously approved reclamation plan or changes in the end use that would substantially change the scope of reclamation. While an extension of the termination date of mining is proposed, no substantial increase in surface area, volume to be extracted, or changes in the operation that would substantially affect end use will occur.

Financial Assurances

The current financial assurance is included as an attachment to the permit renewal packet. No other changes to these amounts are proposed as no changes to the approved Reclamation Plan are proposed.



RECLAMATION PLAN

Pacific Lumber Company Gravel Bar

SECTION I. GENERAL INFORMATION

Project Name: Pacific Lumber Company Gravel Bar, Eel River near Dyerville

Estimated Annual Production: 1,000 cubic yards. Up to 25,000 cubic yards

every three to five years.

Proposed Start-up Date: June 1993

Proposed Termination Date: 2007

Operator: Humboldt County Public Works Department

Road Division 1106 Second Street Eureka, CA 95501 (707) 445-7421

Owner/Surface Rights: Pacific Lumber Company

125 Main Street Scotia, CA 95565 (707) 764-2222

Location: AP#211-141-03

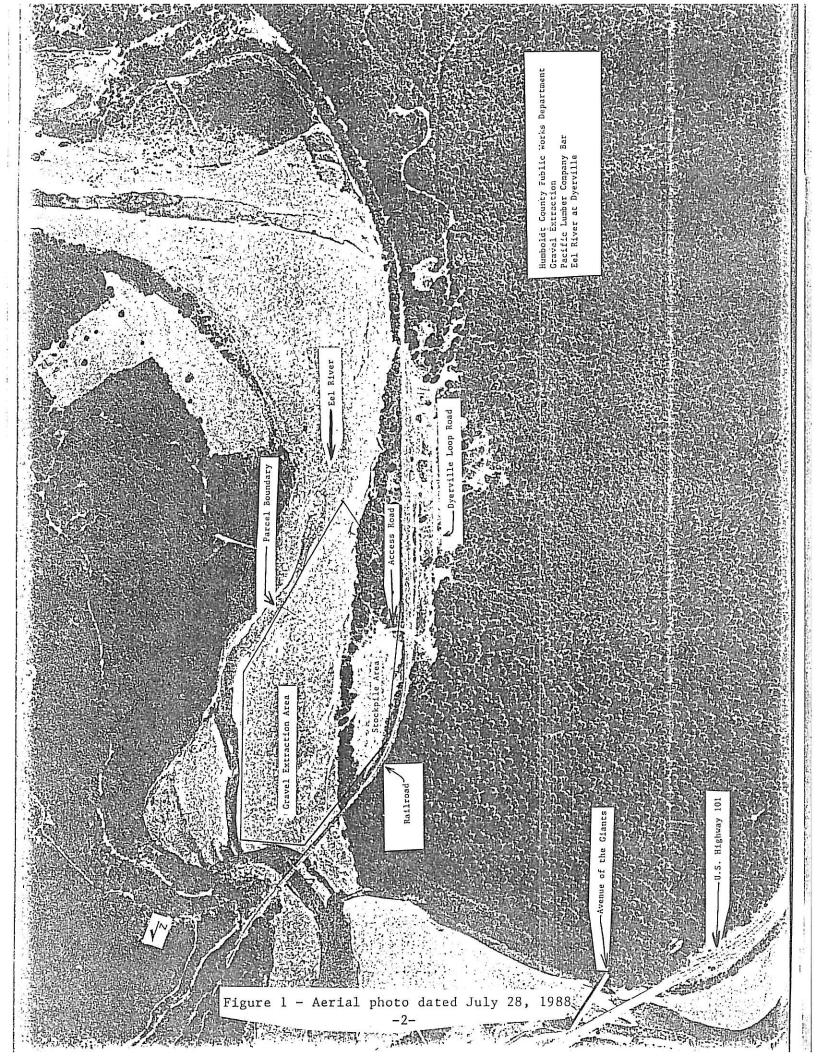
Township, Range, Section: T1S, R2E, S26

Base and Meridian: Humboldt

SECTION II. DESCRIPTION OF ENVIRONMENTAL SETTING

<u>Wild & Scenic River Designation</u>: The project area on the Eel River is included under the California Wild & Scenic Rivers System. The California Wild & Scenic Rivers Act (SB 107) of December 20, 1972, declares it is the policy of the State of California to preserve the river in its free-flowing state together with its immediate environment for the benefit and enjoyment of the people of the State. Use of the river as wild and scenic is declared to be the highest and most beneficial use, and a reasonable and beneficial use of water within the meeting of the California Constitution.

The project area is designated or classified as a recreational section of the wild river. No dam, reservoir, diversion or other water impoundment facility other than temporary flood storage facilities can be constructed on this river in this area. In regard to the streambed alteration agreement, the State Attorney General has held that the Department of Fish & Game is prohibited from entering into these agreements in any case where the agreement would alter the natural condition of the river (60 Ops. Cal. Atty. Gen. for [1977]).



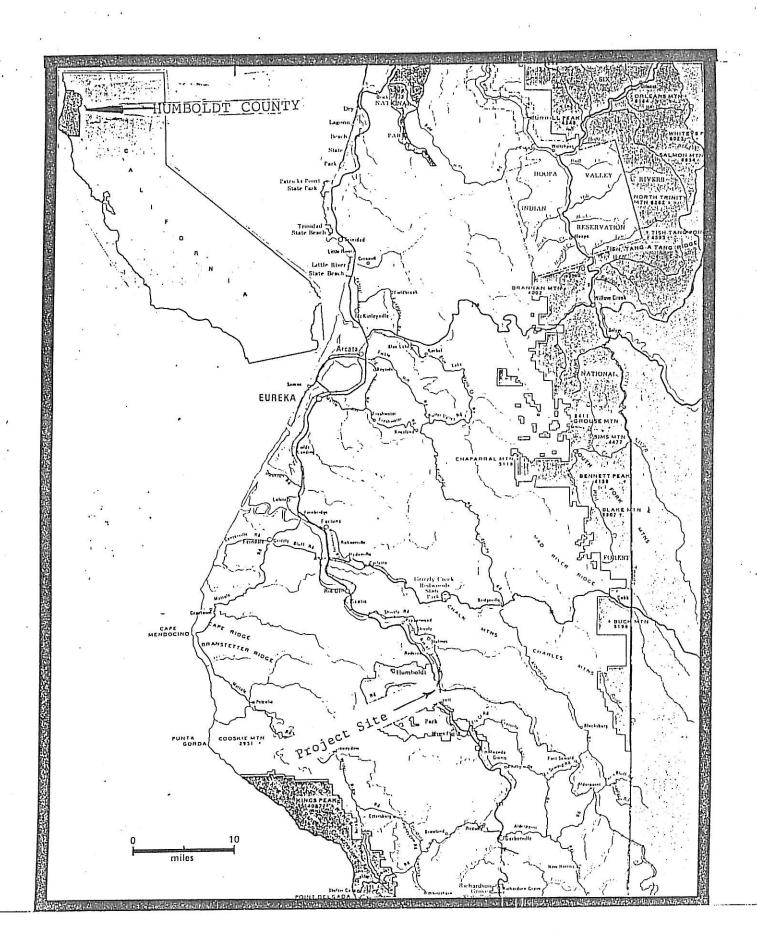


Figure 2 - Regional Map

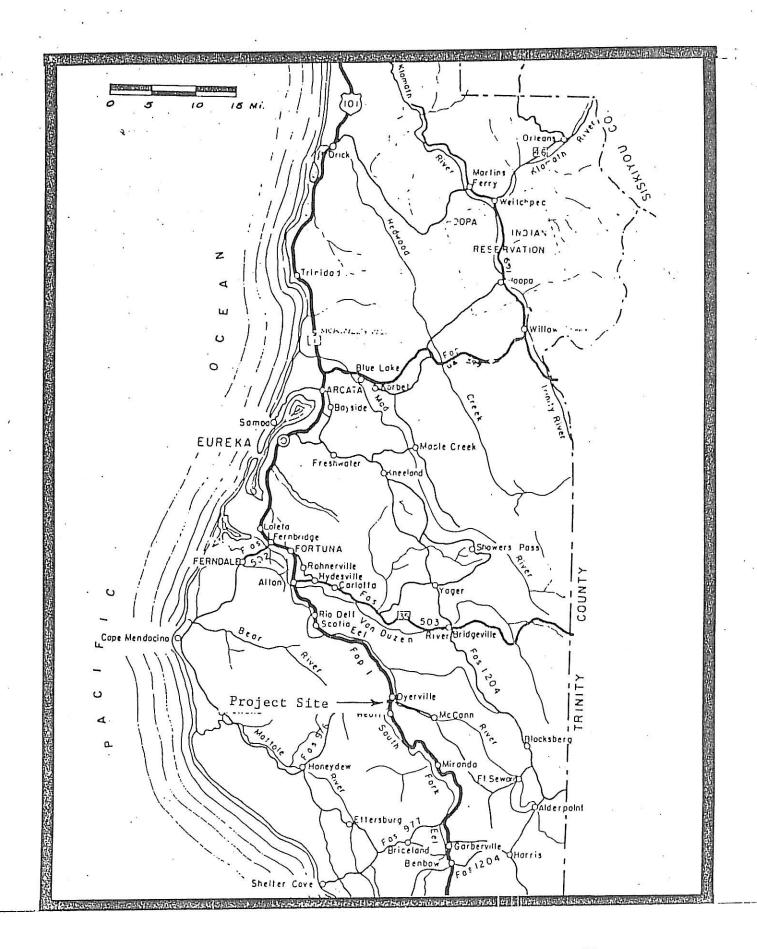


Figure 3 - Humboldt County showing project site at Dyerville.

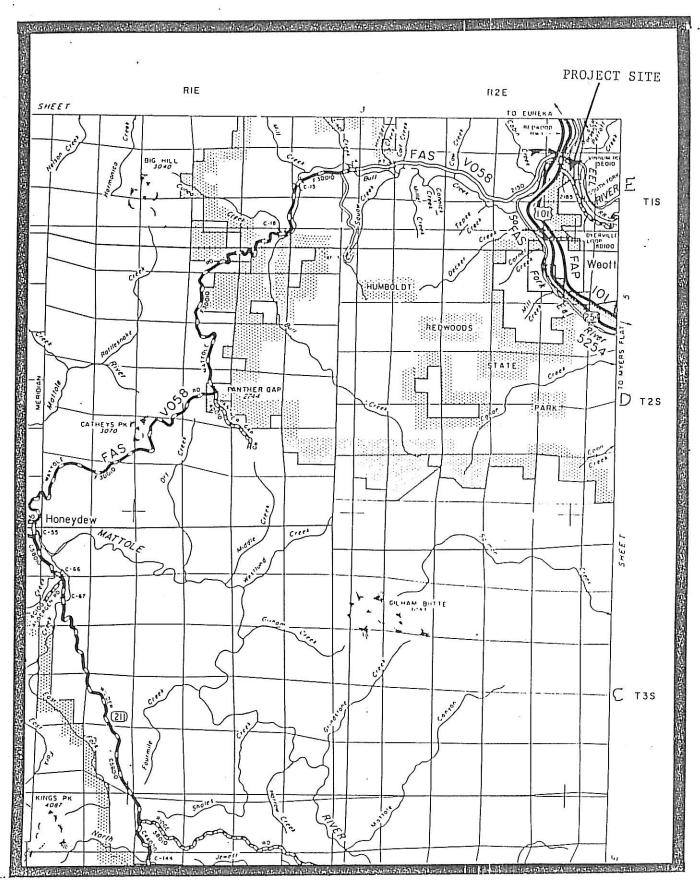


Figure 4 - Portion of County road map showing project site at Dyerville. Scale 1'' = 2 Miles.

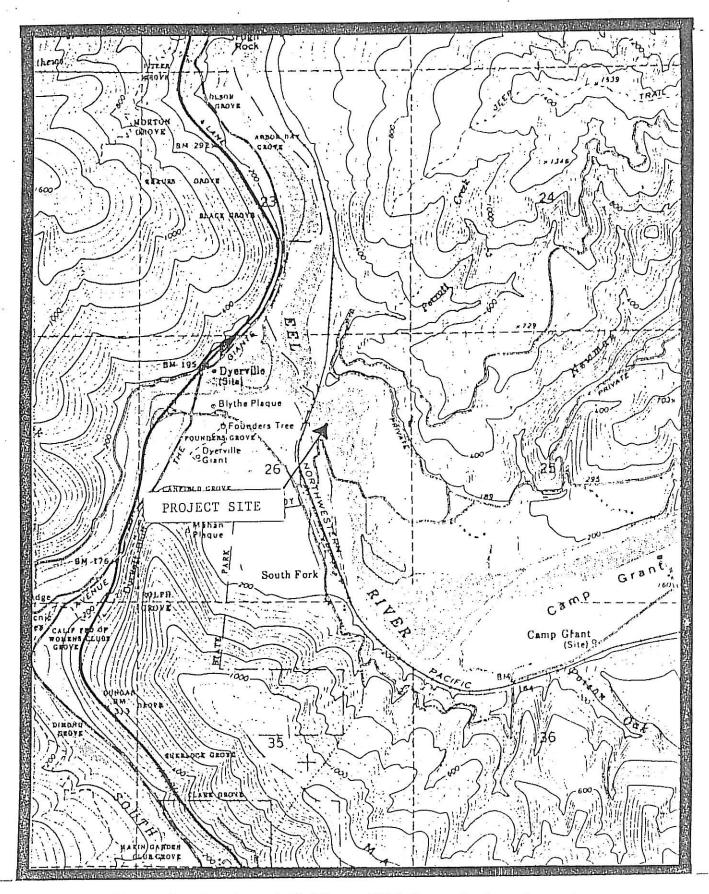


Figure 5 - Portion of $7\frac{1}{2}$ Minute USGS Weott Quadrangle map. Scale 1" = 2,000'.

<u>Vegetation:</u> The Inventory of Rare and Endangered Vascular Plants, published by the California Native Plant Society in 1975, did not show any rare or endangered species at this site.

The California Department of Fish & Game was consulted with regard to the presence of rare and endangered plants or animals. That department reported that their Natural Diversity Data Base showed no rare or endangered species at the project location as of August 14, 1991.

As a result of the lack of scouring floods during the past six years, the bar currently supports growth of wild dill, star thistle, dandelion, mustard and a few willows. The area of the river terrace up out of the floodplain on which the stockpiles are to be placed is unvegetated.

The proposed site lies in close proximity to Humboldt Redwoods State Park which contains both old growth and second growth redwood trees. The land across the river from the gravel bar has been logged and currently supports second growth redwood and douglas fir trees.

Wildlife: None was observed during the site visits by Public Works personnel. However, it would be expected that the bar would be traversed by various mammals, primarily from dusk to dawn. It would be anticipated that various species of song birds would nest in the trees and shrubs on the perimeter of the terrace. This area probably supports some small mammals, reptiles, amphibians and invertebrates, as well. Economically important species of fish reported from this area of the Main Eel River include king and silver salmon, and steelhead trout.

In addition to the negative report of rare or endangered species obtained from the California Department of Fish & Game's Natural Diversity Data Base, a request was made to that department with regard to the presence of Northern Spotted Owls. California Department of Fish & Game searched their Northern Spotted Owl Data Base System and reported no known observation records at the proposed site as of April 25, 1991.

Hydrology: The project site is located on the bed of the Main Stem Eel River just above the confluence with the South Fork of the Eel River. The nearest active gaging station is located about 12 miles downstream at Scotia. This station has a drainage area of 3,113 square miles including the 690 square miles of the South Fork. Flow data has been recorded at this station since 1910. The average annual flow as reported in the USGS Water-Data Report Ca-8202, published in 1984, was 7,336 cfs. The range of flows from June through September 1982 were from 119 to 1,640 cfs. These flows include that portion derived from the 690 square miles drainage area of the South Fork Eel River which represents about 22% of the total flow. Subtracting this 22% from the above data produces an average annual flow of 5,745 cfs with the 1982 summer range being 92 to 1,279 cfs.

Geology: The types of rock and strata affecting the Dyerville site are composed of four geologic formations. The predominant formation located to the north, southeast and virtually surrounding the area is Upper Cretaceous marine sedimentary of the Yager formation composed of dark gray mudstone, shale, graywacke and conglomerate. To the east, within the watershed of influence, can be found middle and/or lower Pliocene marine sedimentary rocks of the Eel River formation which are composed of dark gray to black mudstone, silt stone, and glauconitic sandstone. To the south, outcrops of Tertiary Marine Sedimentary rocks of the Wildcat group can be found. These are composed of mudstone, siltstone, and sandstone. The streambed runs through Quaternary Non-Marine Terrace deposits of gravel, sand and clay of the Rohnerville formation.

<u>Description of the Gravel Bar</u>: The current gravel bar measures 600 feet wide at its widest point and 2,000 feet long resulting in a total surface area of $20\pm$ acres. It slopes down along most of its length at an average slope of 3% towards the low flow channel. There are no secondary channels nor noticeable depressions.

Noise Levels: Ambient noise levels range from 40 to 60 dBA and are the result of vehicular traffic, wind, water and wildlife. In addition, the site is subject to periodic noise resulting from the trains which utilize the tracks that run parallel to it and the State park. This railroad has been in existence since 1914. It presently operates two freight trains daily, Tuesday through Saturday, past this site.

Archaeological and Historical Resources: The archaeological site maps contained in the Environmental Data Bank were checked and revealed no known or recorded archaeological resources at this specific site.

<u>Visual Aesthetics</u>: The stockpile area is not visible from Dyerville Loop Road, nor is the bar. However, the bar is visible from an 800 foot stretch of the Avenue of the Giants and Highway 101, 2,000 feet northwest of its north boundary.

Recreation: The proposed site is adjacent to Humboldt Redwoods State Park. The terrace upon which the crusher will be placed is 2,200 feet from the nearest park rest area and the trail to the fallen giant. Vehicular noise from the Avenue of the Giants and Highway 101, which are 400 to 500 feet from the State park rest area and the trail to the fallen giant, was recorded on June 2, 1992 and ranged from 48 to 59 dBA. These measurements were taken within the rest area parking lot and on the trail in front of Founder's tree.

SECTION III. DESCRIPTION OF PROPOSED MINING OPERATION

The Humboldt County Public Works Department has a borrow agreement with Pacific Lumber Company, owner of this site, for the annual removal of 1,000 cubic yards of material. Every three to five years, 25,000 cubic yards will be removed and crushed.

It is proposed that operations at this site in any given year would begin on or about June 1st and cease no later than September 30th or sooner if high water occurred earlier than expected.

The location where operations will take place is shown on Figures 1-5. Since access to the site is via an existing haul road, there is no need to remove any vegetation. Gravel will be extracted by skimming an area equal to approximately 4.5 acres to a depth of three to four feet. The equipment which will be used includes: D-6 caterpillar, front-end loader, 10-yard dump trucks and portable crusher.

In those years when no crushing is done, skimmed material will be loaded directly into 10-yard dump trucks and transported to a job site. The area involved in skimming 1,000 cubic yards will be less than one acre to a depth of one foot or less.

Every three to five years, 25,000 cubic yards will be removed and trucked to the portable crusher which will be installed on the terrace above the river. If necessary to control dust from the crusher operation, a water truck will be brought to the site to provide a water spray. The crushed material will be stockpiled on the terrace until needed.

SECTION IV. DESCRIPTION OF PROPOSED RECLAMATION

Reclamation will be accomplished each year gravel removal operations occur. Since the present allowable dates for operation run from June 1st to September 30th, per Department of Fish & Game requirement, with a two week period for reclamation after September 30th, any required reclamation will be accomplished by October 14th.

Reclamation will consist of smoothing the skimmed portion of the bar to eliminate sharp edges and holes and to leave the bar with a slope towards the channel. This will preclude the trapping of fish by rising and falling water levels during the winter as well as erosion and undercutting of the bar. Any compacted areas will be scarified using the ripper on the back of a bulldozer.

The proposed subsequent use for the mined land is open space and flood plain. There is no requirement for resoiling or revegetation of the mined area.

At the conclusion of seasonal operations, the Road Division will make sure that no machinery, waste material, scrap iron, toxic substances or any other type of solid waste resulting from the mining operation remains on-site.

The proposed reclamation will have no effect on the potential for future mining at this site. Such potential will be determined by replenishment of the bar via normal bedload transport during the heavy winter flow(s) with the concurrence of the Department of Fish & Game.

In the years when the crusher is used at this site and removal exceeds 5,000 cubic yards, an aerial photograph with a scale of 1" = 400' will be provided. This photograph will show parcel lines, work location, and cross-section locations. The cross-sections will be tied to permanent bench marks above the 100-year flood plain and will be accomplished before and after extraction in order to calculate the volume of gravel removed.

It should be noted that this plan details the reclamation proposed to erase the results of removing gravel from this site by the Humboldt County Public Works Department and is not intended to include the activities of any other gravel removal operator. At the conclusion of reclamation each year, photos will be taken to verify the condition of the site at the time of departure of the County Public Works Department personnel.

With regard to Assurance of Reclamation, it should be noted that the County Planning Department is the lead agency in issuing a Conditional Use Permit to the County Public Works Department for this mining operation. Because both of these agencies are within the government of Humboldt County, the Public Works Department feels that a signed statement included in this Reclamation Plan is sufficient to guarantee that the Reclamation Plan will be implemented.

The following signed statement is included in the Reclamation Plan as required by SMARA (PRC) Section 2772(j):

"I, John Murray, Director of Public Works, hereby accept the responsibility for reclaiming the lands involved with the removal of gravel from the river bar named on page 1 of this Reclamation Plan in accordance with the provisions of this Reclamation Plan."

JOHN MURRAY DIRECTOR	DATE
APPROVED:	
LEAD AGENCY REPRESENTATIVE	DATE