

COMMENTS OF STATE AGENCIES

G-16. STATE OF CALIFORNIA (EXHIBIT N)

The comments of the State of California, presented as Exhibit N, contain the comments of other pertinent State agencies. A summary of the views expressed are as follows:

a. Resources Agency. The Resources Agency stated that the plan of improvement is an important feature of the California Water Plan and the State Water Project and is needed by the mid-1980's to maintain yield of the project. The plan is engineeringly feasible and economically justified and the State supports early authorization of the project. They added that it is recognized that additional studies will have to be undertaken relative to finalizing the plan of development and to define specific measures necessary to achieve mitigation of project incurred fish and wildlife losses. The agency objected to the report showing a benefit-cost-ratio for fish and wildlife mitigation. It is intended that during the advanced study stage, continuous coordination will be maintained with the affected State agencies to finalize the matters mentioned above. The benefit-cost-ratio for fish and wildlife mitigation shown in the draft of report has been deleted from the final report. An analysis of the report by the various State agencies having an interest in water resources development resulted in the State submitting numerous recommendations. Comments of the Corps of Engineers on these recommendations are discussed below:

(1) Recommendation No. 1. The Corps of Engineers will process the report through the required channels for congressional authorization.

(2) Recommendation No. 2. Recreation will be included as a project purpose in accordance with the provisions of Public Law 89-72.

(3) Recommendation No. 2. Recreation will be included as a project purpose in accordance with the provisions of Public Law 89-72.

(4) Recommendation No. 3b. Subsequent to project authorization and funding coordination will be carried on with the U.S. Fish and Wildlife Service and the State Department of Fish and Game to resolve the matters pertaining to fish and wildlife mitigation.

(5) Recommendation No. 3c. The water releases downstream of the dam for preservation of the fisheries resources are generally concurred with.

(6) Recommendation No. 3d. The recommendation by the Department of Fish and Game relative to hatchery size is not in accordance with the recommendations of the U.S. Fish and Wildlife Service. This Service's recommendation has been incorporated in the report. It is expected that the differences of the two agen-

(7) Recommendation No. 3d. The benefits for recreation associated with fishing in the reservoir are presented in the report. The management of the reservoir fishery would be by the State agency.

(8) Recommendations No. 3f, g, h, and i. The matters relative to displacement of deer days, land required for replacement of wildlife habitat, and funds for implementation of the wildlife habitat plan are not in accordance with the recommendations of the U.S. Fish and Wildlife Service. The U.S. Fish and Wildlife recommendations have been incorporated in the report. Active coordination is expected to continue between the Wildlife Service and the Department of Fish and Game during the advanced planning and construction phases, to reconcile the differences. Also, a plan of development for annual management and operation of the wildlife mitigation area will be developed.

b. Department of Water Resources. The Department concurred generally in the recommendations of the report and recommends that the State support authorization of the proposed project. They stated that final sizing and cost estimates are subject to modification based on additional study by the Department and the Corps of Engineers. These studies should include additional geologic exploration, availability of construction material, and cost estimates for other types of dams. Preliminary field explorations and available data indicates that enough suitable material is available for construction of the project as proposed. The Department also expressed reservations regarding the cost estimate for relocations for the reservoir, stating that some of the relocated items would be enhancement and not replacement in kind. Fullest consideration has been given to steps which might be taken to mitigate, to the greatest possible extent, any adverse impact on the Indian interests and economy. If a substitute economy is to be developed, it is felt that \$3,000 per year per family is the minimum to be considered and the other Indian incomes that are presently higher should be equaled or bettered. As a means of arriving at a reasonable estimate of cost for the relocation, certain concepts of what such a plan might entail were adopted. Discussions were held with representatives of the Bureau of Indian Affairs during the formulation of the project in which it was indicated that the suggested approach was reasonable and workable. The problem is significant, as about two thousand acres of Indian land and the future of about 350 Indian residents are directly involved. To indicate the scope of the problem and permit a reasonable introduction of it into this report, a rationale for solution has been adopted

which is considered to permit evaluation comparable to other proposed project features and, more important, give a starting basis for further concept consideration. It is not believed that this feature, relative to the Indians, constitutes an enhancement measure. The Department suggests that water supply benefits be determined on the basis of \$30 per acre foot at the Delta. Thus, the cost of delivering the water from the exit portal of the Dos Rios-Grindstone Tunnel to the Delta should be determined and shown in the report. Preliminary evaluation indicated the cost for developing the conveyance from the exit portal of the tunnel to the Delta, consisting of channel improvement in the lower reaches of Stoney Creek, was in the category of about one dollar per acre-foot per year. On this basis a benefit of \$29 per acre-foot of water delivered at the portal of the tunnel has been adopted for the report.

c. Department of Public Works. Upon authorization of the project and receipt of funds for advanced planning and design, active coordination will continue with the Department on relocation studies. Details on design standards and costs will be resolved in the advanced planning stages. The estimates of costs in the report reflect the difference in road length with and without project as chargeable to the project.

d. Water Resources Control Board. The Board expressed concern on the effect the project might have on the quality of the Sacramento River water. Studies will be made during the advanced planning stages by the Federal Water Pollution Control Administration to determine possible detrimental effects, if any, and required measures to eliminate or reduce these effects.

e. Department of Harbors and Watercraft. The Department concurs with the conclusion in the report on the economic impact the recreation activities will have on the area.

f. Department of Conservation. Fire protection will be part of the Master Plan to be developed in final design. An adequate fire protection system will be provided during construction and after project completion.

g. Department of Fish and Game. Most of the comments and conclusions furnished by the Department are contained in the comments by the Resources Agency and discussed in sub-paragraph a. Comments not covered by the Resources Agency and which require clarification, are discussed below:

(1) Conclusion Nos. 3, 4, 5 and 6. The recommendations by the California Department of Fish and Game relative to fish and wildlife mitigation are not in accordance with the recommendations of the U.S. Fish and Wildlife Service. The U.S. Fish and Wildlife

recommendations have been adopted for the proposed project. Active coordination is expected to continue with the two agencies during advance planning and construction phases, subject to project authorization.

h. Department of Parks and Recreation. Close coordination will be maintained with the State and local interests throughout the post authorization planning and construction phases. It is policy of the Corps to assure that the land adjacent to the reservoir perimeter be available for recreational uses. Thus, in accordance with provisions of the Federal Water Project Recreation Act of 1965, 14,000 acres of land would be purchased, to be available for future recreational development, and held in reserve for a period of not less than ten years. At that time, a determination would be made as to the best use of the land. The project will be operated in a manner to assure filling of the reservoir in the shortest time possible and to keep the water surface elevation constant to the maximum possible extent throughout the recreational season.

COMMENTS OF STATE-FEDERAL INTERAGENCY

G-17. CALIFORNIA STATE-FEDERAL INTERAGENCY GROUP (EXHIBIT O)

The California State-Federal Interagency Group endorses the proposed plan of development for the Dos Rios Dam and Reservoir on the Middle Fork Eel River. Furthermore, the Group states that the report prepared by the Corps of Engineers thereon presents a comprehensive analysis of the proposed project and includes damsite documentation on all study aspects. They added that the project is compatible with plans for export of water from Eel River Basin and is in accordance with the California Water Plan and has been selected as an addition to the State Water Project.

COMMENTS OF LOCAL AGENCIES

G-18. EEL RIVER FLOOD CONTROL AND WATER CONSERVATION ASSOCIATION (EXHIBIT P)

The Association, whose primary purpose is to promote the development of water resources of the Eel River and related watersheds within the northwestern portion of California and is composed of eleven northwestern counties to include: Humboldt, Lake, Marin, Mendocino, Napa, Solano, Sonoma, Yolo, Contra Costa, Del Norte and Trinity, adopted Resolution No. 1-68 on 12 January 1968 endorsing the construction of the proposed Dos Rios Dam and Reservoir and appurtenant features by the Federal Government at the earliest

possible date. Also, the Association requested that the route to convey water from the reservoir be constructed in the best interests of the Association, the State and the United States and that the economy of Mendocino County be protected during project construction, and that the State of California participate in the recreation development of said project in view of the general benefits accruing to the State as a whole.

G-19. HUMBOLDT COUNTY (EXHIBIT Q)

The County Board of Supervisors adopted Resolution No. 68-1 on endorsing the Dos Rios Dam and Reservoir. Furthermore, the County requested the Eel River Flood Control and Water Conservation Association cooperate in requesting the Corps of Engineers to initiate planning and funding for construction of the dam. Also, the County endorsed the study undertaken for Lake County by Kaiser Engineers and the State Department of Water Resources relative to the route selection and contend that further consideration of the route selection is desirable.

G-20. MARIN COUNTY (EXHIBIT R)

The Board of Supervisors of this County by letter dated 19 January 1968, reiterated its support of the policies and programs of the Eel River Association relative to the Eel River. The County expressed concern about the problems facing Lake County relative to improving the quality of water in Clear Lake and they requested that the authorizing language for the Dos Rios Dam be such as to permit further investigation of conveyance facilities routing.

G-21. LAKE COUNTY (EXHIBIT S)

The Board of Supervisors of Lake County is opposed to the authorization of the Dos Rios Dam based on the route selection, that is the easterly conveyance through Grindstone Tunnel. However, the County is in full support of the project based on routing the export water through Clear Lake, the southerly conveyance route. The County contends that the easterly route would: draw away the only economical supplementary water supply for northwestern California; is a threat to the future economic development of Lake County; additional flows through Clear Lake are necessary to stabilize the lake level; the additional flows through Clear Lake are necessary to provide algae control and enhance the water quality; and the easterly conveyance route poses a threat to valuable agricultural lands along the Sacramento River through an increase

in seepage from the introduction of flows from the Middle Fork. The County has engaged Kaiser Engineers to prepare a study of benefits to Lake County and to northwestern counties for routing the water through Clear Lake.

G-22. MENDOCINO COUNTY (EXHIBIT T)

The Board of Supervisors of Mendocino County, adopted Resolution No. 68-11 on 16 January 1968 stating that after serious and diligent review, it is the firm policy of the County that they would not participate as the non-Federal agency in the development of the proposed project. Furthermore, the Board urged the State through its Department of Parks and Recreation to indicate their position as the non-Federal agency for recreation since the benefits are statewide and the County will only participate in recreation if certain restitutions are made to the County, based on the cost of water with recreation as a project purpose and without recreation as a project purpose.

G-23. SONOMA COUNTY (EXHIBIT U)

The Board of Supervisors of Sonoma County and the Board of Directors of the Sonoma County Flood Control and Water Conservation District, adopted Resolution No. 21694 on 15 January 1968 fully supporting the recommendations for construction of a high Dos Rios Dam and Reservoir; also the County agencies added that the projects should not preclude construction of an alternate conveyance route should a more feasible route be found.

G-24. YOLO COUNTY (EXHIBIT V)

The Board of Supervisors of Yolo County adopted Resolution No. 68-2 on 8 January 1968 requesting that the State Department of Water Resources, the Bureau of Reclamation and the Corps of Engineers examine in detail all alternatives to the routing of Eel River water and to give consideration to routing the water through Clear Lake into Cache Creek in Yolo County.

G-25. COLUSA COUNTY (EXHIBIT W)

The Board of Supervisors of Colusa County furnished a letter to this office, dated 14 December 1967, expressing its concern to increase seepage problems along the Sacramento River, if water from the Eel River is diverted easterly through the Grindstone Tunnel.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
2020 Milvia Street
Berkeley, California 94704

December 21, 1967

Lt. Col. Frank C. Boerger
District Engineer
Corps of Engineers
San Francisco District
100 McAllister Street
San Francisco, Calif. 94102

Dear Colonel Boerger:

Your (Draft) Eel River Basin, California, Interim Report on Water Resources Development for Middle Fork Eel River, dated November, 1967, has been reviewed. We are pleased to furnish comments.

The report was prepared on the basis of cooperative federal-state investigations which had the following purposes:

1. Reduce flood damages.
2. Provide additional water supply for the California State Water Project.
3. Provide a potential for hydroelectric power.
4. Help meet expanding public need for water oriented outdoor recreational opportunities.

The principal features of the project are a dam and reservoir on Middle Fork Eel River near Dos Rios; and a tunnel into the Sacramento River Basin.

The Soil Conservation Service is interested in the investigation. Our work in the River Basin at present is largely that of furnishing technical assistance to cooperators in the Elk Creek Soil Conservation District, Mendocino County Soil Conservation District, Trinity County Soil & Water Conservation District, and Westlake Soil Conservation District. Most of the assistance pertains to the rehabilitation and permanent improvement of agricultural lands.

Further, USDA has concurred in a request from the California Resources Agency, Department of Water Resources, to cooperate in a survey of the North Coastal River Basins, California, under authority of Section 6, PL 566. Field work on the Eel River Basin is completed and a report is in preparation on the Eel & Mad River Basins.

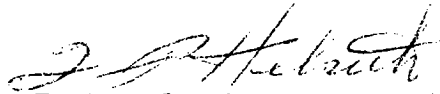
Interest in PL 566 projects has not been expressed as formal applications by sponsors for assistance.

EXHIBIT "A"

2--Lt. Col. Frank C. Boerger, Dec. 21, 1967

Basic soil and water conservation information pertaining to this area is available in the office of J. E. Woods, Area Conservationist, Soil Conservation Service, Sebastopol, California, and you are invited to contact that office as you continue with work recommended in your report.

Sincerely yours,



T. P. Helseth
USDA River Basin Representative
Pacific Southwest

EXHIBIT "A"

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
CALIFORNIA REGION
630 SANSOME STREET
SAN FRANCISCO, CALIFORNIA 94111

IN REPLY REFER TO

3520

January 12, 1968

Lt. Col. Frank C. Boerger
District Engineer
San Francisco District
Corps of Engineer
100 McAllister Street
San Francisco, California 94102

Dear Colonel Boerger:

Your Interim Report on Water Resources Development for the Middle Fork of the Eel River dated November 1967 has been received and reviewed.

The report proposes construction of a multiple purpose dam and reservoir and related facilities for flood control, water supply, recreation and hydroelectric power to be located on the Middle Fork of the Eel River near Dos Rios, California. Also a trans-basin conveyance tunnel to divert water eastward from the proposed reservoir to the Sacramento Valley.

The estimated cost of the improvements, including interest during construction, is \$438 million not including \$4 million of future recreation costs. Annual charges amount to \$15.7 million covering interest and amortization, operation and maintenance, and \$200,000 for loss in productivity. Annual benefits evaluated amount to \$25,430,000 of which \$22,500,000 are attributable to water supply. Benefits from the improvements exceed the costs by a ratio of 1.6 to 1.

Apportionment of first costs are \$57 million Federal and \$341 million non-Federal. Of the \$341 million non-Federal cost, \$339 million is for water supply and \$2 million for recreation. Related annual charges are \$2.17 million to the Federal Government and \$13.37 million to non-Federal interests.

We appreciate the opportunity to comment on the report at this time since the proposed improvements will have a major impact on the lands and management of the Mendocino National Forest as indicated in our statement presented at the hearing in Willits on December 15, 1967. The reservoir created by the Dos Rios Dam will closely border and in some cases inundate portions of the Mendocino National Forest. Much of the trans-basin tunnel will also be within the Forest. The project will have impacts on our recreational, fire



protection, transportation, wildlife, timber management, watershed management, and range activities or improvements.

Our specific comments as referenced to the report are as follows:

1. On page 45, paragraph 58, it is noted that the basin "contains some of the world's unique recreational attractions". On page 64, paragraph 138, the statement is made that "area potential and project features would make the development of the site as a National Recreation Area appear desirable". Perhaps the recreational aspects are overstated or the above refers to the long term prospects, as on page 98 the costs of providing access for such present use does not appear feasible.
2. Roads - The road locations prescribed in paragraph 111 and Plate 3 are questionable from the soils and geology standpoint. The proposed relocation of State Route 261 (Forest Highway 7) around the north shore would involve crossing the Eel and Williams Creek. Thorough, extensive studies of this route will be needed as these drainage areas have many areas of unstable soil conditions including slumps and landslides. Other possible routes should be considered.

The "local relocated road upstream along Black Butte River" could cause disastrous earth slippage in a very unstable area.

We strongly recommend that the Corps work closely with the U.S. Bureau of Public Roads, who are currently relocating Forest Highway 7 (S.R. 261), in examining these routes and alternatives. We note one planned bridge at the east end of the eastern recreation road. It appears superficially that two more bridges might make it possible to connect the two recreation roads as a S.R. 261 location and also tie in past the tunnel inlet to the "local existing road serving private properties at the east side of the reservoir." This would locate both roads in much more stable ground.

The "local existing" route does not merely serve a few private properties. It provides access for fire control, timber harvest, and Forest recreation to a vast area which extends from the proposed reservoir south to Lake Pillsbury. This connection is of great importance to National Forest administration and the multiple public uses of the National Forest.

Since the impoundment cuts off this route, it does not seem to follow that "Costs for the improvement and extension of the unnamed road would specifically apply to the Grindstone Tunnel feature of the project," as suggested in paragraph F-39, a. Incidentally, this route is #1N02.

3. Trans-basin Tunnel - We recommend that the project proponents search for and propose locations for disposal of the debris which will result from tunnel boring. The nature of suitable spoils areas will depend in part on the bulked volume and physical nature of the debris, which the proponents know best. Spoils areas will need to be located and stabilized for minimum erosion, slippage, and stream siltation. Replacement of topsoil and landscaping will be needed for aesthetic reasons.

Special use applications will be needed for any proposed spoils areas within the National Forest, as well as for proposed work roads, camps, or other facilities on National Forest land. We find no reference in the report to spoils disposal nor its cost. We recommend that a considerable amount be budgeted, as it may be necessary to carry the material for some distances to find suitable disposal areas.

Is the Hayshed location a firm one for the west tunnel portal? We understand the shorter and cheaper route from the foot of Long Doe Ridge may be feasible. We also note that the present stream bottom elevation at that point is some fifty feet below the bottom of the water supply pool. We will need to know the decision on this major point before we can begin to study the effect of the tunnel on the National Forest.

It is noted that as much as 3,000 CFS will be discharged from the tunnel outlet into Grindstone Creek. Sustained flows of this magnitude may have damaging effects on the channel and adjoining lands and necessitate channel treatment.

Plates 4 and C-12 show the tunnel inlet at 1405 and the outlet at 1221 feet elevation. Paragraph 109 specifies 1445 and 1245 respectively.

4. Station Relocation - The Eel River Station, listed for relocation in Table F-2 (with Covelo Ranger Station), will need to be relocated in or close to the National Forest, in order to serve its primary purposes of a fire station and work center. The island west of the mouth of Williams Creek could be among the areas investigated for this purpose. For fire control reasons this determination should be integrated with both of the traffic route determinations, previously discussed.
5. Section D & Accompanying Tables - The Mendocino National Forest is referred to as a wilderness. Although a small portion of it is wilderness, the majority is a producing forest, managed for multiple use. It is significant to the suggestions previously given on road location that 90 million board feet of logs come off the Forest annually and about one fourth of this through the proposed area of

the reservoir. Route #1N02 serves some ten thousand deer hunters annually and leads to the most popular hunting area of the Forest. Nearly a thousand cattle graze on Forest allotments which are adjacent to the reservoir and to the lands tentatively chosen for deer habitat mitigation. Mutual adjustments of these and similar Forest activities, and of the project, will be among the considerations to be jointly considered in our impact study.

6. Other - Paragraph F-40a mentions "Lands required for the adopted project," of which "about 21,000 acres are Federal properties (U.S. Bureau of Land Management)." However, the project boundary, as shown on plate D3, includes National Forest lands in the extremities of the Middle Eel, Black Butte, Thatcher Creek, and Elk Creek arms.

Paragraph D-14,e. Fourth sentence should read: "Lake Pillsbury, with 2280 water surface acres is owned by the PG&E and the United States. It is operated by the PG&E under FPC permit. It has four recreation areas, developed and operated by the U.S. Forest Service."

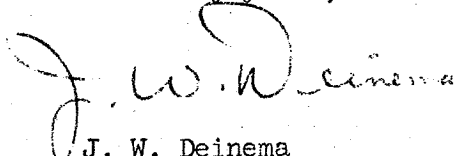
A couple of minor errors: "Hayseed Creek", in paragraph C-11a, should be corrected to read "Hayshed Creek." Plates 1 and 2 show the old town of Hullville near Lake Pillsbury. We believe that Hullville was inundated by the lake.

With our receipt of the interim report, the Mendocino Forest has started preparation of an impact study and report that will set forth in detail the effects of the project on our activities. It is expected this study will be completed in about a year. During this period we desire to work very closely with the proponents of the project in order to facilitate installations affecting National Forest lands when the project is approved.

As a part of our cooperative relations, we are providing the State Forester with a copy of our comments. We are also sending a copy to the California State Department of Water Resources.

We appreciate very much your making the report available for our review.

Sincerely yours,



J. W. Deinema
Regional Forester



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

REGIONAL OFFICE, REGION 2
P. O. BOX 15011
SACRAMENTO, CALIFORNIA 95813

IN REPLY REFER TO: 2-730

JAN 19 1966

Colonel Frank C. Boerger
District Engineer
Department of the Army, Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Dear Colonel Boerger:

We have reviewed the advance copy of your Interim Report on Water Resources Development for Middle Fork Eel River, California, transmitted to us by your letter of December 1, including the revisions transmitted to us by your letter of December 29, as you requested.

The report presents estimates of reductions in Eel River floodflows with Dos Rios Reservoir in operation both with and without the English Ridge Reservoir which we have under study. It supplies monetary evaluations of flood control benefits for Dos Rios. We have not been able to reconcile the relationships between accomplishments and flood control benefits presented for Dos Rios with the benefits for English Ridge which you have previously supplied us. We would appreciate further information concerning the benefits from coordinated operation of the two projects.

Further study of the powerplant below Dos Rios Dam may indicate the desirability of rearranging and enlarging the installation for optimum use of the water and power potential available. You may also wish to give further consideration in design to arrangements which would facilitate additional power development in the future if conditions change. Arrangements for power marketing will require consultation between our offices. In this regard, we feel that reference to power marketing and transmission responsibilities of the Bureau of Reclamation under Federal law and policy and the Interagency agreement should be included in your findings and recommendations.

As we have previously pointed out to the State-Federal Interagency Group, when it was considering alternative conveyance routes, the estimates of water supply available in the Central Valley from the

EXHIBIT "C"

Middle Fork Eel development in conjunction with Central Valley water supplies are dependent upon various assumptions and projections concerning Central Valley Basin water supplies, buildup of demands and future operation of Federal and State project units. We pointed out to the Interagency Group that we had been unable to consider in detail the assumptions and evaluations relating to water supply and use, suggesting that this would be done during the formulation and evaluation of the Master Plan of Development for the Eel and Mad River Basins.

We appreciate the opportunity to review your report and we will be pleased to discuss our comments further with you at your convenience.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "R. J. Pafford, Jr.", written in dark ink.

**R. J. Pafford, Jr.
Regional Director**



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
STATE OFFICE
4017 Federal Building - U.S. Courthouse
650 Capitol Mall
Sacramento, California
95814

IN REPLY REFER TO:
1734 (C.01d)

MAR 13 1968

Col. Frank C. Boerger
District Engineer
S. F. District Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Dear Sir:

Subsequent to a telephone call from Mr. Edward Walker of your staff, we are advising you of the following.

We are reviewing your November 1967 draft report entitled "Interim Report on Water Resources Development for the Middle Fork Eel River" (Dos Rios Dam and Reservoir).

We are not prepared to comment on the subject report in detail at this time. Our official comments will be provided by our impact report which will identify the effects that the proposed reservoir will have on BLM resources and programs and the reciprocal effects that our programs may have on the proposed reservoir. Present plans should see the impact report completed by October 1, 1968, and recommendations with regard to management of lands and resources within and adjoining the project will also be included.

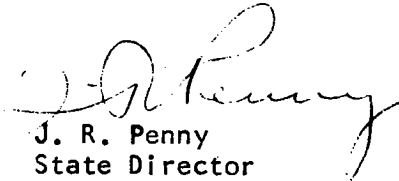
We note in your report that specific lands needed for the project are not identified by description. For your general information the public domain lands within the subject area were recently classified for retention in Federal ownership under the Classification and Multiple Use Act of 1964.

We also note in your report that recommendation is made for local or State administration of the recreation facilities. Please note that in accordance with the Federal Water Project Recreation Act of 1965 (P.L. 89-72) provision is made for the Bureau of Land Management to assume recreation administration of Federal water projects where

EXHIBIT "D"

public lands classified for retention in Federal ownership are within a reservoir project. Our impact report will make a recommendation in this regard.

Sincerely yours



J. R. Penny
State Director



UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF INDIAN AFFAIRS
SACRAMENTO AREA OFFICE
2550 FAIR OAKS BLVD.
P.O. BOX 4775
SACRAMENTO, CALIFORNIA 95825

IN REPLY REFER TO:

Land Operations
341- Round Valley
(Dos Rios Dam Proj.)

JAN 10 1968

Colonel Frank C. Boerger, District Engineer
San Francisco District, Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Dear Colonel Boerger:

Our letter of December 1, concerning the proposed Dos Rios Project stated that this office had submitted two alternatives to our Washington Office for accomplishing the planning which would be required for an orderly rehabilitation of the Indian people in the area affected by the project. The Washington Office has reviewed our suggestions and has given us the following guidelines:

- a. The Bureau of Indian Affairs does not interpose any objections to the project at this time providing it is in no way objectionable to the Council and members of the Round Valley Tribe.
- b. The Corps of Engineers should assume full responsibility for conducting negotiations with the tribe relevant to the project and the Bureau will render every assistance to tribal authorities in reviewing such plans and proposals as requested by the tribe. In addition we shall continue to provide assistance to the Corps where possible.
- c. It is agreed that the full understanding of the Indian people involved and the presentation of adequate detailed plans for their evaluation are essential in obtaining approval of the tribe and its subsequent cooperation in the project. Since this is a Corps of Engineers' project, it is appropriate that they fund any analytical or study efforts in which the Bureau is asked to participate.

Please let us know of any plans, studies or proposals you may have which will require our assistance. We are planning a meeting with

EXHIBIT "E"

the Tribal Council to review the Interim Report of November 1967.
Should the Council request additional information which your staff
can furnish, we will so inform you.

Sincerely yours,

Lawrence M. Hill
Area Director

EXHIBIT "E"

REGION SEVEN

ARIZONA
CALIFORNIA
NEVADA
HAWAII

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS
California Division
P. O. Box 1915
Sacramento, California 95809

January 12, 1968
IN REPLY REFER TO:

Colonel Frank C. Boerger
District Engineer
Department of the Army
San Francisco District, Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Dear Colonel Boerger:

This office has reviewed an advance copy of your Interim Report on Water Resources Development for the Middle Fork Eel River in Mendocino County, transmitted by your letter dated December 1, 1967 and the changes to the report transmitted by your letter dated December 29, 1967.

As stated in your report, the proposed dam and reservoir will require relocation of about 52 miles of county road. A portion of this consists of Federal-aid Secondary Route 505 with the relocation beginning about six miles northeast of the damsite and extending north and east to a point on the present road about one mile east of the confluence of Middle Fork Eel River and Black Butte River. Approximately four miles of the eastern end of proposed relocation on Federal-aid Secondary Route 505, is also designated Forest Highway Route 7.

We are enclosing a recent road system map of the area prepared by the California Division of Highways for your information.

Sincerely yours,



D. J. STEELE
Division Engineer

Enclosure

EXHIBIT "F"



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF OUTDOOR RECREATION

PACIFIC SOUTHWEST REGIONAL OFFICE

BOX 36062

450 GOLDEN GATE AVENUE

SAN FRANCISCO, CALIFORNIA 94102

IN REPLY REFER TO:

D6427 CAL Dos Rios

Your Ref: SPNGP-WA

January 16, 1968

Colonel Frank C. Boerger
District Engineer
U.S. Army Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Dear Colonel Boerger:

We have reviewed the advance copy of your Interim Report on Water Resources Development for Middle Fork Eel River, California transmitted by your letter dated December 1, 1967.

This review is limited to the recommended recreation plan in your report which includes both the Indian Recreation Development Plan to accommodate 1,000,000 recreation-days of use by 1990 and the Selected Plan to accommodate 1,000,000 recreation days by 1990. These plans and the land acquisition program outlined in the Recreation Appendix D, should provide for adequate recreation development of this proposed reservoir. We believe this proposed plan to be in accord with the California Public Outdoor Recreation Plan developed by the State of California pursuant to Subsection 5(d) of the Land and Water Conservation Fund Act of 1965 (78 Stat. 897).

We note the discussion of a proposal to develop the project as a national recreation area in Appendix D. We would like to comment on this proposal should it become a recommendation of your report.

On November 28, 1967, we commented on the recreation aspects of the Interim Review Report on the Mad River, California. Many of the generalized comments made in regard to that report apply to our review of this report and will not be repeated. We would like to emphasize the desirability of summarizing design-day use estimates by the various activities for which facilities are being proposed. Without this information it is very difficult to adequately study a recreation proposal.



The \$7 Annual Golden Eagle Passport
admits carload of people year-long to
all designated Federal recreation areas

EXHIBIT "G"

Costs for recreation facilities are somewhat higher than in your Mad River Report, however, these costs do not appear to be wholly adequate to provide quality facilities for the degree of use anticipated. In Table D-16 the cost shown for eight boat-launching lanes would average approximately \$22,000 each. Included should be the cost of parking for cars and boat trailers, limited sanitation, and turnarounds. Our experience indicates that an average concrete lane of ramp, 100 feet long, including the necessary support facilities, would cost approximately \$36,000 to build.

The recreation land acquisition proposal of 14,000 acres should provide an adequate base for all proposed developments. However, the 14,000 acres does not appear to be specifically covered in the "Recommendations" section of the draft report.

The section D-35, Pool Fluctuation may be misleading. It is true that the average fluctuation would be between 20 and 25 feet. However, Plate B-15 indicates that the water level at the beginning of the recreation season would be over 87 feet below the top of the conservation pool one year out of five exposing approximately 10,000 acres of reservoir bottom. This degree of draw-down, though not a serious deterrent to recreation development, should be noted.

Your proposal to mitigate loss to the Indian economy through development of recreation potential at project cost has considerable merit. Since this approach would have application to other projects in our region, we would appreciate being kept informed of your progress in the development of this program with the Indians.

The proposal is, of course, a policy matter which will probably be decided at the Washington level, and our interest in the subject should not be interpreted as official endorsement. You are aware that, as non-Federal public agencies, Indian governments also could qualify as potential administrators of recreation at these projects under Public Law 89-72.

Thank you for the opportunity of review of this report. If we can be of further assistance, please feel free to contact us.

Sincerely yours,



Frank E. Sylvester
Regional Director

EXHIBIT "G"



UNITED STATES
DEPARTMENT OF THE INTERIOR
FEDERAL WATER POLLUTION CONTROL ADMINISTRATION
SOUTHWEST REGION

Room 1802
100 McAllister Street
San Francisco, California 94102

Comprehensive
Planning and Programs

January 15, 1968

Lt. Colonel Frank C. Boerger
San Francisco District
Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Dear Colonel Boerger:

Reference is made to your letter SPNGP-WA dated December 1, 1967, requesting review and comment on your Interim Report on Water Resources Development for the Middle Fork Eel River (Dos Rios Project), California.

A preliminary water quality control study was prepared by our predecessor agency (U. S. Public Health Service) and a report, "Preliminary Report on Future Municipal and Industrial Water Uses and Future Water Quality Control Flow, Eel River Basin, California", was published in November 1962. Preliminary stream flow regulation to maintain a dissolved oxygen level for sustaining the fishery of the Eel River was determined in this earlier study. This agency is presently re-evaluating these needs in more detail with specific reference to your Dos Rios Project and the Bureau of Reclamation's English Ridge Project.

To keep you informed, a proposal for our current study was forwarded to you on August 25, 1967. As noted in the proposal, our study will also evaluate the impact on water quality of exporting the conservation yield developed by the two projects through the alternate Clear Lake conveyance route. A draft report will be available for review and comment by your agency in February 1968.

Advance data from our present study indicates that stream flow regulation needs for maintenance of oxygen levels in the Eel River would not be significantly changed from that previously reported in the 1962 study. As indicated in your report, these flows are less than the requirement for the maintenance of the fishery, as determined by the Bureau of Sport Fisheries and Wildlife. Final determination on stream flow regulation needs will be presented in our February 1968 report.

EXHIBIT "H"

Preliminary results of our current studies show that water quality improvements would result from the conveyance of both English Ridge and Dos Rios water through Clear Lake. The opportunity for the enhancement of the quality of water in Clear Lake has also been recently reported in a study (January 1968) for the Lake County Flood Control and Water Conservation District by Kaiser Engineers. Water quality enhancement benefits resulting from the transportation of both Dos Rios water and English Ridge water through Clear Lake will be evaluated in detail in our report. It will also evaluate the impact of the sanitary facilities on the proposed recreational areas and the needs for pollution control from construction activities.

We appreciate the opportunity to review and comment on your report at this early date and look forward to working with you in the completion of our respective studies.



William B. Schreeder

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EXHIBIT "H"



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

WESTERN REGION
450 GOLDEN GATE AVENUE, BOX 36063
SAN FRANCISCO, CALIFORNIA 94102

IN REPLY REFER TO:

L7423
(WR)CFA

December 19, 1967

Your Reference:
SPNGP-WA

LTC. Frank C. Boerger
District Engineer
Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Dear LTC. Boerger:

Thank you for the opportunity to review and comment on your "Interim Report on Water Resources Development for Middle Fork Eel River, California."

Archeological values have apparently been fully considered in the preparation of the report. The entire basin is a vast archeological area with a long history of Indian inhabitation. Funds allotted for the study and salvage of this resource appear to be sufficient.

Round Valley, which this recent study would propose to inundate, is an extensive area which has historical associations of significance. We estimate that the historical studies and salvage in Round Valley would require an additional \$21,000.

We note that you have considered the proposed Dos Rios Reservoir as having potential for development as a national recreation area. In the event this reservoir is recommended by the Corps of Engineers as a national recreation area, the Bureau of Outdoor Recreation would determine its suitability for such designation and recommend a Federal agency for administration.

Sincerely yours,

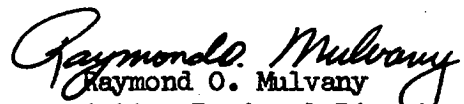

Raymond O. Mulvaney
Acting Regional Director

EXHIBIT "I"



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE

Preliminary Draft of
Proposed Report
For Review Only
Not for Public Release
(December 28, 1967)

ADDRESS ONLY THE
REGIONAL DIRECTOR

730 N. E. PACIFIC STREET
P. O. BOX 3737
PORTLAND, OREGON 97208

Reference: RBS

District Engineer
San Francisco District, Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Dear Sir:

This is our interim detailed report on the effects the proposed Dos Rios Dam and Reservoir, a unit of the Eel River Comprehensive development plan, California, would have on fish and wildlife. It has been prepared under the authority of and in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). This report is for inclusion in your Interim Report on Water Resources Development for Middle Fork Eel River, Eel River Basin, California, authorized for study by (1) the Flood Control Act approved June 22, 1936, (2) resolution adopted August 5, 1939, by the Committee on Flood Control, U. S. House of Representatives, (3) resolution adopted June 13, 1956, by the Committee on Public Works, U. S. House of Representatives, and (4) Section 209 of the 1962 Flood Control Act (Public Law 87-874).

EXHIBIT "J"

This report presents only preliminary and provisional fish and wildlife information since adequate project engineering data and detailed information on distribution and abundance of important fish and wildlife species are not presently available. Consequently, the angler and hunter use estimates and fish and wildlife conservation and development measures described are subject to revision as necessary when additional data are available.

The monetary values assigned in this report to recreational-type fish and wildlife benefits are based on criteria contained in Supplement No. 1 to Senate Document No. 97.

This report has been reviewed and concurred in by the California Department of Fish and Game, as indicated by the attached copy of a letter from Director Walter T. Shannon, dated _____, 1968. The Bureau of Commercial Fisheries has reviewed and concurred in report items and related recommendations concerning fish of commercial significance.

PROJECT DESCRIPTION

Purposes to be served by Dos Rios unit include flood control; water supply for municipal, industrial, and agricultural needs; hydroelectric power production; recreation; and fish and wildlife.

Approximately 600,000 to 700,000 acre-feet of Dos Rios Reservoir water would be exported from the basin annually. This water would be routed by gravity diversion via the proposed 21-mile-long Grindstone Tunnel into Grindstone Creek and existing Black Butte Reservoir, then down Stony Creek and into the Sacramento River where it would be distributed to local service areas. The 600,000 - 700,000 acre-foot diversion combined with existing unregulated flows in Sacramento River would provide approximately 900,000 acre-feet of firm yield for export at the Sacramento-San Joaquin Delta Pool. We understand that the State of California, Department of Water Resources, would construct the Grindstone Tunnel.

The extent and purposes of releases from Dos Rios Dam and Reservoir to Middle Fork Eel River have not been identified at this time. However, we understand that project plans include multilevel outlets at Dos Rios Dam.

FISH

Without the Project

The Eel River supports large populations of coho and fall-run chinook salmon, steelhead trout, and lesser populations of American shad, brown bullhead, cutthroat trout, green sturgeon, green sunfish, suckers, and Pacific lamprey. Eel River estuary supports substantial populations of crabs, redbtail surfperches, starry flounders, and various other estuarine species.

Dos Rios Dam would be a 730-foot-high earth-and-rockfill structure located in Mendocino County, California, on the Middle Fork Eel River about 3 miles upstream from its confluence with the main Eel River, and about 121 miles upstream from the mouth of the main Eel River.

Table 1. Preliminary features of Dos Rios Reservoir

Maximum Pool (spillway design flood)	
Water Surface Elevation	1,626
Water Surface (acres)	42,500
Surcharge (acre-feet)	970,000
Flood Control Pool	
Water Surface Elevation	1,602
Water Surface (acres)	40,000
Storage (acre-feet)	7,600,000
Average Annual Pool (mid-season)	
Water Surface Elevation	1,530
Water Surface (acres)	33,000
Storage (acre-feet)	5,000,000
Minimum Pool	
Water Surface Elevation	1,425
Water Surface (acres)	22,500
Storage (acre-feet)	2,000,000
Silt Storage (acre-feet)	150,000
Average Annual Vertical Drawdown (May-October)	25
Streambed Elevation (damsite)	920

All elevations are in feet and refer to mean sea level datum.

An estimated annual average of 13,000 fall-run chinook salmon and 23,000 steelhead trout spawn in the Middle Fork Eel River and tributaries upstream from Dos Rios damsite. For the 100-year period of analysis (1973-2072), the average annual sport angler use of these resources will be ^{46,500}~~40,000~~ angler-days. The commercial salmon catch will average 394,000 pounds annually, and the consumptive-use fishery for chinook salmon and steelhead trout by members of the Covelo Indian Community will average 1,000 pounds annually.

The average unimpaired runoff of Middle Fork Eel River at Dos Rios damsite is about 1,022,300 acre-feet annually. The annual runoff pattern contributes significantly in attracting and transporting fish and in maintaining fish habitat including the removal of temporary obstructions to fish passage.

The pattern and quantity of unregulated flows in Sacramento River may also contribute substantially in attracting and transporting fish, and in maintaining fish habitat.

With the Project

Dos Rios Dam and Reservoir would block anadromous fish access to about 150 miles of spawning area in the Middle Fork Eel River and tributaries. This would result in average annual losses during the analysis period of ^{45,000}~~38,500~~ angler-days for upstream migrant salmon and steelhead trout, and 1,500 angler-days for juvenile steelhead trout. This blockage

would also result in annual losses of 394,000 pounds of chinook salmon to the commercial fishery and 1,000 pounds of chinook salmon and steelhead trout to the Indian fishery during the analysis period.

Fish resources would also be drastically reduced downstream from the damsite without provision of downriver flows to preserve them. These additional major losses of fish resources and the associated reduction of sport angler use and commercial harvest have not been fully assessed at this time, but they undoubtedly would be of large magnitude.

Losses of anadromous and resident fish could occur during project construction. Physical and hydraulic characteristics of temporary project structures in the streambed could delay upstream fish migration and spawning both in the Middle Fork and main Eel River system. Construction within the streambed could increase the silt load downstream and cause fish losses through suffocation. Excessive siltation and turbidity originating from project borrow or spoil areas also would increase fish mortality, and reduce fish food and spawning areas.

Diversion of unregulated flows of Sacramento River at the Sacramento-San Joaquin Delta as part of the project yield could significantly affect fish passage and habitat. However, the probable effects of such diversions on fish resources have not been fully assessed.

Without development of an intensive fishery management program, including fish stocking, regulation of reservoir water levels, provision

of public-use facilities, and a zoned reservoir-use plan, Dos Rios Reservoir would not support a significant fishery. Numbers of resident fish presently occurring in the Eel River within the reservoir site together with these that may drift into the reservoir from upstream tributaries, are not sufficient to establish a reservoir fishery.

WILDLIFE

Without the Project

The proposed Dos Rios Reservoir site is used by large numbers of game animals, lesser numbers of furbearers and waterfowl, and numerous nongame wildlife.

The reservoir site supports approximately 270,000 deer-days of use annually by black-tailed deer. The average annual hunter use for deer inhabiting the reservoir site will be ^{10,500}~~9,000~~ hunter-days during the analysis period. Deer are also taken by members of the Covelo Indian Community; however, this consumptive use has not been evaluated.

The average annual hunter use for black bears supported by Dos Rios Reservoir site will be about 320 hunter-days during the analysis period.

Upland game animals which inhabit the project area include: band-tailed pigeons, blue grouse, California and mountain quails, mourning doves, ring-necked pheasants, gray squirrels, and rabbits. The average annual hunter use for upland game during the analysis period will be about 2,500 hunter-days.

Bobcats, coyotes, gray fox, minks, mountain lions, raccoons, river otters, skunks, and weasels inhabit the project area. Fur animal harvest within the impoundment site is minor and is not expected to change significantly during the analysis period.

The reservoir site provides feeding areas for small numbers of Canada geese, and nesting and feeding areas for minor populations of common mergansers, mallards, and wood ducks. The small amount of hunting effort which now occurs for waterfowl is not expected to change significantly during the analysis period.

In winter, bald eagles are numerous in the reservoir site, especially on deer wintering areas and along tributaries where salmon spawn. In addition to the economic value of wildlife described above, species such as bald eagles, black bears, mountain lions, and river otters provide significant esthetic values and contribute substantially to the public enjoyment of natural resources.

Waters originating upstream from the damsite contribute to maintenance of wildlife habitat downstream, including contributions to underground water sources which eventually supply agricultural wells in the Eel River Delta. Agricultural practices in the Delta presently provides habitat for upland game, waterfowl, and other wildlife.

The runoff pattern and quantity of unregulated flows in Sacramento River may contribute significantly to maintenance of wildlife habitat, particularly for waterfowl, in the Sacramento-San Joaquin Delta.

With the Project

Dos Rios Reservoir would inundate substantial habitat areas supporting significant numbers of deer and important populations of bears. The long-term project effect would be a reduction in annual harvest of these species amounting to an estimated average annual loss of ^{10,500}~~9,000~~ hunter-days for deer and 320 hunter-days for bear.

The reduction in hunting effort for upland game, resulting from habitat inundation, would be about 2,500 hunter-days annually.

Total project-related wildlife losses cannot be fully evaluated until the location and size of borrow and spoil areas are determined, and location of roads, recreation sites, and other developments, including relocation of the community of Covelo, Round Valley Indian Reservation, and Eel River Ranger Station, is determined.

Project effects on wildlife habitat in Eel River areas downstream from the damsite and in the Sacramento-San Joaquin Delta have not been fully assessed.

DISCUSSION

To compensate for blockage of anadromous fish passage by Dos Rios Dam and Reservoir, construction and operation of a hatchery and related structures would be required at or near the damsite to maintain estimated average runs of about 13,000 chinook salmon and 23,000 steelhead trout. Facilities would be required for 16,250,000 chinook salmon eggs and 13,000,000 chinook salmon smolts (100/pound), and 4,600,000 steelhead trout eggs and 2,300,000 yearling steelhead trout (8/pound). Planned

hatchery capacity includes capacity for restitution of losses to the Indian consumptive-use fishery. Estimated capital costs for the hatchery facilities would total \$4,175,000; annual costs of operation, maintenance, and replacement would be about \$410,000. This hatchery should be completed before Dos Rios Dam is closed.

Lands adjacent to the hatchery should also be acquired, developed, and hatchery water supply works sized to allow for hatchery expansion if, following a reasonable period of operation and evaluation, average fish runs and harvest are not being maintained by planned hatchery production.

Interim hatchery facilities would be required to maintain the above-described fish runs during project construction and thereafter until the permanent hatchery becomes fully operational. Costs of the interim facilities have not been determined.

A firm supply of suitable quality water would be required for both interim and permanent hatchery operation. This may necessitate a closed water system which would include facilities to filter, sterilize, heat, and cool part of the total hatchery water supply. The amounts and points of delivery of this water have not been determined. For purposes of this analysis it is assumed that permanent hatchery water requirements could be met from the 217,000 acre-foot release described below.

All costs of these loss compensation measures should be project costs.

At this time, it has not been determined which public agency would operate the proposed fish hatchery. Project funds for annual operation, maintenance, and replacement of the hatchery and related facilities should be transferred to the operating agency through the Corps of Engineers.

During subsequent project planning we will work closely with your staff in developing detailed information on required hatchery

facilities and water supply as fish inventory data are gathered and analyzed, and as hatchery sizing requirements are cooperatively refined by our Bureau, the Bureau of Commercial Fisheries, and California Department of Fish and Game.

To compensate for fish losses downstream from the damsite resulting from no downriver releases with the project, and to provide the required flows to transport hatchery-produced fish with the project, a minimum of 217,000 acre-feet of water should be released from Dos Rios Dam and Reservoir to the Middle Fork Eel River annually on the following schedule: 350 second-feet October 1-May 31, and 200 second-feet June 1-September 30. Multilevel outlets at Dos Rios Dam would probably be required to provide adequate quantities of good quality water for hatchery operation and to provide required temperatures of downstream releases. Since we have not been provided with your estimation of the months and amounts of downstream releases, or the months, amounts, and points of downstream diversion to meet irrigation, municipal, and industrial needs, if any, the above release of about 217,000 acre-feet of water from Dos Rios Dam should, at this time, be considered exclusive of all downstream water rights.

To facilitate unobstructed passage of anadromous fish, an open channel should be maintained, as a project responsibility, in the 25-mile reach of Middle Fork and main Eel River from Dos Rios damsite to the confluence of North Fork Eel River. Special project funds should be provided to control vegetative growth and/or landslide debris which,

EXHIBIT "J"

without the project, are removed by flood waters. Emergency funds may be required to remove such obstructions which are presently unpredictable in occurrence and for which costs of removal would depend on the magnitude of the obstruction.

Project-caused water pollution could result in losses of fish and fish spawning and rearing habitat. Pollution could occur from harmful materials discharged into the river or from siltation originating from in-channel work or from borrow or spoil areas. If the project is authorized, plans should be developed by the Corps of Engineers in cooperation with the Bureau of Sport Fisheries and Wildlife and the California Department of Fish and Game to develop methods for the prevention of excessive water pollution during construction periods.

With provisions of minimum public use facilities as provided by the Federal Water Project Recreation Act of July 9, 1965, Public Law 89-72, the estimated average annual visitor use of the proposed anadromous fish hatchery at or near Dos Rios damsite would be ~~28,500~~^{31,500} visitor-days during the analysis period. This enhancement derives from expected trends in visitor use as follows:

<u>Years</u>	<u>Visitor-Days</u>
Initial	6,000
50th	30,000
100th	60,000

Trends between years shown are straight lines. Each visitor-day at this site would be valued at \$0.50.

Dos Rios Reservoir would support a warmwater fishery with (1) intensive fish management, (2) angler-use facilities, and (3) a reservoir zoning and management plan.

A warmwater fishery could be established by stocking 100,000 channel catfish fingerlings, 2,500 adult largemouth bass, and 20,000 adult redear sunfish. Costs of initial stocking would total about \$12,000, and would be subject to provisions of P. L. 89-72. Maintenance stocking of these fish species would also be required; however, costs of such stocking have not been determined.

With the above provisions, this new warmwater fishery would provide for an average annual use of about 50,500 angler-days during the analysis period. This enhancement derives from expected trends in new angler use as follows:

<u>Years</u>	<u>Angler-Days</u>
Initial	0
2nd	3,000
50th	50,000
100th	100,000

Trends between years shown are straight lines. Each new angler-day of reservoir fishing would be valued at \$1.50.

Initial capital costs of angler-use facilities (boat launching ramps, parking areas, and sanitary facilities) would be \$33,000. By the

EXHIBIT "J"

fiftieth year of project operation, additional angler-use facilities costing approximately \$223,000 would be required. Estimated annual operation, maintenance, and replacement costs of these facilities would be \$3,000 during the first 49 years of project operation and \$22,000 for years 50 through 100. All costs associated with angler-use enhancement facilities would be subject to provisions of P. L. 89-72.

At this time a non-Federal public body has not been designated to share costs of this enhancement plan.

Since conflicts may arise among the many competing uses for reservoir land and water areas, a land and water use zoning and management plan should be developed in connection with overall planning for project operation, to insure that certain areas and/or certain periods would be available for fishing, hunting, and other fish and wildlife purposes without conflicting with public safety and other recreational activities. Such a plan should be developed cooperatively by the appropriate managing agency, the California Department of Fish and Game, and the Bureau of Sport Fisheries and Wildlife.

Retention of natural vegetation in Dos Rios Reservoir, particularly in the littoral zone, would improve conditions for game fish by providing cover and minimizing turbidity. The retention of trees and shrubs along the shoreline of the normal maximum reservoir pool level would also provide cover and be of value to various species of wildlife,

particularly California quail. Plans for clearing the reservoir site prior to impoundment should be developed cooperatively by the appropriate managing agency, California Department of Fish and Game, and Bureau of Sport Fisheries and Wildlife.

Although the full extent of wildlife losses has not been determined at this time, the following minimum provisions should be included in project planning to offset destruction of big game and upland game habitat and the associated reduction in hunting use. Habitat improvement to increase wildlife carrying capacity would be required on a proposed wildlife management area consisting of about 16,000 acres of project, public, and private lands. The exact location of these lands has not been determined. It is estimated that not more than 6,000 acres of the management area would consist of private lands. Based on your estimates, cost of acquiring 6,000 acres of private lands in fee title would be about \$900,000. Estimated cost of habitat development on 1,500 acres would be about \$90,000, and costs of maintaining developments would be about \$9,000 annually. All costs of this wildlife loss mitigation measure would be project costs.

The wildlife area would be managed by California Department of Fish and Game. That Department would initiate and maintain wildlife developments in accordance with a program developed cooperatively with the Bureau of Sport Fisheries and Wildlife. Project funds for annual operation,

EXHIBIT "J"

maintenance, and replacement would be transferred to the administering agency through the Corps of Engineers.

RECOMMENDATIONS

It is recommended:

1. That the report of the District Engineer, Corps of Engineers, include the conservation, improvement, and development of fish and wildlife resources among the purposes for which the project is to be authorized.

2. That to compensate for blockage of anadromous fish passage to Middle Fork Eel River and tributaries upstream from Dos Rios Dam, the project provide for and fund:

a. Construction and operation of a hatchery and related structures at or near the Dos Rios damsite to maintain average runs of 13,000 chinook salmon and 23,000 steelhead trout. Estimated capital costs of hatchery facilities would total \$4,175,000; annual costs of operation, maintenance, and replacement would be about \$410,000.

b. Construction and operation of additional permanent hatchery facilities if, following a reasonable period of operation and evaluation, average fish runs and harvest are not being maintained by the above planned hatchery production.

c. Construction and operation of interim hatchery facilities to be used during project construction and thereafter until the

permanent hatchery becomes fully operational. Costs of the interim facilities have not been determined.

d. A firm water supply of suitable quality for both permanent and interim hatchery operation. The amounts and periods of delivery of this water have not been determined. It is assumed, however, that the permanent hatchery water supply could eventually be provided from the 217,000 acre-foot release specified in Recommendation 3 below.

3. That to compensate for fish losses downstream from Dos Rios damsite resulting from decreased downriver flows with the project, and to provide required flows for transportation of hatchery-produced fish with the project, 217,000 acre-feet of water be released annually from Dos Rios Dam to the Middle Fork Eel River on the following schedule: 350 second-feet October 1 - May 31, and 200 second-feet June 1 - September 30. The 217,000 acre-foot release should be considered exclusive of all downstream water rights.

It is assumed that your planned multilevel outlets at Dos Rios Dam would supply adequate quantities of good quality water, including suitable temperatures for both hatchery operation and downstream releases.

4. That the project provide for and fund the annual removal or control of obstructions such as landslide debris or vegetative growth that would prevent passage of anadromous fish in the 25-mile reach of Middle Fork and main Eel River from Dos Rios damsite to the confluence

of North Fork Eel River. Plans for this work should be developed cooperatively by the project operating agency, the Bureau of Sport Fisheries and Wildlife, and the California Department of Fish and Game.

5. That prior to project construction, a plan be developed by Corps of Engineers in cooperation with the Bureau of Sport Fisheries and Wildlife and the California Department of Fish and Game to develop methods for the prevention of excessive water pollution during construction periods.

6. That, as an enhancement measure, project plans provide for fish stocking and angler-use facilities at Dos Rios Reservoir.

Costs of initial stocking would total about \$12,000. Costs of maintenance stocking have not been determined. Fish stocking plans should be cooperatively developed by the agency expected to administer the reservoir, the Bureau of Sport Fisheries and Wildlife, and the California Department of Fish and Game.

Initial capital costs of angler-use facilities (boat launching ramps, parking areas, and sanitary facilities) would be about \$33,000; additional facilities costing about \$223,000 would be required by the 50th year of project operation. Estimated annual operation, maintenance, and replacement costs of the initial facilities would be \$3,000 and would increase to \$22,000 by the 50th year of project operation.

All costs associated with this enhancement plan would be subject to provisions of P. L. 89-72. At this time a non-Federal public body has not been designated to share costs of this enhancement plan.

7. That the report of the District Engineer, Corps of Engineers, appropriately provide for the development of a reservoir zoning plan in connection with overall planning for the reservoir to insure that certain areas (or certain periods) would be available for fishing, hunting, and other wildlife purposes without conflicting with general recreation. It is further recommended that the reservoir zoning plan be developed cooperatively by the agency expected to administer the reservoir, the Bureau of Sport Fisheries and Wildlife, and the California Department of Fish and Game.

8. That plans and specifications for clearing vegetation from Dos Rios Reservoir site be developed by the Corps of Engineers in cooperation with the Bureau of Sport Fisheries and Wildlife and the California Department of Fish and Game.

9. That to compensate for destruction of big game and upland game habitat, the project provide for (a) establishment of a 16,000-acre wildlife management area, including fee title acquisition of 6,000 acres of private land and (b) habitat development on about 1,500 acres of land within the wildlife management area. Capital costs would be about \$900,000 for acquisition of 6,000 acres of private lands and \$90,000 for habitat development. Costs of maintaining developments would be about \$9,000 annually.

EXHIBIT "J"

California Department of Fish and Game would accomplish developments and operate and administer the wildlife management area in accordance with a plan developed cooperatively by that agency, and the Bureau of Sport Fisheries and Wildlife. Annual project funds for maintaining developments on the wildlife management area would be transferred to the administering agency through the Corps of Engineers.

10. That all capital, operation, maintenance, and replacement costs of mitigation or compensation measures recommended as project costs be treated in the same manner as other project joint costs and allocated among the beneficial purposes of the project.

11. That control programs employing chemical herbicides or pesticides on project lands or waters be developed in cooperation with the U. S. Public Health Service, Federal Water Pollution Control Administration, the Bureau of Sport Fisheries and Wildlife, and the California Department of Fish and Game.

12. That project operating criteria established for the protection and development of fish and wildlife be adhered to by the Corps of Engineers as long as it exercises direct operational control of project features, and that any agreements entered into for the delegation or release of operational control to another agency include stipulations to prevent deviation from these criteria.

13. That the following language be incorporated in the recommendations of the report of the District Engineer, Corps of Engineers:

a. "That such reasonable modifications be made in the authorized project facilities and operation as may be agreed upon by the Director of the Bureau of Sport Fisheries and Wildlife and the Chief of Engineers for the conservation, improvement, and development of fish and wildlife resources."

b. "That Federal project lands and waters be open to public use for hunting, fishing, and related uses, except for sections reserved for safety, efficient operation, or protection of public property, and except for certain areas or periods where closures may be found necessary by the California Department of Fish and Game and the Bureau of Sport Fisheries and Wildlife to conserve or develop fish and wildlife resources."

c. "That leases of Federal land in the project area reserve the right of public access for hunting and fishing except for sections reserved for safety, efficient operation, or protection of public property."

d. "That all lands necessary for carrying out the various purposes of the project be acquired in accordance with the provisions of the Joint Policy of the Department of the Interior and of the Army, relative to reservoir project lands of

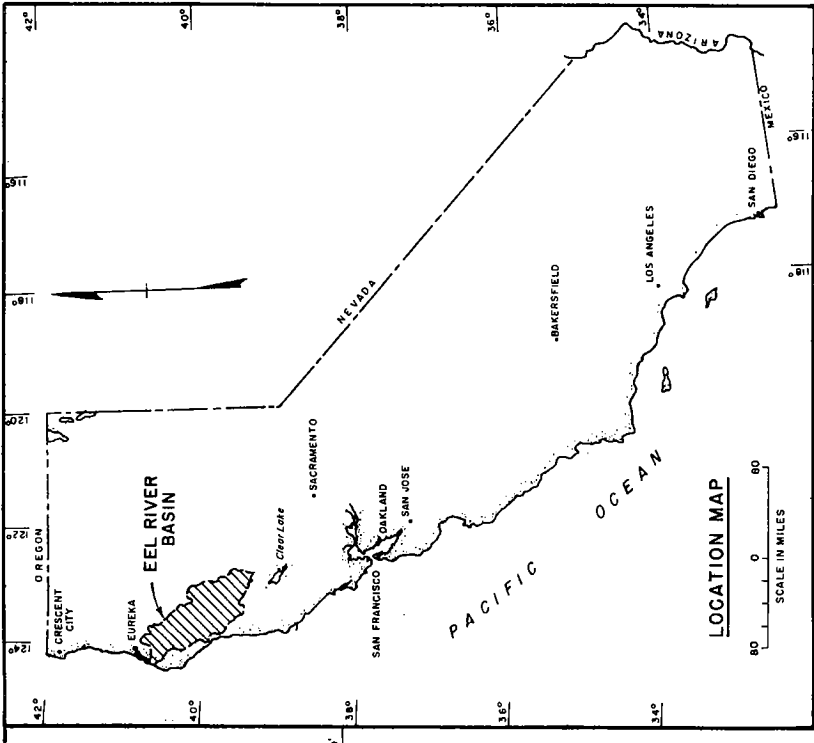
February 16, 1962, and that flowage easements be acquired only on those lands found not to have substantial value for recreation and fish and wildlife purposes."

This report is based on engineering data and information provided by your staff through September 1967. We would appreciate notification of any change or refinement of the engineering plan so that consideration may be given to the revision of this report.

Please notify us of your proposed actions regarding our recommendations. Thank you for the cooperation of your staff during preparation of this report.

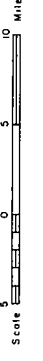
Sincerely yours,

Regional Director



LEGEND

- Outline of Drainage Basin
- U.S. Highway
- State Highway
- County Road
- County Line
- River Miles
- Existing Dam and Reservoir
- Proposed Dam and Reservoir
- Potential Dam Sites
- Levee



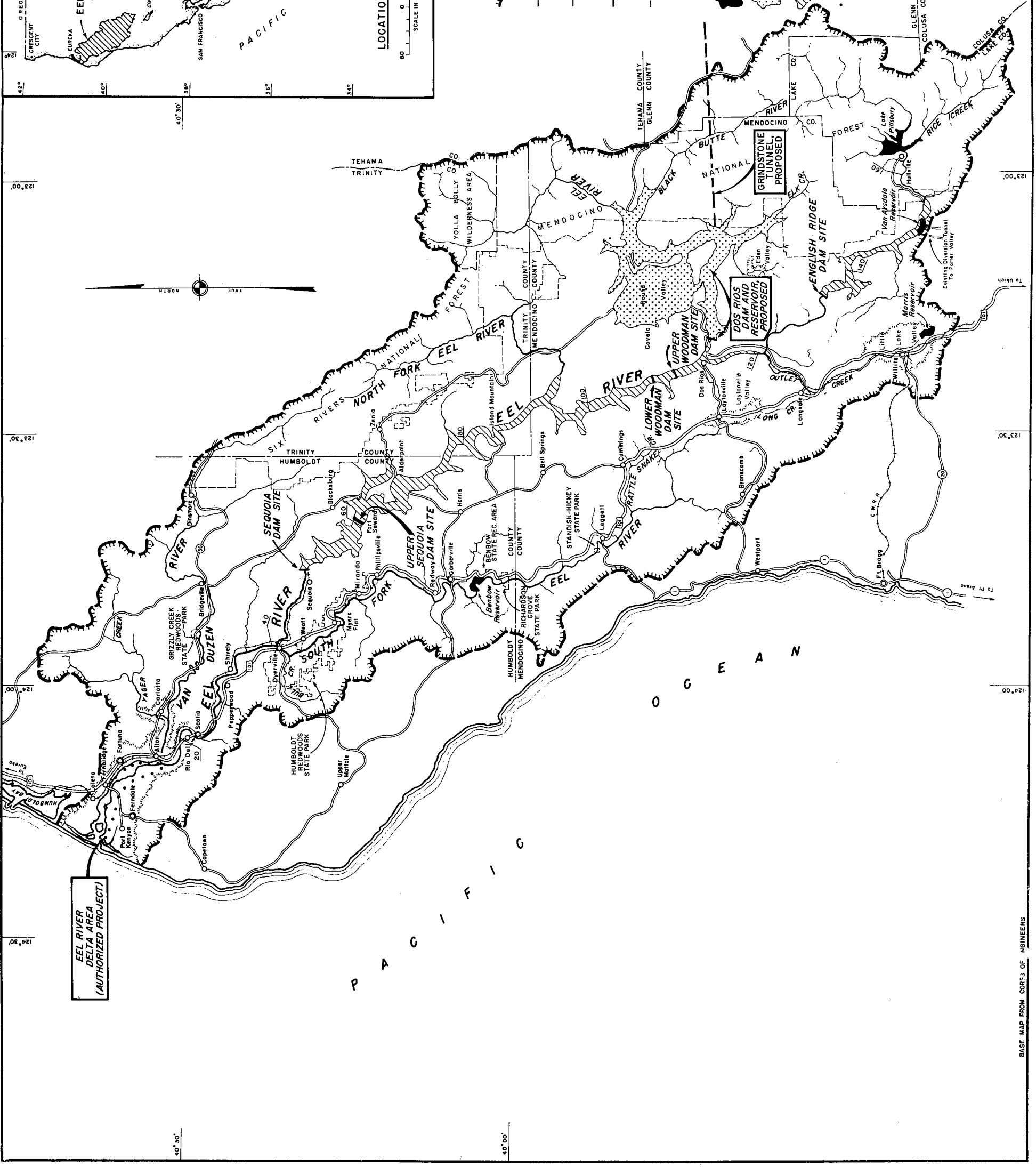
UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE

EEL RIVER BASIN
CALIFORNIA

CORPS OF ENGINEERS

**MAJOR POSSIBLE EEL RIVER BASIN
WATER DEVELOPMENTS**

SEPTEMBER 1967 PORTLAND, ORE. PLATE 1



BASE MAP FROM CORPS OF ENGINEERS



UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
Water Resources Division
District Office
855 Oak Grove Avenue
Menlo Park, California, 94025

March 8, 1968

District Engineer
San Francisco District
U.S. Army, Corps of Engineers
100 McAllister Street
San Francisco, California, 94102

Dear Sir:

Copy 74 of your Interim Report on Water Resources Development for Middle Fork Eel River is enclosed with our comments. We apologize for our delay in replying.

The only parts of the report that fall within the scope of our activities are the sections on hydrology. Nothing in those sections is inconsistent to any significant degree with our data and analyses, except for the footnotes to the table that appears on pages 27 and B-12. The gage on Eel River at Alderpoint is shown as being discontinued in 1965; this gage, which was destroyed by the flood of 1964, was rebuilt at Fort Seward and records for the two sites are considered to be equivalent. The gage on Eel River below Dos Rios is shown as being in operation in 1967; this station was discontinued on September 30, 1966, but runoff can now be computed as the sum of the discharge at three upstream stations.

There is also a small discrepancy between the text on page B-6 and the table on page B-11. The text states that about 30 percent of the annual runoff in Middle Fork Eel River occurs from April through June; the table shows 25 percent for those three months.

Very truly yours,

R. Stanley Lord
R. Stanley Lord
District Chief

Enclosure

EXHIBIT "K"

FEDERAL POWER COMMISSION
REGIONAL OFFICE
555 BATTERY STREET, ROOM 415
SAN FRANCISCO, CALIF. 94111

81A-Eel R.
W/A 59

January 22, 1968

Lt. Colonel Frank C. Boerger
District Engineer
U.S. Army Corps of Engineers
San Francisco District
100 McAllister Street
San Francisco, California 94102

Dear Colonel Boerger:

This is in reply to your letter of December 1, 1967, requesting our review and comments on the advanced copy of your "Interim Report on Water Resources Development for Middle Fork Eel River, California," dated November 1967.

The report indicated that you have made studies of various sites and capacities of single and multiple-purpose reservoirs principally on the Middle Fork Eel River. From these studies you determined that the proposed multiple-purpose Dos Rios reservoir on the Middle Fork was the most feasible plan for the initial improvement. Tangible benefits would be for flood control, water supply, recreation, and hydroelectric power development. The reservoir would have a gross storage capacity of 7,600,000 acre-feet consisting of 600,000 acre-feet for flood control; 5,000,000 acre-feet for water supply, recreation, and power pool; and 2,000,000 for a minimum pool including silt and land-slide reservation. The dam would have a maximum height of 730 feet above stream-bed and an approximate crest length of 2,100 feet. It would be a zoned-rockfill embankment. A trans-basin conveyance tunnel about 21 miles long and 17 feet in diameter would be required to divert water eastward into the Sacramento Valley where the water would be incorporated into the California State Water Project. A complex of recreational facilities would be included as part of the plan of development.

The reservoir would regulate the runoff from 745 square miles, or about 21 percent of the total Eel River drainage area. The proposed reservoir in combination with the authorized delta levees would provide protection against floods of greater than a one percent or 100-year chance of occurrence.

EXHIBIT "L"

Lt. Colonel Frank C. Boerger

January 22, 1968

The total estimated first cost of the project, based on September 1967 prices, is \$398,000,000 consisting of \$241,000,000 for dam and reservoir, which includes \$1,800,000 for specific power facilities, \$153,000,000 for water supply conveyance tunnel to the Sacramento River Basin, and \$4,000,000 for lands to be reserved for future recreation potential. Estimated Federal first cost is \$57,000,000 for dam and reservoir improvements related to flood control, recreation, and hydroelectric power purposes. Total annual benefits are estimated at \$25,430,000, as compared with estimated annual costs of \$15,540,000 over a 100-year economic project life, giving a benefit-cost ratio of 1.6 to 1. Each of the proposed project purposes has a benefit-cost ratio greater than unity.

The data for your proposed Dos Rios Dam agree essentially with data for the State of California's proposed Dos Rios Dam described for the Glenn Route in the California Department of Water Resources Bulletin No. 171, "Upper Eel River Development," dated August 1967, which is approved by the Bureau of Reclamation, Soil Conservation Service, and the Corps of Engineers.

In your current study of the feasibility of the downstream Yellow Jacket Dam on the Eel River (or of an alternative afterbay), the development of pumped-storage power between Dos Rios and Yellow Jacket reservoirs (or alternatives) should be investigated along the lines of those already made in your office. If the Yellow Jacket reservoir or alternative is a feasible project, then the construction of Dos Rios Dam should include provisions for pumped-storage power facilities.

Your proposed Dos Rios dam and reservoir is an economically feasible multi-purpose project. It appears to be a physically feasible project if prohibitive geologic conditions are not discovered. The single element giving the most concern in developing the Dos Rios dam-site appears to be the geological character of the area. These reservations are well expressed in your Appendix C on Geology, pages C2-C5. In view of these concerns we suggest that the authorizing document provide for the use of an alternative development.

We do not interpose any objection to your selection of a power plant with an installed capacity of about 4,800 kilowatts limited to utilization of in-basin releases for fish mitigation and available head. However, we will want to review this installation at the advanced planning stage, along with proposals for the inclusion of pumped-storage facilities in the initial facilities.

Your report states that the undependable flow of the export water in the Grindstone transbasin conveyance tunnel precludes its development for power without the inclusion of a relatively large afterbay for reregulation for water supply. In the advanced planning stage of Dos Rios project we suggest that further studies be given to the addition of power facilities in connection with the conveyance tunnel. It may be that the outflow from other works of the California water plan can be adjusted so that improved power characteristics of Grindstone conveyance tunnel will result.

EXHIBIT "L"

Lt. Colonel Frank C. Boerger

January 22, 1968

Thank you for the opportunity of reviewing your proposed report. We will be glad to cooperate in additional power studies in connection with this project.

Sincerely yours,

A handwritten signature in cursive script that reads "M. Boyd Austin". The signature is written in dark ink and is positioned above the typed name and title.

M. Boyd Austin
Regional Engineer

EXHIBIT "L"



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

AREA VI
MINERAL RESOURCE OFFICE

450 GOLDEN GATE AVENUE
BOX 36012
SAN FRANCISCO, CALIFORNIA 94102

December 7, 1967

Lt. Col. Frank C. Boerger, District Engineer
San Francisco District, Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Ref. SPNGP

Dear Colonel Boerger:

This is in reply to your letter of November 15, 1967 notice of a joint public hearing on an interim report on Water Resources Development for Middle Fork Eel River, California wherein the Corps of Engineers proposes to recommend Federal construction, maintenance, and operation of a multiple-purpose dam and reservoir at Dos Rios, Mendocino County, California, with State of California construction, maintenance, and operation of a conveyance tunnel eastward into the Sacramento River.

The proposed dam would be of a rockfill type 730 feet high, with a crest length of about 3,100 feet, and with total storage capacity of 7,600,000 acre-feet. The conveyance tunnel would be approximately 21 miles long with a diameter of 17 feet.

Construction of these facilities would require steps to mitigate fishery and wildlife losses, to adjust for disturbance of the Indian community, and, if desired by local interests, to relocate the town of Covelo.

A literature search in the Bureau of Mines Area VI Mineral Resource Office disclosed the following mineral involvement:

Within the general area of the proposed dam, a coal bed crops out over a strike length of approximately 10 miles airline, beginning in section 9, T. 22 N., R. 13 W. and trending southeasterly to section 36, T. 21 N., R. 13 W. Within the boundaries of the reservoir that would result from construction of the proposed Del Rios dam, outcrops of coal occur in the south half of section 2, the west quarter of section 11, and the southwest quarter of section 12, all in T. 21 N., R. 13 W. Here, the coal bed is reported to be between 12 and 14 feet thick and to dip 20 to 30 degrees to the northeast. In view of the uniform thickness over reported lengths up to 600 feet, the coal bed could be continuous between the observed outcrops.

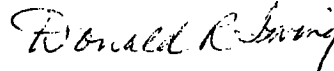
EXHIBIT "M"

A small quantity of coal was mined from the Thomas or Carbon Company coal mine in the south part of section 13, T. 21 N., R. 13 W. from February 1923 to August 1926 and 40 tons were mined in 1948 from the Ocean mine, section 2, T. 21 N., R. 13 W. Two samples of coal from this district were analyzed in 1946 by the Bureau of Mines. The coal was said to be of sub-bituminous rank and non-coking grade. Company officials reportedly estimated reserves of 23 million tons in the two mines (15 million for the Thomas mine and 8 million for the Ocean mine).

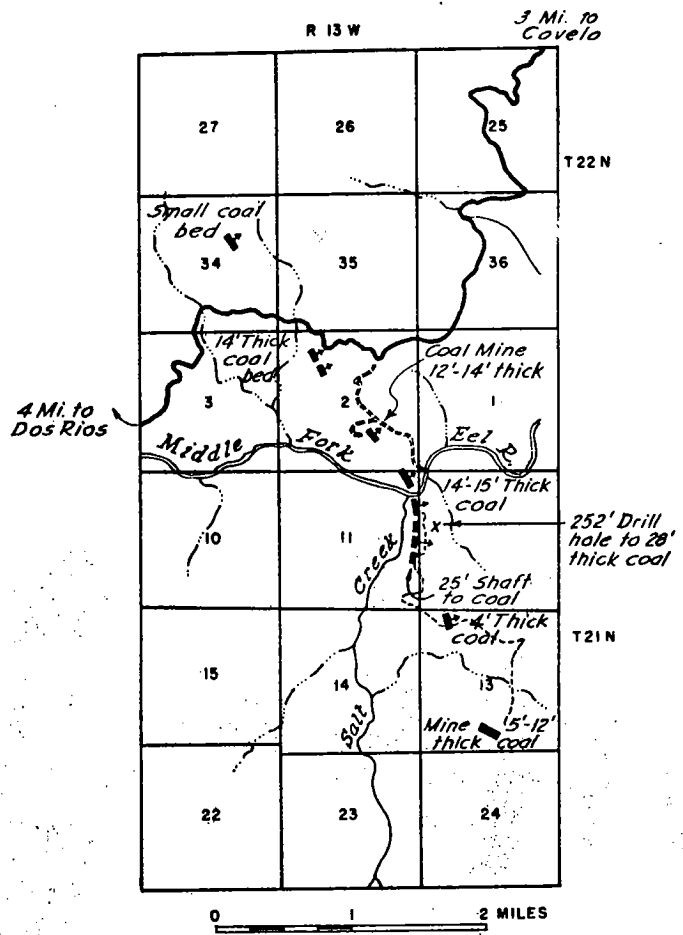
The attached map of the Dos Rios coal area was taken from Mineral Commodities of California, Bull. 176, 1957, p. 161, published by the California Division of Mines and Geology.

There is no present demand in California for coal of this quality, and the outlook for demand in the foreseeable future is probably poor. Thus, it appears that the benefits to be derived from construction of the proposed project (flood protection, water supply, hydroelectric power, and recreation facilities) far outweigh the loss of coal reserves through inundation. However, it may be advisable to conduct a reconnaissance survey of the quantity and grade of the coal and an economic appraisal of its potential market to confirm this opinion.

Sincerely yours,


Donald R. Irving
Area Director

Attachment



Map of Dos Rios coal area, Eel River District, Mendocino County, showing outcrops of coal.

NORMAN B. LIVERMORE, JR.
ADMINISTRATOR

RONALD REAGAN
GOVERNOR OF
CALIFORNIA

OFFICE OF THE ADMINISTRATOR
RESOURCES BUILDING
1416 NINTH STREET
95814

Department of Conservation
Department of Fish and Game
Department of Harbors and Watercraft
Department of Parks and Recreation
Department of Water Resources
State Reclamation Board
State Water Resources Control
Board
Regional Water Quality Control
Boards



THE RESOURCES AGENCY OF CALIFORNIA
SACRAMENTO, CALIFORNIA

March 28, 1968

Colonel Frank C. Boerger, District Engineer
Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Dear Colonel Boerger:

By letter of December 1, 1967, you submitted for state review and comment a draft of "Interim Review Report on Water Resources Development for Middle Fork Eel River". This letter of comment on the report does not represent complete accordance with all phases of the report as it is presently written.

This office distributed copies of your proposed report to all of the state departments and boards concerned. Attached hereto are the recommendations of the State of California and the comments of the State Departments of Water Resources, Parks and Recreation, Harbors and Watercraft, Conservation, Fish and Game, Public Works (Division of Highways) and the State Water Resources Control Board. The comments of the Department of Fish and Game also constitute the State's review under provisions of the Fish and Wildlife Coordination Act.

The development is an important feature of the California Water Plan and the State Water Project, and in our considered judgment is needed by the mid-1980's to maintain yield of the project. The State plans to contract for the conservation storage in Dos Rios Reservoir under terms of the Water Supply Act of 1958, and plans to construct the conveyance facilities to the Sacramento-San Joaquin Delta in accordance with the Memorandum of Understanding dated October 5, 1967, between the Department of Water Resources

EXHIBIT "N"

and the South Pacific Division of the Corps of Engineers. Based on the analysis of information available at this time, the State concludes that the plan of improvement proposed by the Corps of Engineers is engineeringly feasible and economically justified.

The State recognizes that further studies will be required before the development plan can be finalized. We will be pleased to continue to work with the Corps of Engineers and other agencies toward completing the project plan. Various state and federal agencies are currently involved in studies that will develop much of the data and information needed to refine the plan details. We are confident that the Corps will continue to encourage such studies until they are completed.

We are supporting Assembly Bill 552, which has been introduced in the Legislature to grant this office the authority to indicate in writing the State's intent to participate in administering the recreation and fish and wildlife enhancement features of the project under provisions of PL 89-72. If the legislation passes, I will submit a letter to you outlining the conditions under which the State will participate in recreation and fish and wildlife enhancement at the Dos Rios Dam and Reservoir project.

The State recognizes that additional studies will be required to define the specific measures necessary to achieve mitigation of project incurred fish and wildlife losses. The State will work with the Corps and the Fish and Wildlife Service to achieve a mutually satisfactory program after authorization. The detailed recommendations contained in the Department of Fish and Game's report represent our present thinking and should be reflected in your report.

The State objects to the Corps' report showing a benefit-cost ratio for fish and wildlife mitigation measures. We recognize that cost comparisons of features for fish and wildlife mitigation should be made to determine the most economical and satisfactory alternative for mitigating losses. However, we do not believe it is appropriate to show a benefit-cost ratio for fish and wildlife mitigation features, since mitigation is provided to prevent or alleviate damages and losses and no new benefits accrue. Furthermore, the use of this terminology could be misconstrued to infer that unless the ratio is greater than unity, mitigation is not justified. This reporting procedure is contrary to state

Colonel Frank C. Boerger

-3-

March 28, 1968

policy, and we believe it to be contrary to federal policy in evaluating fish and wildlife resource maintenance measures.

In summary, I wish to emphasize that subject to the qualifications noted the State supports early authorization of the project, and looks forward to continued coordination and cooperation with federal and local entities in arriving at a satisfactory solution to unresolved details prior to commencement of construction of the project.

I request that this letter and the attached recommendations and comments which are an integral part thereof, be considered as expressing the preliminary views of the State of California on the Corps' report. The State of California appreciates the privilege of reviewing and expressing its views on this proposed report. The cooperation of you and your staff during the course of our review is greatly appreciated.

Sincerely yours,

A handwritten signature in cursive script that reads "W. B. Linn Jr." The signature is written in dark ink and is positioned to the right of the typed name "Administrator".

Administrator

Attachment

REVIEW BY THE STATE OF CALIFORNIA
OF
INTERIM REPORT ON WATER RESOURCES DEVELOPMENT
FOR
MIDDLE FORK EEL RIVER, CALIFORNIA

INTRODUCTION

Colonel Frank C. Boenger, San Francisco District Engineer of the U. S. Army Corps of Engineers, requested state review and comments on a draft version of a report titled "Interim Report on Water Resources Development for Middle Fork Eel River". His letter, dated December 1, 1967, formally submitted copies of the report for state review in accordance with established procedures.

The report was prepared in partial response to the 1936 Flood Control Act and a House of Representatives resolution adopted August 5, 1939. Additional congressional authority was given by a House of Representatives resolution adopted June 13, 1956, and by Section 209 of the Flood Control Act of 1962, Public Law 87-874. Although this report is regional in scope, the primary emphasis is on a recommended plan of improvement for the Middle Fork Eel River.

A major consideration in formulating a plan of improvement is the need to develop a water supply for use in water deficient regions of the State. This additional supply is needed by the mid-1980's to maintain the yield of the State Water Project. Continuous coordination has therefore been maintained between interested federal and state agencies through the California State-Federal Interagency Group. Another major consideration is the need to provide additional protection from the recurring floods that have plagued the Eel Basin. Additional considerations are the potentials of this river system for development of hydroelectric power, the natural attractiveness of the area for outdoor recreation, and the fact that the river supports an important run of salmon and steelhead.

The plan of improvement recommended to best accomplish present needs in recognition of the considerations mentioned above is as follows:

1. A 730-foot-high rockfill dam located on the Middle Fork Eel River about 3 miles upstream of the community of Dos Rios. This dam would form a multiple-purpose reservoir having a water surface area of about 40,000 acres at a capacity of 7,600,000 acre-feet.
2. A 21-mile-long, concrete-lined diversion tunnel to carry export water eastward by gravity to the Sacramento Valley.
3. A fish hatchery and other facilities necessary to mitigate for blocking fish from stream headwaters, and a wildlife management area to compensate for loss of wildlife habitat.
4. A complex of recreational facilities to include camping, picnicking, swimming, and boating.
5. A small hydroelectric generating plant to utilize the head from reservoir releases for fishlife.

The recommended plan of improvement would accomplish the following:

1. Provide a supplemental water supply for the California water Project of 900,000 acre-feet annually at the Sacramento-San Joaquin Delta to maintain the minimum California Water Project yield.
2. Provide enough flood control storage to reduce a flood of 840,000 cfs to a peak flow of 650,000 cfs at the Eel Delta.
3. Accommodate the demand for recreation use expected to occur during the first 10 years after the start of project operation, and provide sufficient lands that can later be developed to accommodate the ultimate capacity of the reservoir for recreation use.
4. Provide incidental hydroelectric power.

Initial construction costs for the entire project are estimated to be about \$398 million, excluding interest charges during the period of construction. Estimated benefits exceed the costs in the ratio of 1.6 to 1. It is proposed that the dam, reservoir, and powerplant (\$245 million) would be constructed, operated, and maintained by the Federal Government and the water supply conveyance tunnel (\$153 million) would be constructed, financed, operated, and maintained by the State of California.

Joint costs allocated to recreation plus one-half the separable recreation costs (a total of \$24 million) would be federal. The other half of the separable recreation costs (\$2 million) would be assumed by a non-federal interest. Of the \$245 million cost for the dam, reservoir, and powerplant, \$186 million is allocated to the water supply purpose and would be repaid to the Federal Government in accordance with the Water Supply Act of 1958.

RECOMMENDATIONS

It is recommended that:

1. The Corps of Engineers take the steps necessary to obtain congressional authorization of a multiple-purpose development at the Dos Rios site on the Middle Fork Eel River and continue to work with the State of California in finalizing the development plan.

2. Recreation be included as a project purpose in accordance with the provisions of Public Law 89-72. (A bill is now before the State Legislature which would authorize the Administrator of the Resources Agency to indicate the State's intent to participate in recreation and fish and wildlife enhancement at the proposed Dos Rios Reservoir.)

3. The Corps' report should reflect the following points and recommendations and the postauthorization studies must give consideration to those points:

- a. The project will have a detrimental impact on the State's fire protection system for the area. Adequate fire protection will be a project responsibility.
- b. The recommendations in the report and in these comments concerning fish and wildlife preservation and mitigation should be considered as preliminary. However, the Department of Fish and Game is currently conducting studies which will contribute to the determination of the specific measures that will be required to insure the preservation of fish and wildlife affected by the project. These determinations must be considered during the postauthorization studies.
- c. For the preservation of the fisheries resources downstream from the proposed Dos Rios Dam, water releases should be made in accordance with the following schedule: 350 cfs between October 1 and May 31 and 200 cfs between June 1 and September 30 of each year, totaling 217,000 acre-feet annually. During future studies the appropriateness of a dry year flow schedule will be evaluated.
- d. Pending completion of studies, the project should include a hatchery with capacity to accommodate 45,000,000 king salmon eggs and 22,000,000 salmon smolts (100 fish/pound). Additional rearing capacity to handle 2,300,000 steelhead (8 fish/pound) should also be included.

- e. The recreation benefits which are associated with fishing in Dos Rios Reservoir should be clearly identified and a fisheries development plan should be prepared by the Corps in cooperation with the Department of Fish and Game and the U. S. Fish and Wildlife Service. Such a plan should clearly identify the Department of Fish and Game as the agency responsible for management of the Dos Rios Reservoir Fishery.
- f. The final plan should give consideration to the State's estimated annual 382,000 deer days of use which will be displaced by project construction.
- g. Adequate provision should be made to mitigate project incurred losses of wildlife habitat. Current estimates indicate that approximately 22,000 acres of land would be required to replace wildlife habitat lost through project construction.
- h. A plan of development, including annual management and operation, should be cooperatively developed for the wildlife mitigation area by the Corps, the Department of Fish and Game, and the U. S. Fish and Wildlife Service. The plan should clearly identify the agency responsible for management of the wildlife mitigation lands.
- i. Adequate funds to implement the wildlife habitat development plan should be provided by the Federal Government as a project responsibility. This is estimated to be \$1.5 million for initial development and \$200,000 annually for operation and maintenance.

COMMENTS OF THE DEPARTMENT OF WATER RESOURCES

The Corps of Engineers' report was prepared in general coordination with the Department, and the Department concurs in the recommendations for authorization of the project. However, there are several aspects that we believe need further study.

The most important of these are the proposed capacities of Dos Rios Reservoir and the Dos Rios-Grindstone Tunnel. Current joint studies by the Department and the Corps involving geologic exploration, availability of construction materials, etc., must be completed before project sizing can be finalized. Therefore, we support the authorization of the project with the understanding that the final sizing of features will be subject to modification based on these additional studies.

In addition, we believe that more geologic exploration and materials testing are needed before final sizing and preliminary design of Dos Rios Dam can be accomplished. Further exploration of embankment materials, in particular, is needed to verify that such materials are available in sufficient quantity and quality within reasonable proximity to build the dam at the cost estimated. Further consideration should be given to a concrete arch dam, in case a rockfill dam should prove infeasible or uneconomical.

We have reservations regarding the \$46 million cost estimate for relocations required for the reservoir. It appears that some items included in this figure represent enhancement and go beyond a reasonable interpretation of replacement in kind.

The Corps' report accepts the Department's benefit value for water at the Delta of \$30 per acre-foot, but adjusts this to \$25 per acre-foot at the exit portal of the Dos Rios-Grindstone Tunnel. The adjustment was for costs of possible additional conveyances or other facilities to the Delta pool. Other than the Stony Creek conveyance channel, no additional conveyance facilities will be needed in the Sacramento Valley in connection with releases from Dos Rios Reservoir as contemplated. The cost of improving the Stony Creek Channel should be reflected as a cost item rather than a benefit adjustment in the report. We, therefore, suggest that reference be made only to the value of \$30 per acre-foot at the Delta.

We are pleased to note the inclusion of a recommendation to the effect that the State can be credited for expenditures on advance planning activities on the dam and reservoir, subject to specific advance agreement on plans between the State and the Chief of Engineers.

The Department of Water Resources recommends that the State support authorization of the proposed project and contract for the water supply under the Water Supply Act of 1958, with the understanding that the final sizing and cost estimates of features, including relocations, are subject to modification based on additional study by the Department and the Corps of Engineers.

COMMENTS OF THE DEPARTMENT OF PUBLIC WORKS

The portion of the existing county road from Longvale to approximately five miles east of Covelo is expected to become part of the State Highway System (Route 261) in the near future. It is therefore expected that relocation of this highway will be actually performed as an existing state highway.

Currently, negotiations for relocation of state highways are being governed by Public Law 87-874, which requires inundated roads to be relocated to design standards adopted by the State for the traffic existing at the time of taking. Since we do not presently expect to ask for betterments in the relocation, it appears that the statements on Page F-33 concerning a deduction for betterment credits is inappropriate under current federal law.

In order to study, design, and construct a highway relocation of this size, we will need to begin work at the earliest possible date. An agreement to begin relocation studies should be negotiated as soon as the project is authorized and funds are provided to begin work.

COMMENTS OF THE WATER RESOURCES CONTROL BOARD

It appears the project may to some degree increase the total dissolved solids, turbidity, boron, and possibly nutrients in the Sacramento River. Evaluation of the effect of the project on these factors should be made. If it is found that the project will have significant adverse effect on the waters of the Sacramento River and Delta, every effort should be made in the design of physical features and preparation of operating procedures to eliminate or minimize those adverse effects.

COMMENTS OF THE DEPARTMENT OF HARBORS AND WATERCRAFT

The development of the proposed Dos Rios Dam and Reservoir creating a recreation pool of some 35,000 surface areas with a comparatively small degree of fluctuation during the recreation season, would have a decidedly favorable impact on boating interests and activities in Northern California. We agree with the conclusion that recreation is of considerable importance to the economy of the area and that recreation activities will increase at a greater rate than the population growth in the Northern part of the State. Fresh water oriented recreation opportunities supported by adequate recreation facilities are much needed, and will be in great demand by the population within a 150-mile radius of the project.

We note with approval that the National Recreation Area plan calls for the development of eight boat launching sites on the Dos Rios Reservoir and it is suggested that, prior to the filling of the reservoir, each site be developed so as to facilitate several boat launchings simultaneously.

It is noted also that the plan provides for the acquisition of shore-side lands on which additional recreational facilities may be developed as needed, and as to this, we foresee the need for the construction of complete marinas including auto and trailer parking, sanitation facilities, water supplies, electricity, fuel supplies, boat sales and repair shops and other attendant facilities. We understand that such facilities may be developed by concessionaires, including local governmental entities, and in this connection, we call attention to our loan program through which financial assistance is made available to counties, cities, and properly authorized districts for the purpose of providing suitable boating facilities for the boatmen using the waters of the State.

Also, this Department will assist, as requested, in the matter of supplying boat registration data, design data, and other information to the end that boating facilities be developed as the demands and requirements may indicate.

COMMENTS OF THE DEPARTMENT OF CONSERVATION

The Division of Forestry is responsible for fire protection in the immediate vicinity of the proposed project. Both fire protection facilities and fire prevention activities will be directly affected by this project.

The Division's Covelo Forest Fire Station, located in Round Valley, will be inundated. The new reservoir will greatly alter the existing transportation network and directly affect travel times for fire suppression and prevention activities. Maintenance of the current level of fire protection may require the location of an additional fire station in the area.

Fire prevention problems will increase during the site preparation and dam construction period. New fire prevention problems are expected when the reservoir is completed and existing recreation and land use patterns change.

The project, as proposed, will have a detrimental effect on our existing fire protection system. Our facilities, access, and program activities will be directly affected by the proposed reservoir location. Project construction will increase fire suppression and prevention problems.

It is recommended that correction of the detrimental effect of the project upon the Division of Forestry's fire protection system can be considered an essential element of the project, and included as a cost against the project.

It is further recommended that the Corps of Engineers, and other project cooperators, work very closely with the Division of Forestry in the development of an impact fire protection study during the final design stage of project facilities affecting fire protection.

COMMENTS OF THE DEPARTMENT OF FISH AND GAME

Because of the acceleration of the Corps' project study and preparation of the Interim Report, there has been insufficient time for adequate coordination between our Department, the U. S. Fish and Wildlife Service, and the Corps' biological staff. Consequently, several important problem areas involving fish and wildlife resources have been inadequately covered.

Many of the conclusions and recommendations concerning the fish and wildlife aspects of the project are based on preliminary data. Both this Department and the U. S. Fish and Wildlife Service are conducting studies which will contribute to the development of sound recommendations for adequate protection of fish and wildlife resources which would be provided by the Department of Water Resources and be credited as a portion of the State's contribution to the project.

The following specific conclusions have been drawn from our detailed review of the Corps' report.

1. There have been insufficient fish and wildlife studies to support many of the conclusions and recommendations contained in the Corps' report. All of the fish and wildlife loss estimates and mitigation measures recommended are preliminary in nature.
2. The use of benefit-cost analysis for fish and wildlife losses and mitigation measures is inappropriate and contrary to state policy; and we believe it to be contrary to general federal policy.
3. The recommendations presented in regard to fish hatchery sizing are not representative of current studies and thinking on the subject. In order to preserve an annual average run of 13,000 king

salmon and 23,000 steelhead, it will be necessary to hatch up to 45,000,000 king salmon eggs and rear up to 22,000,000 salmon smolts (100 fish/pound). No additional incubation facilities are required to accommodate steelhead eggs, but hatchery and rearing pond space for 2,300,000 steelhead (8 fish/pound) must be provided.

4. The report states that the area supports 260,000 hunter days of use annually. Earlier studies by this Department indicated 260,000 deer days of use but recently this figure has been revised to 382,000 deer days annually. Hunter use of 7,000 hunter days as shown in Appendix D appears low.

5. The magnitude of the problems associated with wildlife mitigation is understated in the report. We feel that some 22,000 acres will be required to mitigate wildlife losses rather than the 10,000 acres recommended in the report. Further, our studies indicate that the area proposed for wildlife mitigation, on the southeast side of the reservoir, is not especially desirable for deer. We estimate that adequate development of lands needed for wildlife mitigation would require about \$1.5 million for initial development.

6. Since lands to be acquired for wildlife mitigation are currently fully stocked, or nearly so, it is necessary to develop new habitat to support the additional animals displaced by the project. The report does not recognize that once this new habitat is developed it will be necessary to maintain this additional carrying capacity. We estimate that about \$200,000 annually would be required for operation and maintenance of the wildlife mitigation area.

COMMENTS OF THE DEPARTMENT OF PARKS AND RECREATION

Should the State of California accept nonfederal recreation responsibilities for the proposed Dos Rios Reservoir, in keeping with Public Law 89-72, such acceptance, subject to approval of the California State Legislature, should be based on certain conditions, including, but not limited to the following:

1. That postauthorization studies consist of total environmental planning for the Dos Rios-Round Valley area with full and equal participation by the State at every stage of the planning process. Coordination with local interests should also be a condition to the post-authorization studies.

2. The concept of a single reasonably sized recreation area constructed and operated by the State in conformance with Public Law 89-72 be approved and adopted by the Federal Government. This development should be sized and located to accommodate reasonable recreation demand as determined jointly by the State and Federal Government. Recreation development should be located to take advantage of existing terrain and cover, minimize access road and recreation construction costs, and provide reasonable and economical access to the water surface.

3. Only enough private land be acquired for recreation purposes to accommodate this single public recreation development. Private land not required for project purposes, other than recreation and the fish and wildlife enhancement, should be left in private ownership.

With a proper zoning ordinance by Mendocino County, these lands could be developed and operated by private capital for recreational use. Features which might be included in the private development are marinas and boat storage areas, restaurants, stores, lodges, motels, summer homesites, etc. This would remove a minimum of private lands from the local tax rolls and would likely add to the assessed valuation of the area surrounding the reservoir.

4. That the water project be operated to insure a water level in the reservoir which would provide for direct public access to the water surface during the recreation season of each year.

5. That reservoir operations and water deliveries be planned to provide for filling the reservoir in the minimum time possible (approximately 10 years), rather than the maximum time possible (approximately 35 years).

CALIFORNIA STATE-FEDERAL INTERAGENCY GROUP
JOINT STATEMENT

The California State-Federal Interagency Group was organized in 1958 to minimize duplication of effort and to facilitate coordination and cooperation among federal and state water development agencies. The Group's members are: The U.S. Corps of Engineers, the U.S. Bureau of Reclamation, the U.S. Soil Conservation Service, and the California Department of Water Resources.

One of the more intensive cooperative efforts has been in regard to the development of the Eel and Mad River Basins. In September 1966 the interagency members formally agreed upon a joint program for formulation of a master plan for development of the water resources of the Eel and Mad River Basins. This agreement assigns responsibilities for the conduct of planning studies for specific subbasins, projects, and project functions.

The Bureau of Reclamation was assigned primary responsibility for the functions of irrigation water supply developed at major projects and power planning pertaining to federal power transmission and marketing, including possible integration into the Central Valley Project. The Corps was assigned primary responsibility for the function of flood control on the mainstream and major tributaries. The Soil Conservation Service was assigned primary responsibility for watershed management and the functions

of Irrigation and flood control in connection with Department of Agriculture programs. The Department of Water Resources will be responsible for estimates of statewide water requirements and overall coordination of the joint planning effort.

Regarding planning responsibilities for the various subbasins, the Middle Fork of the Eel was assigned to the Corps of Engineers and the Department of Water Resources. The main Eel between the Middle Fork and the South Fork was assigned to the Corps; the Upper Fork and North Fork of the Eel to the Bureau; the South Fork of the Eel to the Department; the Van Duzen River Basin to the Bureau; the Lower Eel to the Corps; the Upper Mad River Basin to the Bureau; and the Lower Mad River, including the Butler Valley Project, to the Corps.

The aim of the agreement is to eliminate duplication of effort in producing, in the most efficient and economical manner, a comprehensive master plan for water and related land resources development in the Eel and Mad River Basins. Such a master plan must be properly coordinated with the needs and desires of the interests in these basins and others affected by it throughout California. The plan will consider all significant uses for which the resources of the basin may be developed and serve as a guide to future action. The joint master plan report is scheduled for completion in 1970.

An interagency report, now under preparation, sets forth the general objectives of a master plan for the Eel and Mad River Basins and the work program by which they can best be met. The report explains the relationship between the master plan and the various investigations now in progress.

The potential projects to be included in the master plan are at various stages of development. Furthest along is the Eel River Delta Levee Project, which has been authorized for construction; next are the Butler Valley Project on the Mad River covered by a previous hearing, and the Dos Rios Project on the Middle Fork Eel, the subject of this hearing. A feasibility report on the English Ridge Project on the Upper Eel River is nearing completion. The remaining projects are in earlier stages of planning.

The Department of Water Resources made extensive geologic investigations and other planning studies leading up to this joint presentation of the selected plan for the Middle Fork Eel River Development. The Department's work has been reported in its Bulletins Nos. 136 and 171, and the voluminous supporting appendixes and office reports to these bulletins. The Corps of Engineers has drawn on much of this material in arriving at its present recommendations.

Throughout the Corps of Engineers' and Department of Water Resources' planning of the Dos Rios Project, other members of the Interagency Group have been kept apprised of the progress, have contributed data, have cooperated on various aspects of the planning study, and/or have had an opportunity to review and comment on the proposed plan of development.

The Corps of Engineers' "Interim Report on Water Resources Development for Middle Fork Eel River" presents a comprehensive analysis of the proposed multiple-purpose Dos Rios Project, including detailed documentation on all study aspects. The primary

purposes of the Dos Rios Project are to furnish additional water supply for the State Water Project and the first major increment of flood control through river regulation. In the planning of this project, the urgent need for control of floods which have inflicted heavy damage along the Eel River was fully recognized. It was further recognized that economic development can be significantly enhanced through development of water-oriented recreation. Consideration was given to preservation and possible enhancement of the valuable fish and wildlife resources. The Corps of Engineers' report fully considers these objectives and provides for their accomplishment.

The proposed project is compatible with plans for export of water from Eel River Basin as reported in Department of Water Resources' Bulletins Nos. 136 and 171.

The Middle Fork Eel River Development, as proposed by the Corps of Engineers, is in conformance with the California Water Plan and has been selected as an addition to the State Water Project. It is an essential element of the master plan for the Eel River Basin and, as heretofore stated, is needed to provide supplemental water supplies for the State Water Project and flood protection and recreation opportunities to the local area.

Close cooperation between the Corps of Engineers and the Department of Water Resources in the planning of this project has culminated in a signed agreement under which the Department will support authorization for the Corps to construct and operate Dos Rios Dam and Reservoir and will contract for the water supply

under the Water Supply Act of 1958. The Department will construct and operate the diversion tunnel to the Sacramento River Basin.

The California State-Federal Interagency Group endorses the plan of development proposed on the Middle Fork Eel River by the Corps of Engineers.

THE EEL RIVER FLOOD CONTROL AND
WATER CONSERVATION ASSOCIATION

Resolution 1-68

Regarding the Development of the Middle Fork
Eel River and the Conveyance of Water Therefrom

WHEREAS, the primary purpose of the Eel River Flood Control and Water Conservation Association is to promote the development of water resources of the Eel River and related watersheds within the Northwestern portion of California for water conservation, flood control, fish and wildlife protection and enhancement, recreation, water quality protection and enhancement, navigation and other beneficial uses that may affect the economy and development of the counties, and,

WHEREAS, the District Engineer, San Francisco District, U. S. Army Corps of Engineers, has concluded in an Interim Report on Water Resources Development for Middle Fork Eel River, dated November 1967, that:

"a. A definite need exists in the Eel River Basin and the State of California for development of water resources for flood control, water supply, recreation and hydroelectric power.

"b. A multiple-purpose reservoir, on the Middle Fork Eel River at the Dos Rios site with a water supply conveyance tunnel to the Sacramento River Basin, would substantially and economically meet the needs of both State and Basin for water resources development and would be compatible with future statewide and basinwide developments. Reservoir purposes would be flood control, water supply, recreation and hydroelectric power.

"c. Creation of a reservoir on the Middle Fork Eel River would require conservation measures for the fish and wildlife resources, relocation of an Indian community, the town of Covelo and roads and utilities.

"d. The dam and reservoir would be constructed, operated and maintained by the Federal Government and the water supply conveyance tunnel would be constructed, financed, operated and maintained by non-Federal interests. Recreation facilities would be operated and maintained by non-Federal interests.

"e. Regulation of flood control and hydropower features would be established by the Federal Government. Water supply regulation would be established by non-Federal interests with Federal Government guidance provided for Indian community needs. Fishery and wildlife regulation would be established by the Federal Government in cooperation with non-Federal interests.

"f. Repayments by non-Federal interests to the Federal Government of the costs allocated to water supply and recreation would be made in accordance with the Water Supply Act of 1958 and the Federal Water Project Recreation Act of 1965, respectively.

"g. The multiple-purpose reservoir at Dos Rios site is estimated to produce an overall benefit-to-cost ratio of 1.6, with each project purpose being justified individually.", and

WHEREAS, the U. S. Army Corps of Engineers, in said Interim Report has proposed to seek authorization for, and construct, operate and maintain a dam, reservoir and appurtenant features, exclusive of conveyance facilities, on said Middle Fork Eel River, hereinafter referred to as the Dos Rios Project, and,

WHEREAS, the State of California, Department of Water Resources has agreed, by virtue of a Memorandum of Understanding, dated October 5, 1967, to purchase conserved water from said Dos Rios Project under provisions of the Water Supply Act of 1958, and to construct operate and maintain conveyance works necessary to divert said water to the Sacramento Valley, and,

WHEREAS, the route of said conveyance works is, at this time, being studied by the County of Lake and the Department of Water Resources to insure that the most economical and beneficial route to the Eel River Association Counties, the State of California, and the United States is selected, and,

WHEREAS, recreation benefits of said reservoir area will accrue to the State as a whole, and not just to Mendocino County and the North Coast area of California, and,

WHEREAS, it is anticipated that there will be an adverse impact on the economy of Mendocino County during certain phases of project development.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Directors of the Eel River Flood Control and Water Conservation Association that the Association endorses the authorization for construction by the Federal Government at the earliest possible date said Dos Rios dam, reservoir and appurtenant features, exclusive of conveyance facilities, as recommended by the District Engineer in said Interim Report.


BE IT FURTHER RESOLVED, that the route to convey water from said Dos Rios reservoir, as finally constructed, be in the best interests of the Eel River Association Counties, the State of California, and the United States.

BE IT FURTHER RESOLVED, that the economy of Mendocino County be protected during project development.

BE IT FURTHER RESOLVED, that the State of California participate in the recreation development of said project in view of the general benefits accruing to the State as a whole.

ADOPTED this 12th day of January, 1968.

This is to certify that this Resolution was made and duly adopted by a majority vote at a regular meeting of The Eel River Flood Control and Water Conservation Association Board of Directors on January 12, 1968.


Executive Secretary

BOARD OF SUPERVISORS

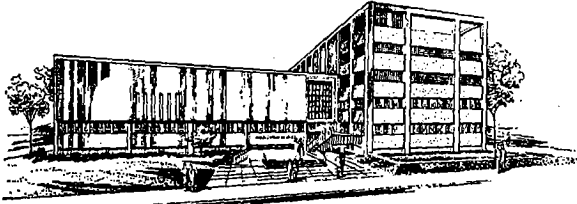
SAM S. MITCHELL, 4th Dist.
Chairman
826 K Street, Eureka
(442-7255)

LWYN L. LINDLEY, 1st Dist.
Vice-Chairman
3223 Union Street, Eureka
(443-3593)

MELVIN J. BAREILLES, 2nd Dist.
734 Rigby Avenue, Rio Dell
(764-5741)

NORMAN R. ROBERTSON, 3rd Dist.
5349 Broadway, Eureka
(442-2016)

GUY E. RUSHER, 5th Dist.
P. O. Box 134, Orick
(488-2581)



COURTHOUSE

COUNTY OF HUMBOLDT
EUREKA, CALIFORNIA 95501

TELEPHONE 443-7555
AREA CODE 707

VERLYN L. FLETCHER
County Administrative Officer
THOMAS M. MONTGOMERY
County Counsel

FRED J. MOORE, JR.
Clerk

January 11, 1968

U. S. Army Corps of Engineers
100 McAllister St
San Francisco, California 94102

Gentlemen:

Enclosed is a certified copy of Resolution No. 68-1
of the Board of Supervisors of the County of Humboldt,
dated January 9, 1968, endorsing Dos Rios Dam.

Sincerely,

FRED J. MOORE, Jr.
County Clerk

Encl/fs.

EXHIBIT "Q"

RESOLUTION NO. 68-1

RESOLUTION OF BOARD OF SUPERVISORS
OF COUNTY OF HUMBOLDT
ENDORING DOS RIOS DAM

WHEREAS, consideration is now being given to construction of Dos Rios Dam on the Eel River; and

WHEREAS, all agencies involved agree that the construction of Dos Rios Dam will create one of the most important reservoir features of the California Water Plan and that this dam is a necessary link in all proposed Eel River routings; and

WHEREAS, the Kaiser Engineers' report which was prepared for Lake County presented substantial persuasive reasons for the reconsideration of the proposed easterly routing by the State Department of Water Resources;

NOW, THEREFORE, BE IT RESOLVED by the Board of Supervisors of the County of Humboldt as follows:

1. Humboldt County recognizes that the construction of Dos Rios Dam is the most important feature of the proposed reservoir complex which is to be a part of the California Water Plan in this area and that it is a primary water source in all of the proposed plans for the development of the Eel River.

2. Humboldt County requests the Eel River Flood Control & Water Conservation Association cooperate in requesting that the U.S. Army Corps of Engineers initiate planning and funding for construction of the proposed Dos Rios Dam.

3. Humboldt County endorses Lake County's further routing study which is being made by Kaiser Engineers and the State Department of Water Resources and feels that further consideration of the route selection is desirable.

PASSED, APPROVED AND ADOPTED on motion of Supervisor Bareilles,

EXHIBIT "Q"

seconded by Supervisor Mitchell, this 9th day of January, 1968, on the following vote, to wit:

AYES: Supervisors: Lindley, Bareilles, Robertson, Mitchell, Rusher.

NOES: Supervisors: None.

ABSENT: Supervisors: None.

Chrym L. Lindley
Chairman of the Board of Supervisors
of the County of Humboldt, State of
California.

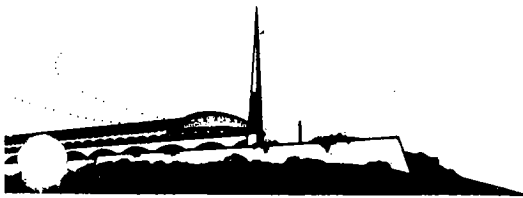
(SEAL)

ATTEST:

FRED J. MOORE, JR.
County Clerk and ex officio Clerk
of the Board of Supervisors of the
County of Humboldt, State of California.

By *William E. Hansen*
Deputy Clerk

The within instrument is a full true
and correct copy of the original
on file in the office of the County Clerk
of Humboldt, California, this
JAN 11 1968
County of Humboldt, State of
California
By *Lowell W. Lewis*
Deputy Clerk



E BOARD OF SUPERVISORS OF MARIN COUNTY

January 19, 1968

ADMINISTRATION BUILDING
SUITE 315, CIVIC CENTER
SAN RAFAEL, CALIFORNIA 94903
TELEPHONE 479-1100
EXT. 315

Department of the Army
San Francisco District,
Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Attention: Frank C. Boerger, District Engineer

Re: Eel River Basin, California
Interim Report on Water Resources Development
Middle Fork, Eel River 1967
(SPNGP-WA)

Gentlemen:

After consultation with the Marin Municipal Water District and the North Marin County Water District who represent this County in its future water supply and regional water programs, we have prepared the following information for inclusion in your report.

The Corps of Engineers and the State Department of Water Resources are to be complimented on the proposed cooperative development of the Eel River Basin. While Marin County does not stand to benefit directly from the proposed Middle Fork Project, it has an indirect interest in the project, its potential recreation benefits and flood control advantages on the Lower Eel. We may obtain our future water supply from the Eel River Basin, and the diversion route selected may reduce water available to us, although alternate supplies can come from the English Ridge Project or through future enlargements of the North Bay Aqueduct.

Marin County is, however, greatly concerned about the problems faced by Lake County. Marin County has strongly supported the Eel River Association as its representative in obtaining maximum benefit from the development of North Coast water resources for all member counties, including Lake County. By deciding to route Eel River water easterly to the Sacramento Valley, one possible method of improving the quality of Clear Lake and providing Lake County and

CHAIRMAN
J. MCINNIS
SAN RAFAEL
DISTRICT

CHAIRMAN
ERNEST N. KETTENHOFEN
SAN ANSELMO
2ND DISTRICT

PETER H. BEHR
MILL VALLEY
3RD DISTRICT

THOMAS T. STORER
POINT REYES
4TH DISTRICT

WILLIAM A. GNOSS
NOVATO
5TH DISTRICT

CLERK
GEO. H. GNOSS
REGULAR MEETING

EXHIBIT "R"

January 19, 1968

other adjacent counties, including Marin, with additional water supply, has been lost. While we believe that this routing decision was based on a careful analysis of information presently available, many factors affecting the future water quality in Clear Lake need more thorough study. As the Corps proceeds toward authorization of the Middle Fork Project, sufficient reservation should be placed in the authorizing language so that if future investigations demonstrate that benefits can be derived by transporting large quantities of water through Clear Lake, the project can be revised.

We request that the Corps of Engineers give all possible assistance to proposed algae research study, which the Eel River Association may undertake in the coming years.

In conclusion, Marin County fully supports the Eel River Association in its policies and programs for the future of the Eel River and related watershed areas.

Very truly yours,


ERNEST N. KETTENHOFEN
Chairman

ENK/vg

COMMENTS BY LAKE COUNTY REGARDING THE JOINT PUBLIC
HEARING ON INTERIM REPORT ON WATER RESOURCES
DEVELOPMENT FOR MIDDLE FORK EEL RIVER, CALIFORNIA

December 15, 1967

The Board of Supervisors of the County of Lake would like to make the following comments on the proposed Dos Rios Dam and Reservoir and conveyance route for diversion of export water from the Middle Fork of the Eel River, as announced by the California State Department of Water Resources, July 14, 1967, based upon engineering studies in Department of Water Resources Bulletin No. 171.

As the county of origin for the headwaters of the Eel River, Lake County acknowledges the benefits to be derived from the proposed Dos Rios Dam and Reservoir to the extent that this project will provide greatly needed flood control for Humboldt County. Lake County does not oppose Dos Rios Dam and Reservoir as a flood control project.

Lake County acknowledges the objection raised by Mendocino County in a 1964 resolution opposing the flooding of Round Valley by the 730 feet Dos Rios Dam.

Lake County is opposed to authorization of Dos Rios Dam and Reservoir in accordance with the routing proposed under the terms of the MEMORANDUM OF UNDERSTANDING entered into by the U.S. Corps of Engineers and the California State Department of Water Resources, October 5, 1967.

Lake County is opposed to the Easterly conveyance route for export waters from the proposed Dos Rios Dam and Reservoir as set forth in this MEMORANDUM OF UNDERSTANDING, but Lake County is in full support of authorization of the project based on routing of export waters from the proposed Dos Rios Dam and Reservoir through Clear Lake.

EXHIBIT "S"

1. Lake County holds that the Easterly route of the Middle Fork would drain away the only and the most economical sources of supplementary water for the Northwestern Region of California for all time to come.

2. Lake County maintains the Easterly conveyance route is a threat to the future economic development of Lake County and is a threat to the preservation of Clear Lake, California's largest natural lake, for posterity.

3. Lake County holds that additional flows through Clear Lake, which would be developed by the Clear Lake route, are vitally necessary to stabilize the lake level. The holding reservoirs downstream on Cache Creek are vitally necessary to provide flood control on Clear Lake in wet years and to save thousands of acre-feet of runoff in the Cache Creek Basin now being lost to the sea. This water would be available to the California Aqueduct System.

4. Lake County holds that additional flows through Clear Lake, which would be developed by the Clear Lake route, are vitally necessary to provide algae control and to enhance the water quality of Clear Lake.

5. Lake County holds that the Easterly route will pose a threat to valuable agricultural lands along the Sacramento River through an increase in seepage from introduction of flows from the Middle Fork and that this damage would be detrimental to the best interests of the People of the State of California. Lake County recalls that the California Water Plan was approved by the people of the State on the assumption that areas of origin would have their future water requirements fully protected before

any water was diverted away. The State of California found in their Water Resources studies contained in Department of Water Resources Preview of Bulletin No. 136 , North Coastal Area Investigation, dated September 1963 found that future water requirements of Lake County is estimated at 150,000 acre-feet per annum.

If the Easterly conveyance route for Middle Fork water is used in the matter proposed, Lake County will not be able to secure this needed future water supply.

Lake County, in seeking an unbiased study, has hired Kaiser Engineers to prepare a study of benefits to Lake County and to Northwestern and Valley Counties not considered in Bulletin 171. The report is due early in January from Kaiser Engineers and therefore Lake County requests that the record remain open until January 15, 1968.

RESOLUTION NO. 68-11

RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF MENDOCINO RELATING TO THE MATTER OF RECREATIONAL DEVELOPMENT OF THE PROPOSED DOS RIOS RESERVOIR ON THE MIDDLE FORK OF THE EEL RIVER WATER RESOURCES DEVELOPMENT PROGRAM.

WHEREAS, the Army Corps of Engineers in cooperation with the State of California Department of Water resources has proposed a reservoir at Dos Rios on the Middle Fork of the Eel River in Mendocino County, and

WHEREAS, such a proposed dam at Dos Rios as part of the water resources development for the area, anticipates total inundation of Round Valley including the unincorporated community of Covelo, and

WHEREAS this proposal has been reviewed in great detail by the Board of Supervisors, including an impact study by the County Department of Public Works, and

WHEREAS testimony has been heard at the public hearing held in the City of Willits by the Army Corps of Engineers on December 15, 1967, and

WHEREAS, after this review, it has become abundantly clear to the members of the Board of Supervisors that Mendocino County, as the county of origin, faces severe losses from the proposed development, including loss of prime agricultural land, loss of vital tax base, required additional county expenditures in the field of law enforcement, roads, and health, as well as additional planning staff, and

WHEREAS, the taxpayers of this county are already heavily burdened due to our extensive area, low population and very low tax base, and

WHEREAS the Corps of Engineers have considered Mendocino County to be the probable sponsoring party for the recreational aspects of the project, and

WHEREAS, the proposed project is of such magnitude that would require financial resources in excess of this county to fund and operate, and

WHEREAS one of the reasons for such recreational development under the Federal Water Development Recreation Act of 1965 is to provide additional Federal funds which, in turn, will lessen the user cost of

water developed from the project, and

WHEREAS the State of California, as the water purveyor and the water users in other parts of the state, will benefit from this low cost of water, rather than the people of Mendocino County;

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors, after serious and diligent review hereby declare its firm policy that the County of Mendocino will not participate as the non-Federal agency in the proposed development of the Dos Rios Project, and

BE IT FURTHER RESOLVED that this Board urges the State of California, acting through its Department of Parks and Recreation to indicate their interest and position as the non-Federal agency for recreation in this project, since the benefits are state-wide, and

BE IT FURTHER RESOLVED that if the State government declines to fulfill its obligation to the people of the State of California, that this Board will only consider participation in the recreation facilities if adequate financial assistance is provided to this County of origin based on the use of additional user charges on a per acre footage basis for water derived from the Dos Rios Project with such additional charges being returned to Mendocino County for use in the recreation matching funding at the Dos Rios Project so that the eventual users throughout California who will benefit from the low water costs, which recreation will provide, can also share in providing some of this recreational element;

BE IT FURTHER RESOLVED that copies of this resolution be forwarded to Congressman Clausen; Governor Reagan; Norman B. Livermore, Administrator, Water Resources Agency; Wm. Gianelli, Director of California Water Resources Department; Senator Collier; Assemblyman Belotti; Col. Frank Boerger, Corps of Engineers; Senator Thomas H. Kuchel; and Senator George Murphy.

The above and foregoing resolution was introduced by Supervisor Avila, seconded by Supervisor Mayfield, and carried, this 16th day of January, 1968, by the following vote of the Board of Supervisors of Mendocino County, California:

AYES: Supervisors Banker, Sawyers, Avila, Scaramella, Banker
NOES: None

ABSENT: None

EXHIBIT "T"

WHEREUPON the Chairman declared said resolution passed and
adopted AND SO ORDERED.

JOHN MAYFIELD, JR.

~~JOHN MAYFIELD, JR.~~
CHAIRMAN OF THE BOARD OF
SUPERVISORS

ATTEST: VIOLA N. RICHARDSON
Clerk of said Board

By Dorothy V. Starks
Deputy Clerk

EXHIBIT "T"



SONOMA
COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT

SONOMA COUNTY ADMINISTRATION BLDG.

SANTA ROSA, CALIFORNIA 95401

Phone (707) 542-4316

GORDON W. MILLER
Chief Engineer

February 6, 1968

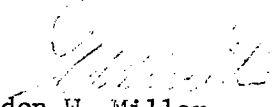
FILE NO. 40-0-25
Eel River Assoc.

Col. Frank C. Boerger, District Engineer
Department of the Army
San Francisco District, Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Dear Sir:

Enclosed for your information is a copy of concurrent resolution of the Board of Supervisors of the County of Sonoma and the Board of Directors of the Sonoma County Flood Control and Water Conservation District setting forth their position in support of a large dam and reservoir at the Dos Rios site on the Eel River.

Very truly yours,


Gordon W. Miller
Chief Engineer

GWM/ae
Encl.

EXHIBIT "U"

THE WITHIN INSTRUMENT IS A CORRECT
COPY OF THE ORIGINAL ON FILE IN
THIS OFFICE.

ATTEST: FEB 6 - 1968

EUGENE D. WILLIAMS, Secretary
SONOMA COUNTY FLOOD CONTROL
AND WATER CONSERVATION DIST.

By E. Williams
Asst. Secretary

21703

RESOLUTION NO. DP 21694

County Administration Building
Santa Rosa, California

January 15, 1968

CONCURRENT RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SONOMA AND THE BOARD OF DIRECTORS OF THE SONOMA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT SUPPORTING THE PROPOSED CONSTRUCTION OF A LARGE DOS RIOS DAM AND RESERVOIR ON THE MIDDLE FORK OF THE EEL RIVER, CALIFORNIA.

WHEREAS, Sonoma County has consistently recognized and expressed the need for early and orderly progressive development of the water resources of the Russian River Basin and the North Coast streams of California to provide flood control, water supply, recreation facilities, hydroelectric power for the benefit of Sonoma County and the State of California; and

WHEREAS, Sonoma County has consistently supported those Federal and State agencies engaged in the formulation of plans for water resources development of the North Coast streams to accelerate the preparation of proposals and recommendations for construction of projects; and

WHEREAS, Sonoma County Flood Control and Water Conservation District has entered into cooperative agreements with the U. S. Army Corps of Engineers on Russian River development and has urged Federal and State agencies to enter into similar agreements for joint and cooperative planning and construction of proposed projects in the Eel River Basin and other river basins in Northwestern California; and

WHEREAS, the District Engineer, U. S. Army Engineer District, San Francisco, California, has proposed a multipurpose project on the Middle Fork of the Eel River, California, and presented such proposal for consideration in a report entitled Interim Report on Water Resources Development for Middle Fork Eel River dated November 1967; and

WHEREAS, said report proposes the construction of a high multipurpose Dos Rios Dam and Reservoir on the Middle Fork of the Eel River to provide flood control along the Eel River, water supply for local needs and for export, recreation facilities, and hydroelectric power; and

WHEREAS, said proposed Dos Rios Dam and Reservoir requires facilities in conjunction therewith to convey waters excess to the needs of Northwestern California to other areas of California that need such water; and

EXHIBIT "U"

WHEREAS, in recognition of the requirement, for such conveyance facilities, the Corps of Engineers proposed (among other requirements) that prior to construction of Dos Rios Dam and Reservoir, non-Federal interests, "Design and construct the necessary conveyance facilities, under their own method of financing, in a scheduled manner that would insure its timely completion consistent with that for the dam and its appurtenant works"; and

WHEREAS, Sonoma County is cognizant that independent studies are being made of various and alternative routes for the conveyance facilities with a view toward ascertaining whether a route can be determined to be more feasible than the one considered in the Corps' report; and

WHEREAS, Sonoma County notes that such conveyance route studies as completed to date indicate that construction of the high Dos Rios Dam and Reservoir as proposed by the Corps of Engineers will be needed regardless of the route by which water is conveyed; and

WHEREAS, Sonoma County believes that the recommendation of the Corps of Engineers in regard to conveyance facilities, as quoted above, does not preclude the future adoption of a more feasible conveyance route than the one considered in the report.

NOW, THEREFORE, BE IT RESOLVED in order to further the early and orderly progressive development of the water resources of Northwestern California, that the Board of Supervisors of the County of Sonoma and the Board of Directors of the Sonoma County Flood Control and Water Conservation District fully supports the proposed recommendation for construction of a high Dos Rios Dam and Reservoir to provide flood control along the Eel River, water supply for local needs and export, recreational facilities, fish and wildlife mitigation, and hydroelectric power.

BE IT FURTHER RESOLVED that assurances be obtained from the Corps of Engineers that the report does not preclude the construction of an alternate conveyance route and that the authorizing legislation of Congress allow construction by the State of California of either the conveyance route as incorporated in the report or an alternate route should such alternate route be found more feasible.

BE IT FURTHER RESOLVED that copies of this resolution be forwarded to the District Engineer, U. S. Army Engineer District, San Francisco; the Governor of the State of California; Eel River Association area Congressional Representatives and California Legislators; the Administrator of the Resources Agency; and Director of the Department of Water Resources, and State Department of Fish and Game.

The foregoing resolution was introduced by Supervisor/Director Shoemaker, who moved its adoption, seconded by Supervisor/Director Vella, and adopted on roll call by the following vote:

Supervisor/Director Vella	<u>aye</u>
Supervisor/Director Shoemaker	<u>aye</u>
Supervisor/Director Ruonavaara	<u>aye</u>
Supervisor/Director Rath	<u>aye</u>
Supervisor/Director Nordyke	<u>aye</u>

Ayes: 5

Noes: 0

Absent or not voting: 0

WHEREUPON, the Chairman declared the foregoing resolution adopted, and

SO ORDERED.

EXHIBIT "U"

MAY 8 1968

WALTER S. HENNING, Clerk
County

RESOLUTION NO. 68 - 2

WHEREAS, THE NEED FOR BENEFICIAL UTILIZATION OF WATER FROM THE EEL RIVER HAS RECEIVED INCREASING CONSIDERATION OVER A NUMBER OF YEARS; AND

WHEREAS, EFFECTIVE UTILIZATION REQUIRES PROPER AND EFFICIENT ROUTING OF EEL RIVER WATER FOR DISTRIBUTION; AND

WHEREAS, THERE IS THE POSSIBILITY OF GREAT DANGER AND ECONOMIC DAMAGE THROUGH SEEPAGE TO MANY MILES OF PRIME AGRICULTURAL LAND ALONG THE SACRAMENTO RIVER IF THE LEVEL OF THE SACRAMENTO RIVER IS MAINTAINED AT A HIGH LEVEL THROUGHOUT THE YEAR; AND

WHEREAS, THERE IS A TENTATIVE PROPOSAL FOR THE ROUTING OF EEL RIVER WATER INTO THE SACRAMENTO RIVER WHICH WOULD CONTRIBUTE TO INCREASING SEEPAGE IN THE ADJACENT AGRICULTURAL LANDS OF YOLO COUNTY AS WELL AS OTHER COUNTIES ALONG THE SACRAMENTO RIVER; AND

WHEREAS, THERE IS THE POSSIBILITY OF ROUTING EEL RIVER WATER THROUGH CLEAR LAKE INTO CACHE CREEK WHICH COULD BE OF ASSISTANCE IN REDUCING THE DANGER OF SEEPAGE TO PRIME AGRICULTURAL LAND IN YOLO COUNTY; AND

WHEREAS, CONSIDERATION SHOULD BE GIVEN TO COORDINATED UTILIZATION OF THE PLANNED WEST SIDE CANAL THROUGH YOLO COUNTY; AND

WHEREAS, THERE IS NEED FOR FURTHER STUDY OF THE DEVELOPMENT AND UTILIZATION OF CACHE CREEK IN THE ROUTING OF EEL RIVER WATER THROUGH YOLO COUNTY FROM CLEAR LAKE; AND

WHEREAS, ALL ALTERNATIVES SHOULD BE CAREFULLY EXAMINED INCLUDING THE POSSIBILITY OF BENEFITS FROM HYDROELECTRIC POWER AS PART OF ANY COST BENEFIT RATIO STUDY AND MEANS OF FINANCING;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF SUPERVISORS OF THE COUNTY OF YOLO, STATE OF CALIFORNIA, THAT THE DEPARTMENT OF WATER RESOURCES OF THE STATE OF CALIFORNIA, BUREAU OF RECLAMATION, UNITED STATES DEPARTMENT OF THE INTERIOR, AND THE UNITED STATES DEPARTMENT OF THE ARMY CORPS OF ENGINEERS ARE REQUESTED TO EXAMINE IN DETAIL ALL ALTERNATIVES TO THE ROUTING OF EEL RIVER WATER AND TO GIVE CONSIDERATION TO THE ROUTING OF EEL RIVER WATER THROUGH CLEAR LAKE INTO CACHE CREEK IN YOLO COUNTY; AND,

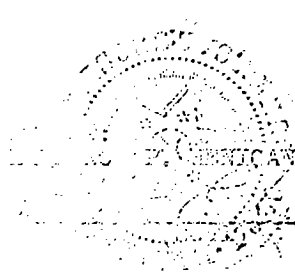
BE IT FURTHER RESOLVED THAT A COPY OF THIS RESOLUTION BE SENT TO THE HONORABLE RONALD REAGAN, GOVERNOR OF THE STATE OF CALIFORNIA, UNITED STATES SENATOR THOMAS KUCHEL, UNITED STATES SENATOR GEORGE MURPHY, CONGRESSMAN ROBERT L. LEGGETT, CONGRESSMEN JOHN E. ROSS, STATE SENATOR FRED W. HARLER, JR., ASSEMBLYMAN RAY E. JOHNSON, ASSEMBLYMAN EDWIN L. Z'BERG, AND TO THE BOARDS OF SUPERVISORS OF THE COUNTIES OF LAKE, COLUSA, SUTTER, YUBA AND SACRAMENTO REQUESTING THEIR SUPPORT.

PASSED AND ADOPTED THIS 28th DAY OF February, 1968 BY THE FOLLOWING VOTE:

AYES: Duncan, Edmonds, Espigares, Stephens, Connor.

NOES: None.

ABSENT: None.


CLERK
Deputy



COUNTY BOARD OF SUPERVISORS,
COUNTY OF YOLO, STATE OF
CALIFORNIA
APPROVED TO FORM
County Counsel

EXHIBIT "V"

COLUSA COUNTY

BOARD of SUPERVISORS

PHONE 458-4516

MILLARD E. STETSON First District
Arbuckle
SHELDON E. MORRIS Second District
Grimes
F. B. SMITH Third District
Williams
CHARLES V. DENNIS Fourth District
Maxwell
LEE A. MACE Fifth District
Colusa



JEAN B. FOWLER
Clerk

ANDREW R. CLARK
Executive Secretary

COUNTY COURT HOUSE
COLUSA, CALIFORNIA
December 14, 1967

1. SENATOR FRED W. MARLER, JR.
P. O. BOX 2297
REDDING, CALIFORNIA
2. ASSEMBLYMAN RAY E. JOHNSON
352 VALLOMBROSA AVENUE
CHICO, CALIFORNIA
3. U. S. CORPS OF ENGINEERS
DISTRICT ENGINEER
FEDERAL & COURTHOUSE BUILDING
SACRAMENTO, CALIFORNIA
4. DEPARTMENT OF WATER RESOURCES
OLD HIGHWAY 99 NORTH
RED BLUFF, CALIFORNIA
5. JOHN LUTHER, MGR.
334 FORUM BUILDING
SACRAMENTO 14, CALIFORNIA

THE COUNTY OF COLUSA IS GRAVELY CONCERNED BY THE INCREASED LEVEE SEEPAGE PROBLEMS CULMINATED BY THE PROPOSED EEL RIVER WATER DIVERSION DOWN THE SACRAMENTO RIVER. THE EXPECTED PROLONGED INCREASED WATER LEVEL IN THE SACRAMENTO RIVER SHALL CAUSE SEVERE AND DETRIMENTAL SEEPAGE PROBLEMS EVIDENCED BY PAST EXPERIENCE AND DEPARTMENT OF WATER RESOURCES REPORT NO. 125, AUGUST 1967. INCREASED OR UNTIMELY HIGH RIVER WATER HENCE SEEPAGE WOULD RESULT IN CROP DAMAGE AND/OR FAILURE TO PLANT. THIS COUNTY IS OF THE FIRM BELIEF THAT THE ADDITIONAL MAINTENANCE COST TO PREVENT DETRIMENTAL SEEPAGE SHOULD NOT BE BORNE BY THE CONCERNED DISTRICTS OR THE TAXPAYERS OF COLUSA COUNTY AND SUCH ADDITIONAL MAINTENANCE COSTS SHOULD BE BORNE BY THE FEDERAL OR STATE GOVERNMENTS. COLUSA COUNTY IS IN FAVOR OF THE INCREASED RIVER FLOWAGE PROVIDED POSITIVE, ASSURANCE IS RENDERED TO PROVIDE THE ADDITIONAL FISCAL AID IN LEVEE SEEPAGE AND DRAINAGE MAINTENANCE.

BOARD OF SUPERVISORS
COLUSA COUNTY

EXHIBIT "W"