MEMORANDUM OF UNDERSTANDING
BETWEEN THE
UNITED STATES FOREST SERVICE
AND
THE PLACER COUNTY WATER AGENCY
FOR
CONDUCT OF WORK BY THE AGENCY DURING CONSTRUCTION AND
SUBSEQUENT OPERATION OF THE MIDDLE FORK AMERICAN RIVER PROJECT
ON THE ELDORADO AND TAHOE NATIONAL FORESTS

THIS MEMORANDUM, by and between the UNITED STATES FOREST SERVICE, hereinafter referred to as the SERVICE, and the PLACER COUNTY WATER AGENCY, hereinafter referred to as the AGENCY, is intended to become effective upon the issuance by the Federal Power Commission of a license for the Middle Fork American River Project No. 2079, and contains the stipulations and conditions to be imposed upon the AGENCY pursuant to said license as consideration for its use and occupancy of the National Forest lands.

WHEREAS:

1. The AGENCY is an agency of the State of California created by an Act of the State Legislature (Statutes of 1957, Chapter 1234 as amended in 1959) has its office and place of business at Auburn, California, and has applied to the Federal Power Commission for a license to construct, maintain, and operate a hydroelectric development known as the Middle Fork American River Project No. 2079, which will occupy lands of the United States within the Eldorado and Tahoe National Forests.

2. The AGENCY is acquiring the lands and water rights necessary for the project. A list and description of the works to be constructed under Project No. 2079 is included in the application for license dated March 23, 1962 as amended by letter revision dated September 5, 1962. It is understood that this application may be further amended prior to or at the time of its approval by the Federal Power Commission.

3. The SERVICE, through the Forest Supervisor, Eldorado National Forest, Placerville, California, is responsible for administration and protection of the lands of the Eldorado National Forest; and through the Forest Supervisor, Tahoe National Forest; Nevada City, California, is responsible for administration and protection of the Tahoe National Forest. The SERVICE by agreement with the State of California, is responsible for the forest fire protection and administration of State fire laws on the several areas of private land which lie within this power project area and within the fire protection boundaries of the Eldorado and Tahoe National Forests. By agreements, the SERVICE, the California Department of Fish and Game and the U. S. Fish and Wildlife Service are jointly responsible for the fish and game resources on National Forest land.
Under the terms and conditions of the license the AGENCY is required to take specific measures for (a) fire prevention and control, (b) alleviation of damage to, and assuring adequate protection of, National Forest lands and resources, and (c) relocation and replacement of SERVICE improvements and facilities insofar as affected by the project, and (d) cooperation with the SERVICE in planning construction and maintenance of any project roads that are needed for joint use by the AGENCY and the SERVICE.

4. The AGENCY desires to cooperate with the SERVICE in meeting its responsibilities under terms of the license for fire protection, debris disposal, repair and replacement of improvements, preserving scenic values, and protection of the land and water resources.

5. The fulfillment and implementation of the terms of the license, and the desire and objective of the AGENCY and the SERVICE to preserve and protect all resource values, calls for mutual agreement and cooperation.

NOW, THEREFORE, IT IS MUTUALLY AGREED BY THE PARTIES HERETO as follows:

I. FIRE CONTROL

A. A Project Fire Plan covering added fire risks and hazards arising from the project will be prepared jointly by the AGENCY and the SERVICE prior to the start of construction, and will be put into effect immediately upon award of the construction contract by the AGENCY. The fire plan, when approved, will be attached to and become a part of this memorandum. It will be revised and approved annually by March 15. The fire plan will supplement, but not supersede the requirements of State law.

B. The Fire Plan will specify certain minimum fire prevention precautions and suppression measures which are to be taken by the AGENCY in all of the project operations by its employees, contractors, and subcontractors, and their employees. The AGENCY and its said employees, contractors and subcontractors, and their employees, will exercise such reasonable care as the circumstances and conditions require to prevent the escape of fire, and such reasonable care will include, but not be limited to, the said precautions and measures set forth in the said fire plan.

C. During the construction period, the AGENCY will provide and pay for all of the extra fire detection, prevention and suppression forces (including equipment, housing, and supplies) which are necessary to safeguard against wild fire. The number and kind of forces will depend upon the spread of construction activities, the time of year, and the nature of the increased fire risks and hazards.

D. The AGENCY shall require of each general or prime contractor, before commencing construction operations on the project, a liability insurance policy or policies insuring said contractor and its subcontractors in the amount of not less than five million dollars against liability of said contractor and its subcontractors arising from the escape of fire in the course of said construction operations.
The AGENCY shall present each such policy to the SERVICE for inspection before said contractor and its subcontractors commence construction.

II. CLEARING AND CLEANUP (Within the Project Area)

A. National Forest Timber Sales

1. Timber which must be disposed of because of the project may be offered for competitive sale by the SERVICE. Timber not disposed of in this manner will be disposed of by the AGENCY under written agreement with the SERVICE and paid for at rates established by the SERVICE.

2. A plan for scheduling the removal of units of timber on the entire project shall be developed by the AGENCY subject to the approval of the SERVICE. This plan shall be amended annually by May 1 for all remaining timber that must be removed from the project.

3. The AGENCY shall mark on the ground at not to exceed 100' intervals, so far as practicable, property lines and the reservoir clearing lines, and also show on suitable maps all areas that require clear cutting or other types of cutting, including hazardous trees.

B. Debris Disposal After merchantable timber on both National Forest and private areas has been removed, the resulting and remaining debris will be completely disposed of by the AGENCY in accordance with the terms of the FPC license.

1. National Forest timber sale purchasers will not be required to burn or dispose of slash or debris.

2. Timber sale purchasers shall be held liable for fire prevention and for suppression of fires for which they are responsible on their timber sale areas, and shall be required to file an approved timber sale fire plan with the SERVICE.

3. As soon as a timber sale purchaser has removed the merchantable logs, has completed all timber sale requirements, and has removed his equipment from a sale area, the SERVICE will notify the AGENCY that the area is available for completion of debris disposal. Beginning with the date of notification, the AGENCY shall provide fire prevention and presuppression measures in the sale area as required by the SERVICE.

4. The AGENCY will diligently pursue and complete the disposal of all debris on each area as soon as feasible after each area has been made available to the AGENCY for debris disposal.

5. Cleanup burning will be governed by the Project Fire Plan.
6. If forest insect populations begin building up in any project-connected slash and threaten surrounding timber prior to the time the debris can be burned, the AGENCY agrees to take adequate control measures to prevent spread of the insects.

C. Stump Removal. In accordance with the FPC license the AGENCY is required to clear the reservoirs. In certain areas where heavy recreation and boating use is expected, the AGENCY will provide for grubbing out and disposal of all stumps on approximately 150 acres. Such areas will be determined and defined by mutual agreement, and the AGENCY will accomplish the work along with its reservoir clearing and cleanup operations. Maximum permitted stump height will be 12 inches in areas where stumps are not grubbed out.

III. PROTECTION OF LANDS AND RESOURCES

A. No heavy powered equipment shall be operated outside of the project boundary without advance approval of the Forest Officer in charge. Tractors will not be operated above the maximum water line of reservoirs to push debris back into the clearing areas.

This material will be pulled into the clearing area by equipment operating in the area. Tailhoids must not be made to trees that will remain above the high-water line, except where it is clearly impracticable to do otherwise, in which case suitable measures to prevent damage to the tree will be taken. Skid roads or cat roads will not be permitted closer than 50 foot slope distance below the maximum water line.

B. The AGENCY shall keep open at all times a road suitable for travel by sedans and fire trucks across the Middle Fork American River within the French Meadows Reservoir site not only from Foresthill to Long Canyon but also to the upper reaches of French Meadows, for National Forest fire protection, administration and use.

C. The scenic and aesthetic values of all National Forest lands within and adjacent to the project area shall be protected as far as possible consistent with project development under terms of the license.

D. Borrow areas, quarry areas, road rights-of-way, and any other construction sites will be cleared only to the minimum area required, to avoid unnecessary denudation of land.

E. The AGENCY shall treat borrow and quarry areas in the following manner:

1. Topsoil and mulch stripped from the surface of borrow areas shall be stockpiled in strategic locations designated in advance. Upon completion of the project the stored topsoil shall be replaced as directed by the SERVICE.

2. Bank slopes in borrow areas will be kept reasonably even and, in soil, will be sloped at a ratio of 2 horizontal to 1 vertical as far as practicable.
3. Following compliance with paragraphs 1, 2, and 3 above, the AGENCY shall revegetate disturbed areas with species of tree seedlings and/or deer browse or grass approved by the SERVICE.

4. Bank slopes in quarries will be sloped at a ratio of 1/4 to 1 in solid rock and 1/2 to 1 in decomposed rock, with a bench minimum of 10' along the contour of every 30-foot rise in elevation. Banks of quarries outside of the reservoir site will be sloped or safety-fenced with woven wire fencing as directed by the SERVICE.

F. To the extent reasonably feasible the AGENCY agrees to treat intermingle private land the same as National Forest land and as described in paragraphs A, C, D & E, above.

IV. REPLACEMENT OF EXISTING FACILITIES

A. The AGENCY will replace to standard SERVICE specification and at a location designated by the SERVICE the eight camp units and interior roads and parking slots in the McGuire Campground which will be inundated by the proposed French Meadows Reservoir. This replacement of facilities can be incorporated as a part of a larger campground that may be constructed by the AGENCY on National Forest land.

B. The AGENCY will enter into a cooperative agreement with the SERVICE wherein the AGENCY will deposit with the SERVICE the sum of $4,000 as full settlement for the replacement of the French Meadows cabin and garage-storage shed, which is owned by the SERVICE, and which is in the site of the proposed French Meadows Reservoir.

C. The AGENCY shall enter into a cooperative agreement with the SERVICE for the replacement of road and trail signs which will be outdated by proposed construction and will need replacing.

D. The AGENCY shall replace to standard SERVICE specifications at locations designated by the SERVICE those portions of the Georgetown Ranger Station-Big Meadow telephone line that require relocation because of AGENCY project-connected construction or reconstruction of access roads.

E. The AGENCY shall replace to standard SERVICE specifications at a location designated by the SERVICE that portion of the Long Canyon Drift Fence and the cutleguard which will be destroyed by construction of South Fork Long Canyon Diversion.

F. The AGENCY shall replace the county road (FS#16N11-TNF) which will be inundated by French Meadows Reservoir. The replacement will be located on the south side of the reservoir. The road shall be constructed at least to the following standards: 7% maximum grade, 350' minimum radius of curve, 28' minimum width, base course adequate to support State Highway loading and 22' minimum width of paving.
The paving may initially consist of an asphaltic penetration treatment with a seal coat and chips followed by a second seal coat and chips near the completion of the water project, the objective being to put the road in proper condition before turning it over to Placer County for maintenance. The bridge across the Middle Fork of the American River shall be 26' in width between curbs, with a pedestrian walkway 4' in width on the downstream side of the bridge and separated from the roadway by a suitable barrier. The bridge shall be designed for H20-S16 loading and shall be constructed of permanent materials (steel and concrete-treated timber).

G. The AGENCY shall replace portions of Duncan Creek Road (FS#15N08-TNF) and French Meadows Road (FS#16H11-TNF) which will be destroyed by construction of French Meadows Dam. The replacement will be located across the top of the dam. The road shall be constructed at least to the following standards: 7% maximum grade, 300' minimum radius curve (with exceptions noted below), 28' minimum width, and base course adequate to support State Highway loading.

Exceptions: A curve of 200' radius will be acceptable at the South dam abutment. A curve of radius between 200' and 150' as mutually agreed upon by the AGENCY and SERVICE will be acceptable at the North dam abutment.

The bridge across the spillway shall be at least 26' in width between curbs with a horse and pedestrian walkway 4' in width on the upstream side of the bridge and separated from the roadway by a suitable barrier. (See I below regarding trail across dam). The bridge shall be designed for H20-S16 loading and shall be constructed of permanent materials. (Steel and concrete-treated timber).

H. The AGENCY shall replace portions of the Lagoon trail (FS#14E02-ENF) and Hell Hole trail (FS#15E01-ENF) which will be inundated by Hell Hole Reservoir. These trails shall be relocated and constructed to the following standards: 15% maximum grade, 4' minimum radius curve, 18" to 24" tread and clearing of 8' width and 10' height. Bridges will be required only where fords will not serve the need. If bridges are needed they shall be constructed of permanent materials. (Steel, concrete or treated wood), 5' in width and with guard rails.

I. The AGENCY shall replace the portion of the McGuire trail (FS#14E23-TNF) which will be inundated by French Meadows Reservoir. The replacement shall be across the top of the French Meadows Dam and connecting to the existing trail on both sides of the reservoir. The trail across the dam shall be 4' in width, shall be on the upstream side of the dam and shall be separated from the roadway by a suitable barrier. The balance of the trail shall be constructed to the following standards: 10% maximum grade, 8' minimum radius curve, 24" to 36" tread and clearing of 8' width and 10' height.

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V. CONSTRUCTION OF NEW FACILITIES

A. The AGENCY shall widen approximately 600 lineal feet of existing Forest Highway 96 in seven (7) separate in-turns of the cliff sections to make those portions of the highway safe for project-generated traffic. Widening shall be done to 28' and base course and asphaltic concrete surfacing shall be applied to the widened sections.

The widening may be done at any time prior to June 1, 1964 provided:

1. That the time is mutually agreeable to the AGENCY and the SERVICE, and further

2. That in the interim the AGENCY shall adequately sign the narrow sections of the highway with "one lane with turn-outs" and other appropriate cautionary signs.

B. The AGENCY shall provide base course adequate to support State Highway loading for the existing Duncan Creek road (FS#15N08-TNF).

C. The AGENCY shall relocate and/or reconstruct the existing road (portions of FS#14N08, #14N09 and #14N05-TNF) from French House to Big Meadows. The road shall be constructed to the following standards: 7% maximum grade (with exceptions noted below), 350' minimum radius curves (with exceptions noted below) and 28' minimum width and base course adequate to support State Highway loading.

Exceptions: A section of 7 1/2% grade will be acceptable from a point on the South Fork of Long Canyon Creek southwesterly for approximately 2000 feet. A curve of 150' radius will be acceptable at the crossing of North Fork of Long Canyon.

At the AGENCY's option, the existing road from French House to the cattleguard need not be widened or otherwise improved except that base course shall be added.

D. The AGENCY shall construct a road from the French Meadows road (FS#16N11-TNF) at the upper end of French Meadows Reservoir along the north side of the reservoir to the westernmost recreation area in Section 29, T 15 N., R 14 E. This road should utilize as much of the existing road as possible but will be constructed to the following standards: 7% maximum grade, 350' minimum radius curve, 28' minimum width, base course adequate to support State Highway loading and 22' minimum width of paving. The paving may consist of an asphaltic penetration treatment with two seal and chip coats.

At the AGENCY's option construction of this road may be deferred until such date as may be prescribed hereafter by the Federal Power Commission upon the recommendation of the SERVICE but not more than five years beyond completion of French Meadows Dam -- Provided that the trail described in "F" below is extended to join the existing road mentioned above.
E. The AGENCY shall construct a trail from the end of the road described in "D" along the north shore of French Meadows Reservoir to a junction with the McGuire trail (FS#14E23-TNF) near French Meadows Dam. The trail shall be constructed to the following standards: 10% maximum grade, 8' minimum radius curve, 24" to 36" tread and clearing of 8' width and 10' height.

F. The AGENCY shall construct a road from Big Meadows to and across Hell Hole Dam and spillway to the following standards: 7% maximum grade (with exceptions noted below), 350' minimum radius curves (with exceptions noted below), 28' minimum width and base course adequate to support State Highway loading. Sufficient road shall be constructed on the east side of the dam to permit future extension of the road construction without hindrance to the dam and a turnaround shall be constructed at the end of the road. The bridge across the spillway shall be 26' in width between curbs with a pedestrian walkway 4' in width separated from the roadway by a suitable barrier. The bridge shall be designed for H20-S16 loading and shall be constructed of permanent materials. (Steel and concrete - treated timber).

Exceptions - A short distance of 8% grade will be acceptable approaching the curve onto the bridge and also approaching the upper switchback. A curve of 200' radius will be acceptable on the bridge approach and a curve of 200' radius will also be acceptable in the upper switchback.

G. The AGENCY shall construct a road to the Duncan Creek Diversion to the following standards: 10% maximum grade, 100' minimum radius curve, 16' minimum width with turnouts intervisible, approximately 500' apart and 26' in width for a length of 100'.

H. The AGENCY may construct a road to the Middle Fork Interbay. The portion of this road from the Mosquito Ridge road (FS#15N10-TNF) to the breakoff shall be constructed to the following standards: 10% maximum grade, 100' minimum radius curve, 16' minimum width with turnouts intervisible approximately 500' apart and 26' in width for a length of 100'.

The portion from the breakoff to the river may be constructed to the following standards: 15% maximum grade—provided that, wherever necessary to prevent roadbed erosion because of steep grades, the roadbed and gutter will be paved, 50' minimum radius curve and 14' minimum width with turnouts intervisible, approximately 500' apart and 26' in width for a length of 100'. Further, a "grade line" design should be used for this portion of the road to reduce the necessary roadway excavation quantities to a minimum.

I. The AGENCY may construct a road from Forest Highway 96 to the Ralston Power Plant according to the following standards: 10% maximum grade, 80' minimum radius curve and 16' minimum width with turnouts intervisible, approximately 500' apart and 26' in width for a length of 100'.
Further, a "grade line" design should be used for this road to reduce the necessary roadway excavation quantities to a minimum.

The bridge across the Middle Fork American shall be at least 14' in width between curbs (or wheelguards), constructed of permanent materials (steel and concrete-treated timber) and designed for H20-S16 loading.

J. The AGENCY may construct a road from the proposed Hell Hole road to the French Meadows Power Plant to the following standards: 15% maximum grade—provided that, wherever necessary to prevent roadbed erosion because of steep grades, the roadbed and gutter will be paved, 50' minimum radius curve and 14' minimum width with turnouts intervisible, approximately 500' apart and 26' in width for a length of 100'. Further, a "grade line" design should be used for this road to reduce the necessary roadway excavation quantities to a minimum.

K. The AGENCY may construct roads to their tunnel portals, adits, surge chambers, penstocks, etc., as listed below to the following standards: 15% maximum grade, 50' minimum radius curves and 12' minimum width with intervisible turnouts.

- French Meadows P.H. Tunnel and Surge
- French Meadows Tunnel Portal
- Brushy Canyon Adit
- Long Canyon Diversions
- Middle Fork Penstock
- Ralston Penstock
- Ralston Afterbay

L. To prevent range cattle from drifting into the areas of heavy recreational use which will be generated by the project and to facilitate management of the range which the project will disrupt, the AGENCY shall construct approximately 14 1/2 miles of fence and 5 cattle guards to standard SERVICE specifications at the following locations:

1. The Chipmunk Drift Fence in Sections 35 and 36, T 15 N, R 13 E, Sections 1 and 2, T 14 N, R 13 E, and Sections 3, 4, 5, and 6, T 14 N, R 14 E. This will consist of approximately 7 miles of fence and 2 cattle guards.

2. The South Fork Reservoir Drift Fence in Section 24, T 14 N, R 13 E. This will consist of approximately 1 3/4 miles of fence and 1 cattle guard.
3. The Big Meadows Drift Fence in Sections 8, 9, 16, 17, and 21, T 14 N, R 14 E. This will consist of approximately 4 1/4 miles of fence and 1 cattle guard.

4. The French Meadows Drift Fence in Sections 10 and 11, T 15 N, R 14 E. This will consist of approximately 1 1/2 miles of fence and 1 cattle guard.

VI. MINIMUM STANDARDS FOR ROAD AND TRAIL CONSTRUCTION

A. Permanent Roads

Minimum standards for grade, alignment, width, base course, paving, turnouts and bridges have been specified above for each individual permanent road. Certain exceptions to these minimum standards have also been approved by SERVICE. During final location and design, other exceptions will be approved by SERVICE as warranted.

Following are other elements of design for all permanent roads:

1. Fill slopes under 10' in height shall be constructed 2:1 and over 10' in height 1 1/2:1.

2. Cut slopes shall not be less than 1:4:1.

3. Slope stabilization will be required as necessary to minimize erosion.

4. Specified maximum grades will be decreased in less stable soils or roadbed and gutter will be paved to minimize erosion.

5. Roadway drainage culverts (or other drainage structures) shall be spaced as needed to minimize erosion of roadbed and gutter and shall be designed and placed so that the water discharged from them does not create erosion channels on the land below the road.

B. Temporary Roads

Temporary roads which are needed only for project construction will either (1) be obliterated when no longer needed or (2) be so located and constructed that they can be made into permanent roads by others after the project is completed.

Obliteration will consist of scarification, cross-ditching and planting of the roadbed and effectively blocking it to travel. If the road is determined by SERVICE to be needed permanently - then gradient, curvature and cross-ditching to minimize erosion will be the controlling factors of location and construction. If the road is determined by SERVICE to be obliterated - then the location and construction will be governed by the least disturbance to the soil and cover.
C. Trails

Minimum standards for grade, alignment, tread, clearing (width and height) and bridges have been specified above for each trail. Following are other required elements of design for all trails:

1. Cut slopes should vary from 1/2:1 to 1:1 to decrease slough but also to provide pack clearance.

2. The required 8' x 10' clearing width and height is for limbs and brush. Trees shall be removed only for a width of 5'. Stumps and other obstructions such as boulders shall be removed from the tread and additionally only sufficient width to provide pack clearance.

3. Drainage for the tread will be provided by designed grade dips in the trail gradient.

II. ROAD MAINTENANCE

A. Prior to the start of the AGENCY's construction project, the AGENCY will reach agreement with the SERVICE as to maintenance responsibility for all roads constructed by the AGENCY and for all SERVICE roads to be used by the AGENCY for project construction and operation.

B. The AGENCY shall either (1) maintain all new permanent roads constructed in connection with their projects or (2) be responsible for having such roads maintained. Minimum standards for road maintenance are shown in VII-E below.

C. The AGENCY shall either (1) maintain any existing permanent SERVICE road used by the AGENCY during construction and operation of their project or (2) enter into a Cooperative Agreement with the SERVICE for payment of a fair share of the maintenance cost of such roads. The SERVICE ordinarily maintains such roads only for fire, forest administration and incidental public use. The AGENCY, if they enter into a Cooperative Agreement, shall pay their fair share of the maintenance cost for their heavy hauling and in addition shall pay the cost of maintenance for traffic generated by the project.

The SERVICE will require other heavy commercial haulers to pay their fair share of the maintenance cost of such roads. The SERVICE will not maintain any road during wet weather seasons. Minimum standards for road maintenance are shown in VII-E below.

As an alternative to (1) or (2) above, the AGENCY may provide for maintenance and/or jurisdiction of an existing SERVICE road by the County.

D. During construction of their project, the AGENCY shall maintain all temporary roads which are built or used by the AGENCY.
E. Minimum road maintenance standards are as follows:

1. Paved roads shall be "patched" and otherwise treated to preserve the pavement. The paving shall be replaced periodically as needed to provide a smooth riding surface. Unpaved roads shall be bladed and shaped to maintain original cross-sections and provide a suitable riding surface. Blading shall not undercut the bank slopes.

2. During dry weather, roads shall be watered or otherwise treated as necessary to avoid dust and loss of surfacing, and to help preserve satisfactory surface riding qualities.

3. Rocks and other obstructions that fall onto the roadbed shall be removed currently.

4. A normal amount of seasonal cleanup will be performed, which will include removing bank slough and slides, fallen timber and other obstructions, over-hanging brush, vegetation restricting sight-distance; replacing material eroded from fill slopes; and cleaning out drainage ditches and culverts. All replaced fill material will be stabilized to prevent any future erosion.

5. Material from slides and other sources requiring removal from the road shall not be deposited in streams or at locations where it will erode or wash into streams and cause damage through silting of streams and reservoirs.

6. All cattle guards, culverts, bridges and other road structures damaged or destroyed by the AGENCY or their representatives, shall be repaired or replaced by the AGENCY.

7. Roads to be used during the winter shall be surfaced with gravel or crushed rock prior to the rainy season.

8. When a construction operation, or use of a road is temporarily discontinued, necessary maintenance work shall be done to minimize damage from the elements during non-operating periods.

VIII. PROJECT BOUNDARY - LAND ACQUISITION

The AGENCY agrees to include all of the land covered by M.S. 4206 in Section 30, T 15 N, R 14 E, M.D.B. 5M. within the project boundaries. The AGENCY further agrees to acquire all of the private land within the project boundaries.

IX. RECREATION

The AGENCY agrees (1) to deposit with the SERVICE under cooperative agreement $5,000.00 to be used in the development of recreation public use plan and site plans to be made by or under the supervision of the SERVICE covering lands suitable for recreation development in the project area; and (2) to assist in the financing of recreation improvements proposed in the above-mentioned plans from such other funds as may be approved and determined available for recreation purposes by the Board of Directors of the AGENCY.
X. SCHEDULE OF OPERATIONS

The AGENCY agrees, in order to facilitate the administration of the National Forest resources affected by the project, to furnish a tentative construction program to the SERVICE at least three months before calling for bids on the first construction item and then a revised schedule every six months thereafter.

XI. FISH AND WILDLIFE

The AGENCY shall abide by the terms of the agreement which was executed on July 30, 1962 between the AGENCY and the State of California Department of Fish and Game and which is attached and becomes a part of this Memorandum of Understanding.

XII. GENERAL CONSIDERATIONS

A. Prior to final assembly of bid invitations for project construction and allowing sufficient time for SERVICE review and approval, the AGENCY agrees to furnish to the SERVICE all sections of such bid invitations that pertain to National Forest interests as covered by this Memorandum of Agreement, and the AGENCY agrees not to advertise for construction bids until the SERVICE has reviewed and approved such sections of the bid invitations.

B. At all times when clearing or disposal work or any other work in connection with project construction is being carried on, the AGENCY shall have at the main camp office or on the job a representative who shall be authorized to receive on behalf of the AGENCY any and all notices in regard to work or activities being carried on under the project. This representative shall work closely with the Forest Officer in charge, and shall take such action as is required by the terms of the license provisions or other matters connected with project construction to protect National Forest land.

C. It is understood that the SERVICE will designate a Forest Officer in charge who will deal directly with the authorized representative of the AGENCY. Only in emergencies, and in the absence of an authorized representative of the AGENCY, will the Forest Officer in charge deal directly with a contractor, sub-contractor or employees. Such an emergency will include the shutting down or stopping of any contractor's unauthorized action which is resulting in damage to SERVICE land or property.

D. Storage and Use of Explosives. The use and storage of explosives by the AGENCY shall be in accordance with applicable current Federal, State and local laws.

E. Campsites. AGENCY acquired land will be used insofar as possible by the AGENCY or its contractors, sub-contractors, or employees, for work camps, barracks, trailer parks, or other occupancy.
F. Use and occupancy of National Forest land outside the project boundary shall be covered by special-use permits to be requested by the AGENCY and issued by the SERVICE. Written application for such permits must be made in advance of need to allow for approval and issuance of the permits prior to use of the government lands.

G. The AGENCY shall acquire public rights-of-way easements across private lands for all permanent roads, trails, fences, telephone lines, and any other improvements constructed by the AGENCY under the terms of this Memorandum of Understanding.

H. The AGENCY shall cause its licensed surveyors (1) to set witness monuments for all of the public land corners nearest to shore which will be inundated by project reservoirs and (2) to reset all public land corners or set witness monuments to such corners that are otherwise destroyed by their project construction. Further, the AGENCY shall cause such survey records and the records of any other land surveys which are made for the project to be filed in the official records of the County in which such surveys are made.

I. The location of all roads (permanent and temporary), trails, fences, telephone lines, borrow pits, soil disposal areas or any other improvements to be constructed by the AGENCY on National Forest land shall be approved by the SERVICE in advance of the preparation of final plans and specifications by the AGENCY. The design standards, plans and specifications for each such improvement shall be approved by the SERVICE before its construction is started by the AGENCY.

J. Nothing in this agreement shall be construed as nullifying or modifying any of the terms and conditions of the Federal Power Commission license, or of the Federal Power Commission's responsibility for administration of the project.

PLACER COUNTY WATER AGENCY

By
Chairman, Board of Directors

Date Sept 15, 1962

UNITED STATES FOREST SERVICE

By
Charles V. Connaughton
Regional Forester
California Region

Date 9-25-62
AMENDMENT NO. 1
MEMORANDUM OF UNDERSTANDING
BETWEEN THE
UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE
AND
THE PLACER COUNTY WATER AGENCY
FOR
CONDUCT OF WORK BY THE AGENCY DURING CONSTRUCTION AND
SUBSEQUENT OPERATION OF THE MIDDLE FORK AMERICAN RIVER PROJECT
ON THE ELDORADO AND TAHOE NATIONAL FORESTS
DATED SEPTEMBER 18, 1962

ARTICLES of the MEMORANDUM OF UNDERSTANDING are hereby amended as
follows:

III. PROTECTION OF LANDS AND RESOURCES

The following subheading is added to this article:

C. The AGENCY shall design and construct spillways for all
dams and discharges from all power plants in such manner
as to protect the land from scour. Where other than concrete
spillways are used, soil and vegetation overburden shall be
removed down to solid rock and the spillway banks shall be
protected from undue slough and erosion.

V. CONSTRUCTION OF NEW FACILITIES

Both paragraphs under subheading "D" are hereby deleted and the
following substituted therefor:

D. The AGENCY agrees to construct an access road from the
Hell Hole road to the Hell Hole spillway inlet and thence
to elevation 4500 within the reservoir.

The road from the crest of the dam to the spillway shall
be constructed to the following standards: 10% maximum
grade, 70' minimum radius curve and 24' minimum width.
The road from the spillway to elevation 4500 shall be con-
structed to the following standards: 13% maximum and 10%
minimum grades, 70' minimum radius curve, and 30' minimum
width of concrete paving.

The first sentence of subheading "E" is revised to read as follows:

E. The AGENCY shall construct a trail from the end of the exist-
ing road near the upper end of French Meadows Reservoir along
the north side of the reservoir to a junction with the McGuire
trail (FS #14 E 23-TNF) near French Meadows Dam.
The following sentence is added to subheading "I".

The AGENCY shall design the road and Ralston Power Plant in such a manner that the road can be readily extended in the future by others without interference with the power plant.

IX. RECREATION

The paragraph under this article is hereby given the subheading "A" and the following added:

B. If the AGENCY constructs the larger Ralston Afterbay in connection with the proposed Oxbow Dam and power plant in lieu of the minimal Ralston Afterbay, it shall construct parking areas along the access road thereto and/or near the dam to provide for parking of at least 20 vehicles by fishermen and other recreationists. If only the minimal Ralston Afterbay is constructed, no parking area construction will be required.

C. The AGENCY shall maintain the water level in the South Fork of Long Canyon Diversion approximately between elevation 4633 and 4637 for swimming during the recreation season. The recreation season in this instance is defined as being from June 25 through Labor Day.

XII. GENERAL CONSIDERATIONS

The following paragraph is added to subheading "F":

The SERVICE will grant the AGENCY a special-use permit for a borrow area for impervious core material within the SW 1/4 of Section 18, T14N R14E and the NE 1/4 of Section 24, T14N R13E; provided, that the portion of said NE 1/4 of Section 24 to be included in said borrow area and the relocation and screening of the existing road through said borrow area shall be as mutually agreed to by both parties.

PLACER COUNTY WATER AGENCY

By: [Signature]
Chairman, Board of Directors

Date 10/18/62

UNITED STATES FOREST SERVICE

By: [Signature]
Charles A. Connaghton
Regional Forester
California Region

Date 11/1/62