



US Army Corps
of Engineers.

SAN FRANCISCO DISTRICT

PUBLIC NOTICE

NUMBER: 24993N DATE: 1 March 2000

RESPONSE REQUIRED BY: 3 April 2000

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

PROJECT MANAGER: Peter Straub TELEPHONE: (415) 977-8443 E-Mail: pstraub@spd.usace.army.mil

1. **INTRODUCTION:** The Del Rio Woods Recreation and Park District (DRWRPD), 2660 Del Rio Court, Healdsburg, California 95442, has applied to the U.S. Army Corps of Engineers (USACE) for a 5-year permit to continue annual construction of a summer dam on the Russian River, approximately 2-1/2 miles upstream of the Healdsburg War Memorial Dam, in Sonoma County, California. The summer dam consists of two gravel berms that abut a permanent concrete weir with removable flashboards. The berms are constructed after June 6 of each year, and the flashboards are installed incrementally from June 6 to June 20. The berms are breached and the flashboards removed by September 15 of each year. This individual permit application is being processed pursuant to the provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344).

2. **PROJECT DESCRIPTION:** As shown in the attached drawings, the two gravel berms are approximately 80 feet and 40 feet in length, 15 feet in height, and 20 feet in width with 2:1 sideslopes. After Memorial Day, gravel is skimmed from the adjacent bar along the west bank and stockpiled near the weir structure. Since the east bank does not afford access to the river, all construction work originates from the west bank. Water is diverted from the normal low-flow channel between the weir and east bank, and stockpiled gravel is brought in to construct the east berm. The west berm is then constructed to close the river channel, diverting water flow over the weir structure.

Berm construction results in the discharge of 2,350 cubic yards (cys) of material below the plane of ordinary high water and requires up to 5 days to complete. During the construction process, equipment operation does not occur in the wetted channel. After Labor Day, the east berm is hand-breached by cutting a small channel below the pool elevation; the resulting flow velocity further widens and incises the channel down to the normal low-flow elevation. The flashboards and steel framework are then removed from the weir and placed in storage. The west berm and remnant east berm remain undisturbed until they are eroded by winter high-flow events.

The existing weir structure is 43 feet in length and 30 feet in width and contains two stepped-pools with a 4-foot riser. At the upper pool level, a steel frame supports removable flashboards that increase the spillway elevation in 1-foot

increments to 5 feet.

3. **PURPOSE AND NEED:** The dam provides enhanced recreational opportunities for swimming, canoeing, and fishing by creating an impoundment area during summer low-flow conditions. The project location principally serves local residences but receives regional visitation during weekends and on holidays. Annual visitation is presumed to be less than 10,000 visitors, since the DRWRPD does not maintain accurate visitor use data. Summer dams have been constructed at this location for over 50 years and authorized by the USACE since 1980.

4. **STATE APPROVALS:** State water quality certification or waiver is a prerequisite for the issuance of a permit to conduct any activity which may result in a fill or pollutant discharge into waters of the United States, pursuant to Section 401 of the Clean Water Act (33 U.S.C. 1341). The DRWRPD is hereby notified that, unless the USACE is provided a valid request for State water quality certification by the Regional Water Quality Control Board (RWQCB) within 30 days of the date of this Public Notice, the District Engineer may consider the permit application to be withdrawn. No permit will be issued until the applicant obtains the required certification or waiver. A waiver will be explicit, or it may be presumed if the State fails or refuses to act on a valid request for certification within 60 days of receipt, unless the District Engineer determines a shorter or longer period is reasonable for the State to act. Water quality issues should be directed to the Executive Officer, Regional Water Quality Control Board, North Coast Region, 5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403, by the close of the comment period.

The project is not subject to the jurisdictional purview of the San Francisco Bay Conservation and Development Commission or the California Coastal Commission.

5. **PRELIMINARY ENVIRONMENTAL ASSESSMENT:** The USACE has assessed the environmental impacts of the project in accordance with the requirements of the National Environmental Policy Act of 1969 (Public Law 91-190), the Council on Environmental Quality's Regulations at 40 CFR 1500-1508, and USACE Regulations at 33 CFR 230 and 325. Unless otherwise stated, this preliminary Environmental Assessment describes only the direct, indirect, and cumulative

impacts which would result from regulated activities within the jurisdiction of the USACE.

The Preliminary Environmental Assessment resulted in the following findings:

Impacts To The Physical Environment:

a. **Substrate:** Skimming gravel for berm construction would lower the substrate elevation an average of 2 feet over 0.75 acre of exposed bar. Berm construction would require the discharge of 2,350 cys of gravel below the plane of ordinary high water, raising the substrate elevation an average of 12 feet over 0.20 acre of river channel. Subsequent winter high-flow events would obscure excavation and construction work by scouring and depositing sediment on the bar and in the river channel. In view of the temporal nature of this disturbance, adverse project impacts on substrate alteration would be short-term and minimal to minor in magnitude.

b. **Streamflow and Drainage Patterns:** The summer dam would impound water for approximately 1 mile upstream. The water depth behind the weir would increase from 3 feet to 9 feet and gradually taper off upstream. The river would vary in width upstream, increasing from a minimum of 40 feet to a maximum of 120 feet. Flow velocity would decrease in the impoundment and below the dam, although outflows over the weir continue throughout the summer months. When the dam is breached, impounded water would be discharged downstream and normal low-flow conditions reestablished in the channel. In view of the temporal nature of this disturbance, adverse project impacts on streamflow would be short-term and minor to moderate in magnitude.

c. **Water Quality:** Construction work and subsequent breaching of the berms would mobilize sediment in the river channel, thereby increasing turbidity and reducing dissolved oxygen levels in the water column downstream of the dam. The affected water column would return to an ambient condition shortly thereafter. In light of the temporal nature of this disturbance, adverse project impacts on water quality would be short-term and minimal to minor in magnitude. Water temperature in the impoundment may be increased 1 or 2 degrees over ambient conditions upstream and downstream of the dam. Since median daily water temperatures in the Middle Reach often exceed 72°F from June through August, the effect of slightly elevated water temperatures on habitat is unknown.

d. **Air Quality:** Gravel excavation, stockpiling, and grading activities associated with berm construction and operation of construction equipment would generate various air pollutant emissions, including fugitive dust, and carbon, nitrogen and sulfur dioxides. In view of the limited 5-day construction

period, air pollutant emissions attributed to project construction would cause adverse but short-term and minimal impacts to ambient air quality.

e. **Noise Conditions:** Equipment operation during construction would generate noise that could be audible from nearby residences. In view of the limited 5-day construction period and the presence of vegetation that may ameliorate noise intrusion, noise emissions attributed to project construction would cause adverse but short-term and minimal impacts to ambient noise levels.

Impacts To The Biological Environment:

a. **Pool and Riffle Areas (Special Aquatic Site):** Riffle complexes occur upstream and downstream of the dam location but not within impoundment area.

b. **Riparian Vegetation:** The seasonal impoundment has restricted the growth of woody riparian vegetation along the outer meander bend of the east bank, within a 10- to 15-foot zone which coincides with the impoundment water depth. This vegetation is characterized by Fremont cottonwood (*Populus fremontii*), Oregon ash (*Fraxinus latifolia*), California black walnut (*Juglans californica*), narrow-leaf willow (*Salix exigua*), arroyo willow (*Salix lasiolepis*), and other species. The seasonal impoundment has also prohibited the growth of herbaceous vegetation that would otherwise colonize the bar if it were exposed during summer low-flow conditions. This vegetation is characterized by white sweet clover (*Melilotus alba*), cocklebur (*Xanthium strumarium*), Jerusalem oak (*Chenopodium botrys*), birdsfoot lotus (*Lotus corniculatus*), and Indian tobacco (*Nicotiana quadrivalvis*). To a lesser extent, the impoundment has limited the growth of willows that could become established on elevated portions of the bar. From a habitat perspective, the recurrent loss of riparian vegetation attributed to project construction would be adverse, long-term, and minor in magnitude.

c. **Endangered Species:** Naturally spawned populations of coho salmon (*Oncorhynchus kisutch*), steelhead (*Oncorhynchus mykiss*), and chinook salmon (*Oncorhynchus tshawytscha*) inhabiting the California Coast Province, including the Russian River Basin, have been federally listed as "threatened," pursuant to the Endangered Species Act of 1973, as amended. In May 1999, critical habitat for coho salmon was designated to include all estuarine and river reaches accessible to coho salmon below longstanding, naturally impassable barriers. The critical habitat consists of the water, streambed, and adjacent riparian zone where coho spawn and mature. Critical habitat has also been proposed for steelhead and chinook salmon and would include essentially the same habitat features specified for coho salmon. The Middle Reach of the Russian River principally serves as a migratory corridor for adult and juvenile salmonids. Due to

high water temperatures during the summer months, the Middle Reach does not typically provide suitable rearing habitat for non-migrating juveniles. Steelhead and chinook salmon may be utilizing portions of the Middle Reach for spawning purposes in the late winter and spring.

The initial water diversion and construction of the berms in June and breaching in the fall would cause minor turbidity and sedimentation downstream of the dam. Early returning adult chinook salmon and late returning adult steelhead may become somewhat disoriented by the increased turbidity and temporarily delay their upstream migration. With dam closure limited to the period of June 20 through September 15, the principal upstream and downstream migratory periods for adult and juvenile salmonids would be avoided. The dam would delay, and likely impede, continued upstream migration of any early returning adult chinook salmon and late returning adult steelhead. The dam may temporarily delay any late outmigrating juvenile chinook salmon and steelhead, since passage is afforded over the weir. The extent to which juvenile salmonids, if any, were to inhabit the impoundment area during the summer months, they may become susceptible to increased predation or stress-related diseases. In view of the declining salmonid populations in the Russian River Basin, adverse project impacts on threatened salmonids would be long-term and minor to moderate in magnitude.

The USACE has initiated Section 7 consultation with the National Marine Fisheries Service on project related impacts to coho salmon, steelhead, chinook salmon, and designated and proposed critical habitat for these species.

d. **Fish and other Wildlife Habitat:** The Russian River Basin provides habitat for over 40 fish species but is dominated by large populations of suckers and minnows. The impoundment would favor species that prefer warmer pool habitats to species that require cooler flowing water. Prolonged inundation of the bar would limit the availability of habitat for several species of shorebirds, small mammals, turtles, and other amphibian species. Accordingly, project impacts on habitat value would be adverse and beneficial, long-term, and minor to moderate in magnitude.

Impacts To The Social And Economic Environment:

a. **Recreational Resources:** The seasonal impoundment would provide enhanced opportunities for swimming, canoeing, and fishing that would otherwise be diminished during summer low-flow conditions. In view of the limited occurrences of seasonal dams in the Middle Reach, the beneficial project impacts on recreation would be long-term and moderate to major in magnitude.

Impacts To The Historic And Cultural Environment:

a. **Archaeological Resources:** Since the river channel and adjacent bar are comprised of sediments recently deposited by winter high-flow events, project construction would not likely encounter intact archaeological resources. If unrecorded archaeological resources were discovered during the conduct of work, these operations would be suspended until the USACE concludes Section 106 consultation with the State Historic Preservation Officer.

Cumulative Impacts: Summer dams are presently installed at 5 locations on the mainstem Russian River, including Vacation Beach (rm 11.5), Johnson Beach (rm 13.0), Wohler (rm 22.5), Healdsburg (rm 31.5), and Del Rio Woods (rm 34.0). While several of these dams contain Denil-type fish ladders to facilitate passage of adult salmonids, summer dams may, on a cumulative basis, temporarily delay both upstream and downstream salmonid migration, reduce the extent potential rearing habitat for juveniles, and increase salmonid exposure to disease and predation.

Conclusions and Recommendations: Based on an analysis of the above identified impacts, a preliminary determination has been made that it will not be necessary to prepare an Environmental Impact Statement (EIS) for the project. This Environmental Assessment has not yet been finalized, and the preliminary determination may be reconsidered if additional information indicates the project would *significantly* affect the aquatic ecosystem.

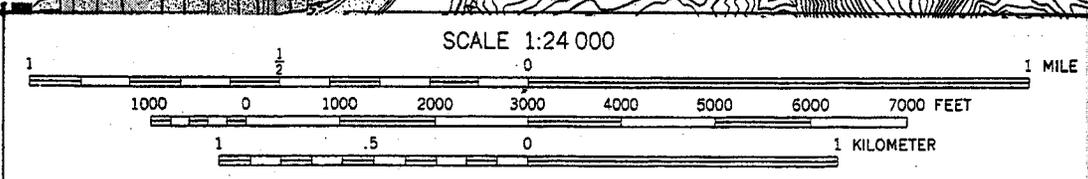
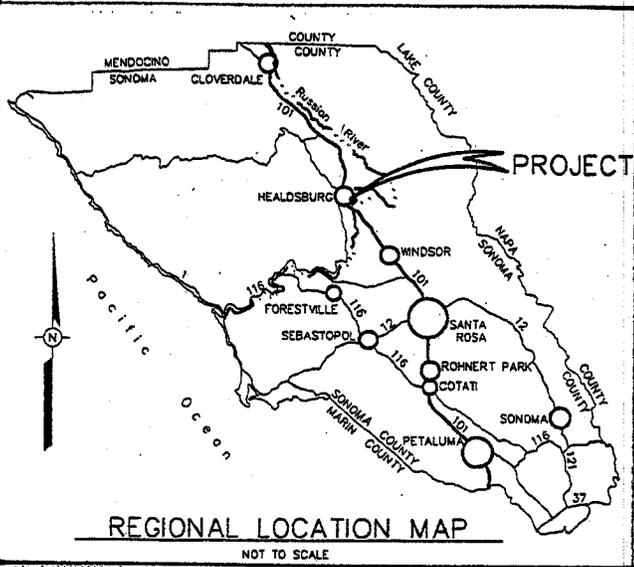
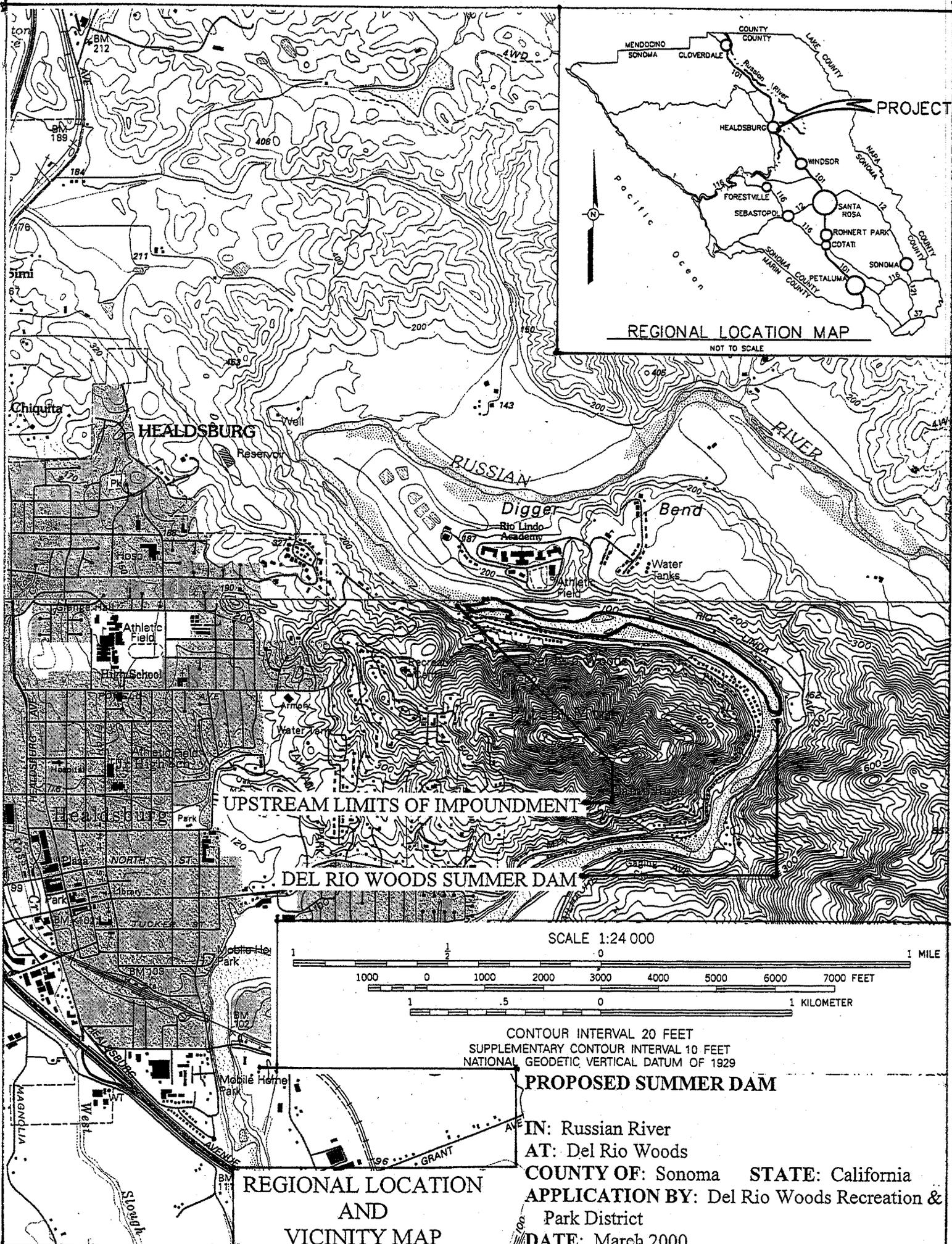
6. **COMPLIANCE WITH THE 404(b)(1) GUIDELINES:** Projects involving fill discharged into waters of the United States must comply with the guidelines promulgated by the Administrator of the Environmental Protection Agency under Section 404(b) of the Clean Water Act (33 U.S.C. 1344(b)). An evaluation pursuant to the guidelines indicates the project is dependent on location in or proximity to waters of the United States to achieve the basic project purpose. The DRWRPD has been informed to submit an analysis of project alternatives to be reviewed for compliance with the guidelines.

7. **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 project and its intended use on the public interest. Evaluation of the probable impacts which the project may have on the public interest requires a careful weighing of all factors relevant in each particular case. The benefits which reasonably may be expected to accrue from the project must be balanced against its reasonably foreseeable detriments. The decision on permit issuance will, therefore, reflect the national concern for both protection and utilization of important resources. Public interest factors which may be relevant to the decision process include 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.

8. CONSIDERATION OF COMMENTS: The USACE 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 the project. All comments received by the USACE will be considered in the decision whether to issue, modify, condition, or deny a permit for the project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, and the other environmental factors addressed in the final Environmental Assessment or Environmental Impact Statement. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the project.

9. SUBMITTING COMMENTS: During the specified comment period, interested parties may submit written comments to the San Francisco District, Regulatory Branch, North Section, citing the applicant's name and public notice number in the letter. Comments may include a request for a public hearing on the project prior to a determination on the permit application; such requests shall state, with particularity, the reasons for holding a public hearing. All comments will be forwarded to the DRWRPD for resolution or rebuttal. Other information may be obtained by contacting Mr. Peter Straub of the Regulatory Branch at telephone 415-977-8443.

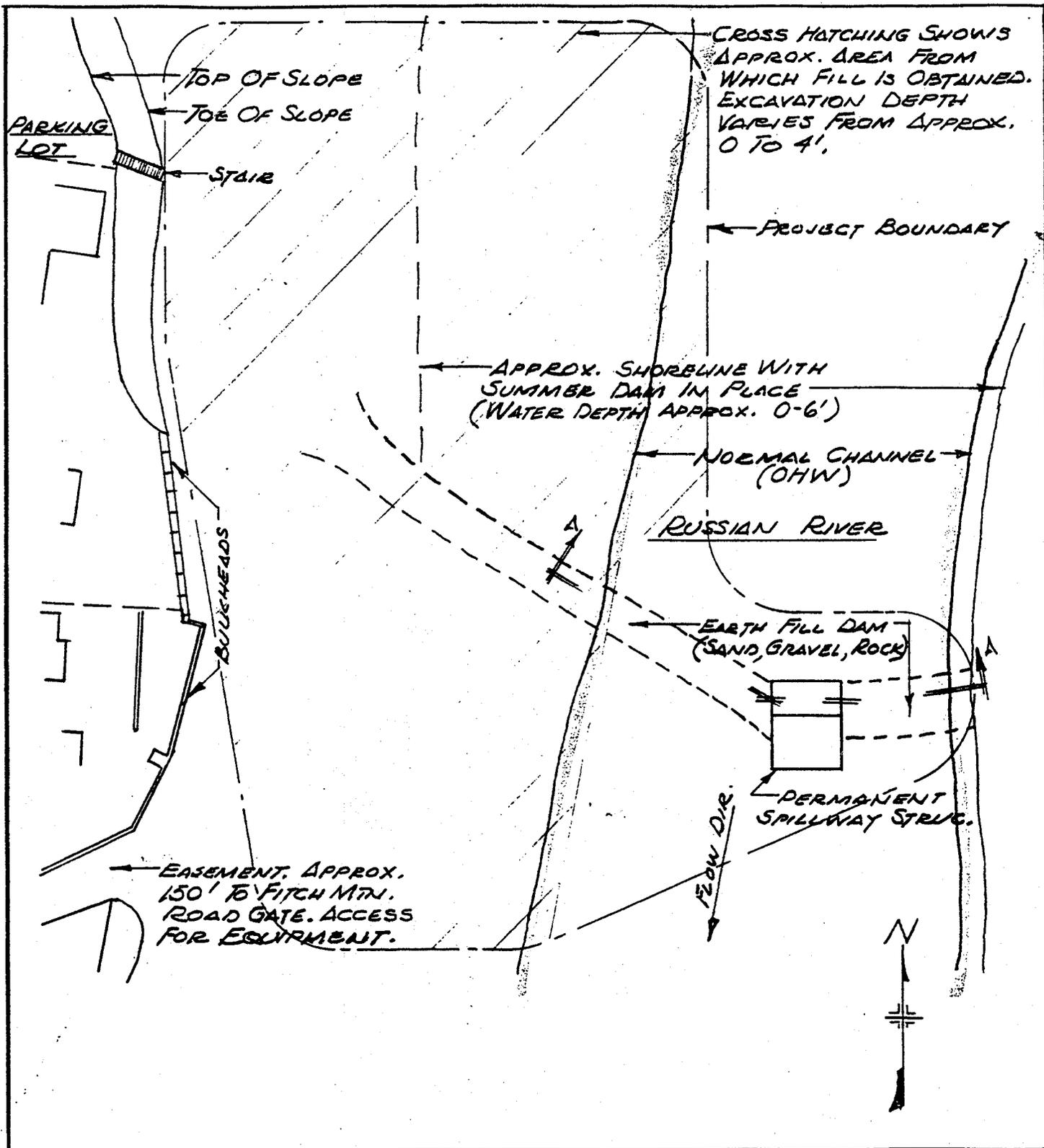


CONTOUR INTERVAL 20 FEET
SUPPLEMENTARY CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

PROPOSED SUMMER DAM

IN: Russian River
AT: Del Rio Woods
COUNTY OF: Sonoma STATE: California
APPLICATION BY: Del Rio Woods Recreation & Park District
DATE: March 2000

REGIONAL LOCATION AND VICINITY MAP



PURPOSE: SUMMER RECREATION

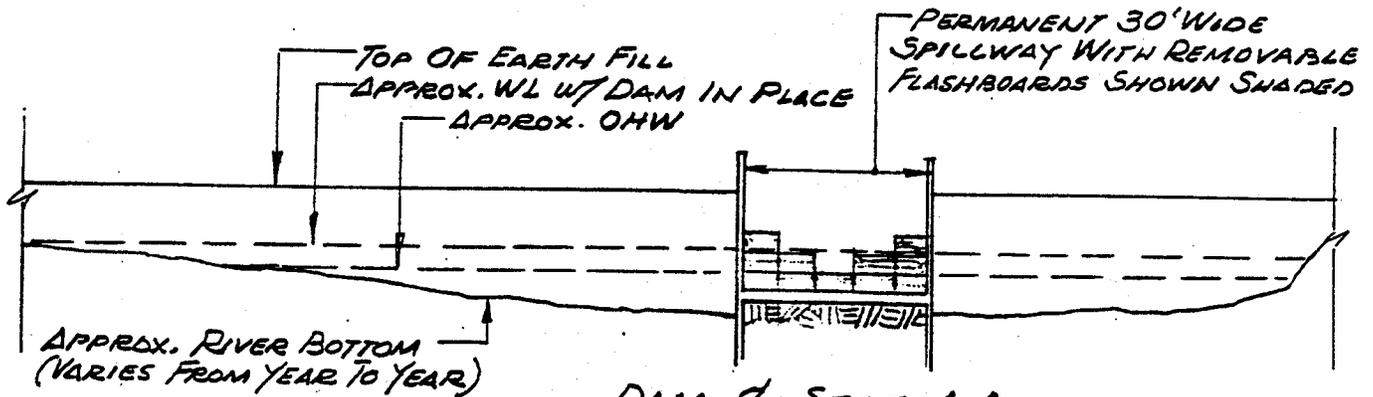
ADJACENT PROPERTY OWNER
 I. JAS. MACIEL (EAST OF DAM)
 2426 RIO LINDO AVE.
 HEALDSBURG, CA 95448

PLAN VIEW
 SCALE: 1" = 60'

DEL RIO WOODS RECREATION
 & PARK DISTRICT
 35 ROCKWOOD COURT
 SAN FRANCISCO, CA 94127

PROPOSED SUMMER DAM

IN: RUSSIAN RIVER
 AT: DEL RIO WOODS
 SONOMA COUNTY, CA
 APPLICATION BY: DEL RIO
 WOODS RECREATION & PARK
 DISTRICT
 SHEET 1 OF 3 . DATE: 9-1-94



DAM & SECT. A-A

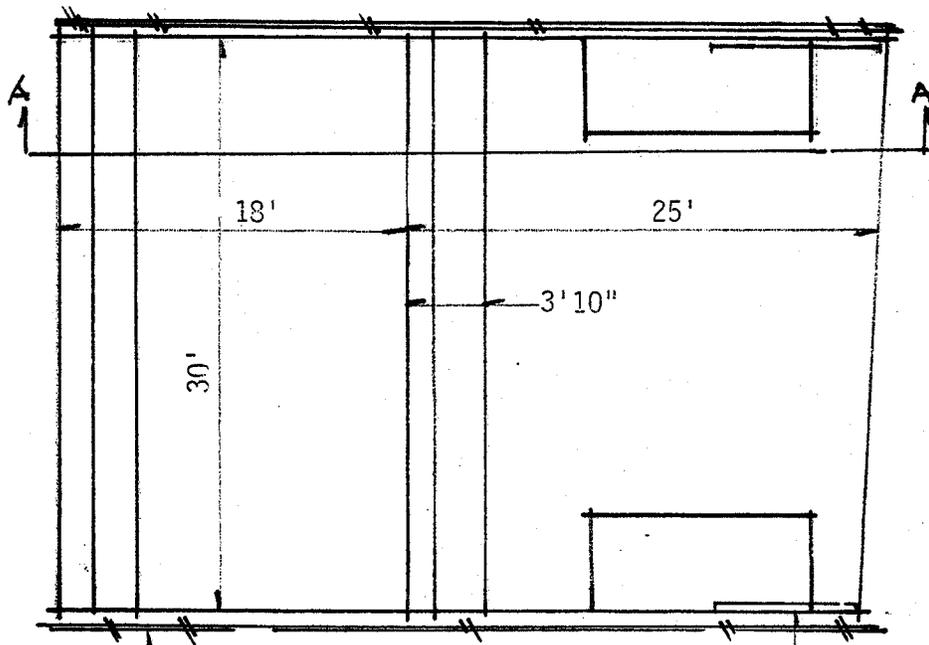
SCALE: 1" = 30' HORIZ. 1" = 10' VERT.

DAM SECTION

DEL RIO WOODS RECREATION
& PARK DISTRICT
35 ROCKWOOD COURT
SAN FRANCISCO, CA 94127

PROPOSED SUMMER DAM

IN: RUSSIAN RIVER
AT: DEL RIO WOODS
SONOMA COUNTY, CA
APPLICATION BY: DEL RIO
WOODS RECREATION & PARK
DISTRICT
SHEET 2 OF 3 DATE: 9-1-94

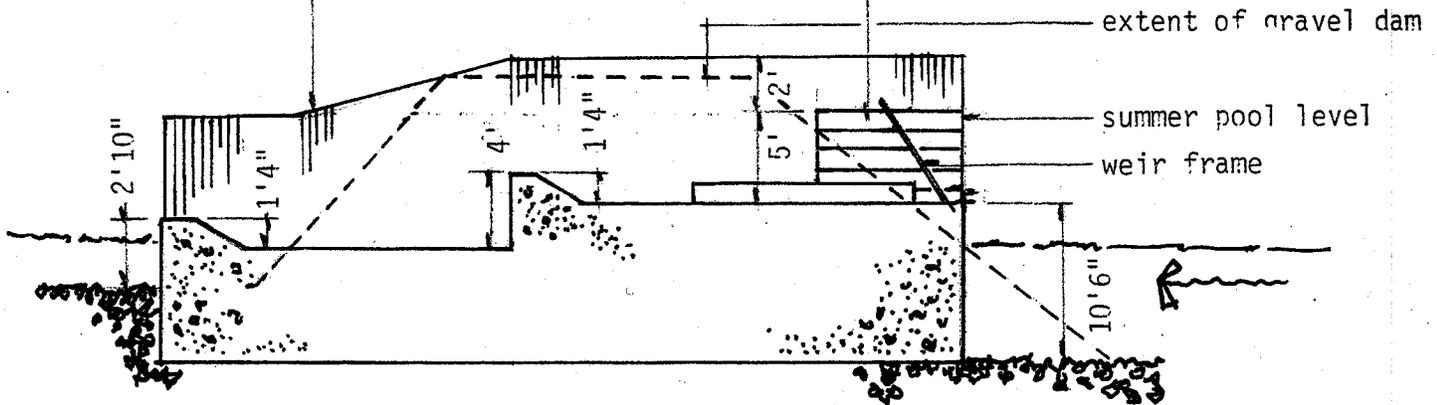


← Russian River flow

PLAN VIEW

sheet piling

wood planks



extent of gravel dam

summer pool level

weir frame

SECTION A-A

PERMANENT SPILLWAY (WEIR) STRUCTURE

SCALE: 1" = 10'-0"

PURPOSE:

DATUM

ADJACENT PROPERTY OWNERS:

①

②

PROPOSED SUMMER DAM

IN: Russian River

AT: Del Rio Woods

COUNTY OF: Sonoma STATE: California

APPLICATION BY: Del Rio Woods Recreation & Park District

DATE: March 2000