# MONTICELLO RESERVOIR
## (LAKE BERRYESSA)
## SOLANO PROJECT CALIFORNIA

# PUBLIC USE PLAN

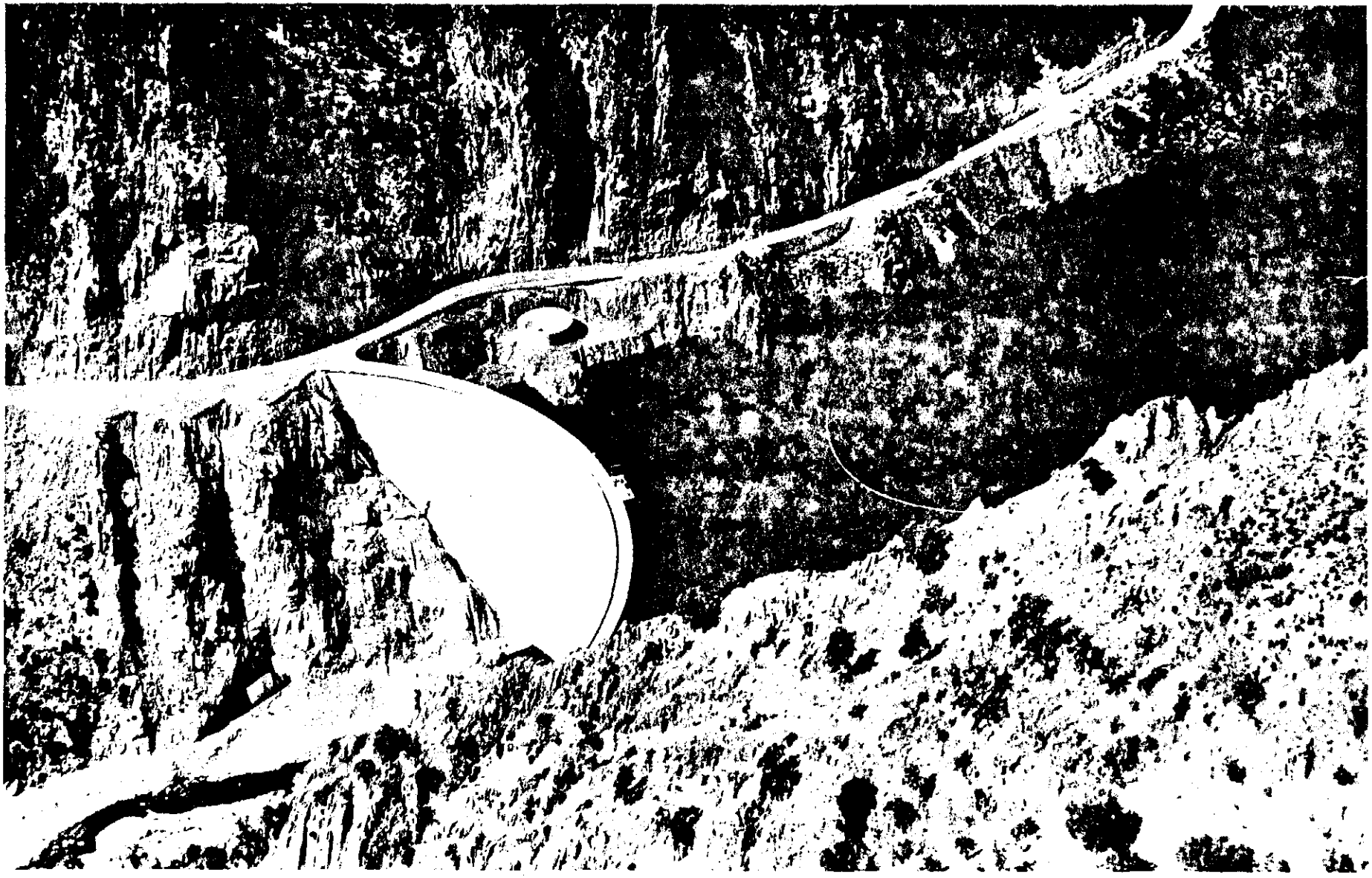
**Prepared for**
**Region 2, Bureau of Reclamation**
**By**
**Region Four, National Park Service**

**United States**
**Department of the Interior**
**October 1959**


Prepared by
William L. Bigler — Supervisory Recreation Planner
Walter J. McCallum — Park Landscape Architect



Code Number XLIV/106



Monticello Dam, located on Napa and Yolo-Solano County line. Observation parking area on left adjacent to State Highway 128. This and subsequent aerial photographs were taken on June 28, 1958 when water surface was at approximately 400 foot elevation.

IN REPLY REFER TO:

L7423

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
180 New Montgomery Street
San Francisco 5, California
REGION FOUR

October 28, 1959

Mr. H. P. Dugan
Regional Director
Region 2, Bureau of Reclamation
P. O. Box 2511
Sacramento 11, California

Dear Mr. Dugan:

Based upon the authority provided the National Park Service by the "Park, Parkway and Recreational Area Study Act" of June 23, 1936 (49 Stat. 1894) and a letter request from the Regional Director, Region 2 of the Bureau of Reclamation to this office dated March 13, 1957, we have prepared a Public Use Plan for the orderly development and utilization of the recreation resources inherent at the Monticello (Lake Berryessa) Reservoir, a part of the Solano Project.

The plan sets forth the significance of the reservoir area in the field of California public recreation, and includes maps which are essential to an understanding of the plan as it relates to development as it would evolve in the field.

We believe that the plan will provide a substantial basis which the administering agency (Napa County) can logically follow in subsequent, more detailed planning. The plan is intentionally broad in concept in order to afford the administering agency appropriate latitude of judgement in adapting it to realities which may be encountered.

This plan has been developed with the full knowledge and assistance of your office and the Napa County Board of Supervisors.

It is hoped that this report will prove to be an aid in guiding the successful development and administration of an active public use program for Monticello Reservoir and its adjacent public lands.

Sincerely yours,

Lawrence C. Merriam

Lawrence C. Merriam
Regional Director

CONTENTS


| | Page |
|---|---|
| I. INTRODUCTION | 1 |
| Authority | 1 |
| Statement of Objective | 1 |
| Public Use | 1 |
| Previous Reports | 2 |
| Present Status | 2 |
| II. PROJECT AREA ANALYSIS | 4 |
| A. Location and Description | 4 |
| B. Physiography | 6 |
| 1. Topography and Land Form | 6 |
| 2. Soils | 7 |
| 3. Drainage | 7 |
| 4. Water Areas | 8 |
| 5. Climate | 8 |
| 6. Vegetation | 9 |
| 7. Fauna | 9 |
| C. History and Archeology | 10 |
| D. Existing Development | 10 |
| 1. Land Use and Zoning | 10 |
| 2. Circulation | 12 |
| 3. Utilities and Services | 14 |
| 4. Adjacent Ownerships and Development | 14 |
| E. Political, Jurisdictional and Legal Aspects | 15 |
| F. Aesthetic Aspects and Scenic Values | 15 |
| III. PUBLIC USE CONSIDERATIONS -- REGIONAL AND LOCAL | 21 |
| A. Population | 21 |
| B. General Considerations of Public Use | 21 |
| C. Economic Considerations of Public Use | 25 |
| D. Political and Planning Factors -- Land and Use Circulation | 26 |
| E. Other Recreation Areas and Facilities | 27 |

Page

IV. GENERAL DEVELOPMENT PLANS ____ 28

A. Purpose ____ 28
B. Development Concept ____ 28
C. Development Areas ____ 29
D. Development Considerations ____ 31
E. Analysis of Public Use ____ 33
F. Special Considerations ____ 34
G. Utilities and Services ____ 35
H. Recommended Standards ____ 36
1. General ____ 36
2. Areas and Facilities ____ 37
3. Boating and Boat Facilities ____ 38
4. Other Aquatic Activities ____ 39
5. Utilities and Services ____ 40
I. Specific Public Use Areas and Facilities 41
Area A1 - Markley Canyon ____ 41
Areas A2 and A3 - Markley Canyon ____ 42
Area B - Wragg Canyon ____ 46
Primitive Camp Area -- Wragg Canyon-Steel Canyon Peninsula ____ 51
Area C - Steel Canyon-Sage Canyon ____ 54
Area D - Capell Creek Arm ____ 58
Area E - Vicinity Capell Creek-Spanish Flat ____ 63
Area F - Park Headquarters & Future Major Public Use Area ____ 68
Area G - West Shore Area - North of Smittle Creek ____ 79
Area H - West Shore Area - North of Area G ____ 82
Area J - Pope Creek Area ____ 89
Area K - Putah Creek Area ____ 92
Organization Camp Area - Putah Creek Arm ____ 99
J. Estimated Cost of Recreation Development 102

MAPS AND CHARTS

Development Data Chart and Summary of Proposals

Public Use Plan

Land Status Map

Specific Areas

| | |
|---|---|
| Sheet No. 1 - | Markley and Wragg Canyons Areas A1; A2; A3; and B |
| Sheet No. 2 - | Primitive Camp Area Wragg Canyon - Steel Canyon Peninsula |
| Sheet No. 3 - | Steel Canyon - Sage Canyon Area Areas C, D, and E |
| Sheet No. 4 - | Headquarters and Major Public Use Area |
| Sheet No. 5 - | West Shore Area North of Smittle Creek |
| Sheet No. 6 - | Pope Creek - Putah Creek Areas |
| Sheet No. 7 - | Organization Camp Area |

ADDENDA:

A. Management Agreement with Napa County for Lake Berryessa (Monticello Reservoir) Area

B. Copy of Concession Agreement

C. Section 201 - Napa County Ordinance - Lake Berryessa Park Commission and Director

D. Section 202 - Napa County Ordinance - Use Regulations

AMMENDMENTS:

PUBLIC USE PLAN
MONTICELLO RESERVOIR
(Lake Berryessa)
A Part of the Solano Project
California

# I. INTRODUCTION

## Authority

Pursuant to a formal request made by the Regional Director, Region 2 of the Bureau of Reclamation to the Regional Director, Region Four, of the National Park Service by letter of March 13, 1957, "A Public Use Plan" has been prepared for the Monticello Reservoir, (popularly known as "Lake Berryessa"), by the Service. Basic authority for this cooperation stems from the Park, Parkway and Recreational-Area Study Act of June 23, 1936 (49 Stat. 1894).

## Statement of Objective

### Public Use Plan for Monticello Reservoir

This public use plan is prepared for guidance in the development of recreation areas and facilities for public use and enjoyment on and adjacent to the Monticello Reservoir. It is intended to assist the Bureau of Reclamation and the management agency in decisions regarding the best use and development of public lands and water areas for recreation.

The plan includes a General Development Plan to guide the development of facilities according to (1) the capacities of the land and water to accommodate public use, and (2) the recreation needs and desires of the people who will use the area, insofar as their needs and desires can be met feasibly by a public agency.

## Public Use

Monticello Dam was completed in 1957, but some water was impounded as early as 1955-56. The water level reached a maximum elevation of approximately 400 feet in June 1958, impounding approximately 900,000 acre feet. Although the area was not officially opened for public recreation by Napa County until June 1, 1959, the water and land areas already receive heavy

public use. Despite the lack of minimum basic public use facilities at that time, including water supply and boat launching facilities, it is estimated that 800 boats were in the area on Sunday, August 31, 1958.

The water level of the reservoir will probably remain relatively high for a number of years and provide an extremely desirable recreation area. With development of facilities to accommodate visitors, a very heavy public use of the area can be anticipated, due to location, size and character of the reservoir, adjacent land areas, and population served.

## Previous Reports

A report entitled Recreational Potentialities of the Yolo-Solano Development, California, was prepared by the National Park Service and submitted to the Bureau of Reclamation in March, 1947. This report concluded that the area was not of national significance and recommended administration by a state or "regional" agency. Recommendations of the above report have been considered in the preparation of the Public Use Plan.

The Division of Beaches and Parks of the State of California released a report in January 1957 entitled State Park Potentialities of Monticello Reservoir and Putah Diversion Pool, Napa, Solano and Yolo Counties, California. In summary, this report recognized the high potentialities of the area for public use, but was not positive in recommending state park status. A re-study of the area was authorized by the State Park Commission and subsequently completed in November 1957. This report, entitled Restudy of State Park Potentialities of Monticello and Cannon Ball Diversion Pool recommended that the State Division of Beaches and Parks accept administration of the Monticello Reservoir area for recreation purposes. The report and plan recommended development of portions of the project land area and the acquisition of additional lands adjacent to the public land. The report also recommended the exclusion of the lower Putah Creek and Diversion Pool areas from state park status.

## Present Status

In the spring of 1958, the County of Napa indicated an interest in assuming responsibility for the management of the recreation phases of Monticello Reservoir. A Management Agreement was

entered into on July 31, 1958, between the County, the Bureau of Reclamation, and the National Park Service. Provision and administration of recreation at the reservoir is the responsibility of the County Board of Supervisors.

A Lake Berryessa Park Commission has been established by resolution to advise the Board on all matters pertaining to the development, use, and administration of recreation areas and facilities. The position of Park Director has been established with the reservoir recreation program his sole responsibility.

A copy of a Preliminary General Development Plan for Monticello Reservoir (marked "Exhibit A") accompanied the foregoing management agreement which described the area to be leased by the County. The land thus transferred will be used primarily for public recreation in conjunction with the water areas. Lands not suitable for recreation or other public use or not required to meet existing recreation demands may be leased by the County for agricultural or other uses compatible with public recreation.

Funds were not provided by the Federal Government for minimum basic public use facilities for Monticello Reservoir. Hence, the County has indicated the intention of encouraging the development of facilities and the provision of services mainly by concessioners under the general supervision of the County. The concessioners would be responsible for the development, operation and maintenance of facilities including roads, sanitation, and water supply in general conformance with the Public Use Plan prepared by the National Park Service for the Bureau of Reclamation. The returns to the concessioners will be from fees and charges for services, goods, and accommodations. All rates and prices charged to the public by the concessioners in the above area are subject to regulation by the County.

To establish proper control the County adopted an ordinance prescribing regulations for the use of the park and water surface areas which also provides penalties for violations. Copies of the agreements and ordinances cited above are included in the Addenda. The County is now engaged in programming for the development, operation and management of the area and facilities for public use in accordance with the Public Use Plan as a general guide.

## II. PROJECT AREA ANALYSIS

### A. Location and Description

The Solano project, authorized as a Bureau of Reclamation project in 1948, is designed to provide for flood control and to supply water for irrigation, municipal, and industrial purposes in portions of Solano County, California. Important project features include the Monticello Dam and the Putah Diversion Dam a short distance downstream. The recreation aspects of the Putah Diversion impoundment (Lake Solano) will be treated in a separate Public Use Plan.

Monticello Reservoir is located about 35 air miles west of Sacramento, California in the northeast portion of Napa County. The reservoir is within 2-1/2 hours travel time of all portions of the San Francisco Bay Area and within 1 hour travel time from the Sacramento metropolitan area.

Monticello Dam is located on Putah Creek about 9 miles west of Winters in Yolo County at the joining of Napa, Solano and Yolo Counties. The waters impounded by the dam inundate Berryessa Valley (the site of the town of Monticello) and create a lake approximately 22-1/2 miles long and 3 miles wide lying wholly within Napa County. The main body of water is approximately 3 miles wide and 10 miles long with the long axis in a general north-south direction. Narrow creek arms extend generally north and south from the main body of the reservoir. Storage capacity is 1,600,000 acre feet, second in size, in California, only to Shasta Lake. Total Federal ownership, including water surface and adjacent land, is approximately 26,250 acres, of which 19,250 is water surface area at maximum water level. Approximately 7,000 acres of land above maximum pool form the perimeter of the immediate project area. At this level, the reservoir has a shoreline length of some 170 miles.

The taking line or limits of Federal ownership, was established at a minimum distance of about 300 feet horizontally from the maximum water level. Practical considerations resulted in some areas as much as 2,000 feet back from the high water shoreline. In three cases it was found advisable by the Bureau of Reclamation to merely acquire the right to flood certain private lands periodically, resulting in floodage easement rights only.

All trees, brush, and other detrimental and hazardous elements, except land forms and outcrops, were removed from lands to be inundated below elevation 440 feet. Portions of the project area are fenced along the taking line for the purpose of excluding cattle. On the west side of the reservoir, the county highway fence is utilized when it coincides with the taking line.

An area surrounding the dam and extending in all directions up to approximately 1,000 feet is designated "Reclamation Zone." Access to and use of that area is limited and subject to direct Bureau of Reclamation control.

A maximum high water level (surcharge-elevation) of 455.5 feet has been established to accommodate periods of excessive runoff. However, water levels above elevation 440 would be of short duration.

The generation of power at the dam is a definite future possibility. It would not adversely effect public recreation use of the reservoir if only firm releases were made.

Reservoir water level may fluctuate from the surcharge elevation of 455.5 to a minimum elevation of 253 feet. A water level of 309 is considered practical as a minimum pool or dead storage elevation, whereas the 440 elevation is, for purposes of this plan, considered as the normal water surface.

Based on discharge for project purposes, including evaporation, the seasonal drawdown is expected to be from 11 to 22 feet. In successive dry years where inflow is less than discharge, a net lowering of the water surface will occur. Based on Bureau of Reclamation data, however, water surface elevation should remain above the 400-foot elevation approximately 17 years out of 31-year period of study, and above elevation 350 feet for approximately 27 years of the period.

Future water development projects may divert water from the Eel River into Monticello Reservoir via the Soda Creek Tunnel. This would tend to maintain a higher water level in the reservoir if discharge were not increased. Whether any future change in reservoir capacity will be required is not known at the present time.

Public land near the reservoir and under the administration of the Bureau of Land Management has been withdrawn from disposition.

Certain lands within the take line were leased by the Bureau of Reclamation for grazing purposes. However, with the development of public recreation facilities and raising of the water level, a minimum of grazing land will be available. Future grazing leases will be administered by the County of Napa.

State and county roads within the project lands that enter the reservoir have been abandoned by the respective agencies. A fire suppression and farm access road has been established on the east side of the reservoir which excludes public access.

## B. Physiography

### 1. Topography and Land Form

Topography favorable for intensive public recreation use occurs in a number of locations of relatively limited size extending northward from the dam along the western shoreline to the north end of the reservoir. Generally project lands are characterized by steep slopes which give way to gently sloping benches and ridge lines at or near the maximum water level. The benches and ridge lines are relatively narrow in width, crossed by many small, V-shaped seasonal creeks and drainage courses leading to the reservoir. The major creek arms are in canyons with very steep slopes. Topography on the east side of the reservoir consists of very gentle slopes above the high water level. On the west side of the reservoir, notably in the Pope Creek arm, occasional prominent rock outcrops occur.

Several islands (at high water levels) are adjacent to the west shoreline of the reservoir, four of which are of sufficient size and favorable topography to warrant extensive development for public recreation use.

A lowering of water elevation will be most noticeable at the north and along the east side of the reservoir where the land is relatively flat below high water level. Certain similar areas along the west side will be exposed with only a minimum drawdown. Toward the south, or lower, end of the reservoir, normal drawdown will not result in substantial horizontal water movement except in the creek arms; otherwise few land areas will be exposed, due to the steepness of the slopes to the valley floor.

Steep west side topography limits public access to and

circulation within the reservoir area and has required extensive cuts and fills for highway construction. Highway access to the reservoir has been achieved along the creek arms except for the west side county road which is a "contour" road with continuous, relatively sharp curves.

Submerged land forms present some hazards to boating, particularly in view of the fluctuating water level. A few of these will probably require marking for boating safety, but they could prove hazardous to night boaters.

## 2. Soils

Soil cover in the area is thin, with generally less than three feet covering the underlying rock. The thin, rocky soil cover is, for the most part, uniformly distributed throughout the area.

According to a soil survey map of the area, all land above the maximum pool is classified as "rough mountainous." Within this area of classification are small pockets of marginal agricultural land.

## 3. Drainage

Few year-round streams enter the reservoir. Sustained flows of water are available principally from Putah, Pope, and Capell Creeks, the latter being of insignificant volume. During dry periods, no water can be observed in any of the creeks; however, limited stream flow continues under the gravel and rock deposits,

Occasional springs are located at higher elevations, the most important of which are located north of Quarry Canyon. Other water flows are the result of fairly rapid spring runoff due to the gravelly character of the soil.

There is a significant shortage of potable water in areas above the valley floor. It is expected that most of the water available from existing creeks, springs and ground water sources will be appropriated and utilized for the development of private property, leaving a relatively insignificant amount available for the public use areas from these sources.

4. Water Areas

The reservoir has qualities that make it most attractive for all aquatic activities. Summer water temperature exceeds 80 degrees Fahrenheit near shore, with slightly cooler temperatures in deeper water. With high air temperatures and warm water, the reservoir offers comfortable swimming until late evening. At present, the water along the shoreline is murky from vegetation, mud, algae and other material. With the creation of improved swimming areas, and the stabilizing of shore areas for boat launching and landing, there should be a marked improvement in water quality.

5. Climate

Climatological data indicates a mean temperature of 60 degrees in the fall and spring, and in the low 70's in summer for the Monticello Reservoir area. The winters are normally wet and cool with occasional below-freezing temperatures. Occasional summer heat over 100 degrees can be expected. Summer evenings are warm and pleasant with a late evening coolness. The area normally enjoys 275 days of sunshine per year with an annual precipitation of approximately 30 inches of rain.

The reservoir appears to be exerting some influence on air temperatures in the area. On the public lands adjacent to the water, the air temperature is noticeably lower and is very pleasant even on the hottest days. A probable increase in humidity in the immediate area may have some favorable effects on vegetation.

The west side of the reservoir enjoys a lower temperature during the day, supports better vegetation, and is more conducive to active public recreation use than other portions. A prevailing breeze from west to east across the reservoir improves conditions on the less vegetated east side, whereas less air movement is felt on the west side. Prevailing winds are occasionally fairly strong and produce rough water near the canyons, while other areas of the reservoir are practically dead calm. North winds in winter occasionally create hazardous small boating conditions.

In general, climate is excellent for recreation, with air temperatures during the long recreation season varying from warm to hot during the day and from warm to cool in the evening.

6. Vegetation

Three growth on the east side of the reservoir is sparse with large oaks very widely spaced near the water and up brushy canyons. The north, west and south sides of the reservoir have from sparse to dense growth of oak, Digger pines and chaparral. Except in brushy areas, the terrain is moderately covered by wild grasses and is subject to high fire danger. Very little litter, dead wood or fallen trees remain in the area.

A few Douglas-fir specimens are located in the Capell Creek area but, in general, the area is very marginal in its support of species other than those mentioned above. Periodic fires in this area have probably discouraged Douglas fir reproduction. In general, material indigenous to the area should be used in planting to minimize maintenance and assure a high percentage of survival under conditions of heavy public uses. With possible local climatological changes brought about by the reservoir, and with limited irrigation, the planting of desirable shade trees not indigenous to the area also may be successful.

In general, vegetative cover on the north, west and south sides of the reservoir is adequate for public use. Supplemental planting of trees for shade and aesthetic purposes should be undertaken.

7. Fauna

Popularity of the general area for deer hunting is indicated by the existence of numerous private gun and hunting clubs in the vicinity. A substantial black-tailed deer population inhabits the area; if the upper reaches of the valley remain relatively undeveloped, a sizeable deer population may persist despite intensive public and private use of areas adjacent to the reservoir. The encouragement of wild life, particularly deer, would be a desirable goal.

Numerous rattlesnakes formerly infested the area, but control measures by sportsmen's groups have substantially reduced the number within the public use areas. Future intensive public and private use should ultimately eliminate this danger in all but the relatively undeveloped portions and the higher slopes.

With the removal of domesticated grain crops from the

valley, and a reduction of existing native grain areas, a substantial reduction of birds and small animals is to be expected.

The importance of the reservoir for migratory waterfowl has not been determined. Although not expected to be a major attraction on established flyways, encouraging numbers of ducks and geese have been seen on and over the reservoir during the past two years. However, intensive public recreation use of the reservoir will probably reduce this potential. The northern end of the reservoir should be the area of greatest waterfowl attraction with its shallow water and probable marshy vegetative growth.

Fishing in the reservoir has been excellent since impoundment. According to the California Department of Fish and Game, future prospects also are most favorable.

## C. History and Archeology

Archeological salvage operations and investigations were carried out in the area prior to and during the construction of the dam. The results of the work were important from an archeological and historical standpoint, and the information gained will be useful if interpretive facilities are offered to the public. The need for on-site interpretive signs, museums, etc., is considered minimum from a public use standpoint and efforts to present the history and archeology of the Berryessa Valley should be undertaken by a local historical society. Few, if any, historical and archeological sites remain above the inundated areas.

## D. Existing Development

### 1. Land Use and Zoning

Following the inundation of the valley, limited ranching activities including grazing continued on the lower slopes of the reservoir area. At the present time, the east shore project lands are best suited for ranching activities. Future improved access and increased demand for these lands may result in many uses related to public recreation use. Lands along the east shore are topographically well suited for ranching. These lands are presently zoned A-1 (Agricultural District) which permits the continuation of present ranching activities under lease arrangement.

Lands adjacent to the public land north of Putah Creek have no major improvements and are used for grazing. The area is zoned WR (Watershed Recreation) and will probably continue mainly as grazing land until its use for homesites or other uses related to recreation is demanded. The area is located adjacent to a possible future public use expansion area. It commands a magnificent view of the reservoir and is topographically well suited for recreation development.

Land adjacent to the Putah and Pope Creek arms is extremely steep and is used for very low density seasonal grazing. Use of portions of the public lands for recreation is indicated in the Public Use Plan. Improvements have been made on private property but are either further up the creeks from the public lands or adjacent to the floodage easements.

Along the entire west side of the reservoir all lands adjacent to the taking line have been zoned W.R. (Watershed-Recreation). Prior to the completion of the Knoxville Road on the west side of the reservoir, few improvements were evident on this side. No agricultural use is evident and utilization for grazing is very limited. Completion of the Knoxville Road, coupled with public use of the reservoir and its potential development have prompted recent property improvements.

A building near the Pope Creek arm presently serves as the relocated Monticello elementary school. Homesites have been created and utility improvements have been made south of the Pope Creek arm. Topography here is well suited for low density homesites adjacent to the taking line and above the Knoxville Road, and extensive residential development is anticipated.

Less residential potential exists between Smittle Creek and Quarry Canyon, but some development will occur. A commercial enterprise, Sugar Loaf Park, which offers supplies and refreshments, has been established in Quarry Canyon adjacent to the road.

Another small commercial enterprise is located on the west side of the reservoir in the Capell Creek area about one mile south of Spanish Flat. Lands between Capell Creek and Pope Creek will probably experience the initial and most extensive private development around the reservoir.

Between Capell Creek and the dam, residential development can be expected adjacent to but outside the taking line. Few improvements exist at this time. Commercial development will probably be confined to areas either adjacent to State Highway 128 or immediately adjacent to designated public use areas.

There is now substantial development in Capell Valley adjacent to State Highway 128 and at the junction with State Highway 37 from Napa. It includes the Napa Valley Ranch Club, numerous ranch houses, a small school, and a gasoline service station. Moskowite Corners, located at the junction of Highways 128 and 37, includes an established commercial enterprise offering refreshments, tourist and fishermen supplies and services. This area will probably be the location of a sizeable community including commercial, light industrial, and residential uses.

Below Monticello Dam, a small established commercial enterprise offers refreshments, supplies and other services.

A description of the land uses permitted under existing county zoning ordinances is included in the Addenda to this report.

Private recreation land uses adjacent to the project area are limited to hunting clubs and recreation or "dude" ranches. Development of reservoir public use facilities should have little effect upon the continuance of existing operations, except in the case of hunting clubs as previously noted. The recreation atmosphere created in the general area should prompt the development of many related recreation uses on private lands.

2. Circulation

The Knoxville Road is adjacent to a greater proportion of the proposed public use areas and will be required to accommodate approximately 80 percent of the visitor traffic. Desirable speed limits have been imposed from its beginning in Capell Valley at Highway 128 to a point beyond the Putah Creek Bridge. Near the entrance to each public use area, appropriate speed limits and sufficient warning signs should be considered. The road, although adequate to serve today's needs, will probably prove unsatisfactory for the demands imposed upon it by future use. Particularly critical is the first one-half mile of the road as it leaves the State Highway. Under future park traffic conditions, the two lane bridges over Pope and Putah Creeks, respectively, will probably prove to be inadequate.

Ample and frequent pull-off areas should be provided for emergency off-highway parking as well as appropriate guard rails and other highway safety devices. Control of number and location of access points into the highway from both public and private property should be considered for greater safety and protection of the area. Appropriate landscaping should ultimately be provided and control of signs, advertising, etc. should be established. Roadside rests and litter cans should also be provided.

Wider, paved shoulders for emergency pull-off for parking and passing, insofar as feasible, eventually should be provided along State Highway 128 from its junction with Knoxville Road to the dam. The highway should be established as a two-lane expressway providing limited controlled access. The intersection of Routes 37 and 128 at Moskowite Corners should be replanned for greater safety and ease.

The unimproved road inWragg Canyon leading from State Route 128 to the proposed public use area and into the reservoir is a dedicated county road. Because of its implications for future public use, it should be brought up to reasonable standards consistent with anticipated use. At present, there is a private access easement across project lands on the west slope of Markley Canyon. The road generally follows on the 500 foot contour and is unimproved.

The Steel Canyon Road, formerly the Monticello Road, (State Route 37), extends from Moskowite Corners and terminates at the water. It is presently an improved county road in poor condition. Since it provides access to a proposed public use area, future reconstruction and repair will be necessary to assure adequate, safe access.

State Route 128 from Rutherford in Napa County to Capell Valley will probably become the major approach road from the north coast areas. Although some reconstruction is presently underway, future public use will probably require a two-lane road of higher standard.

The road from Pope Valley adjacent to the Pope Creek Arm and terminating at the Knoxville Road will probably require only minimum improvement and normal county maintenance for the foreseeable future. The Knoxville Road

extending northward from the reservoir is of minor importance and will probably require little more than present maintenance and improvement.

The east side of the reservoir is now reached by a fire suppression and unimproved farm access road. It is closed to the general public and serves only adjacent property owners. However, appropriate public roads probably will be developed ultimately, to serve future improvements and/or public use areas if expansion to the east side of the reservoir is demanded.

3. Utilities and Services

The west side of the reservoir is presently served by power and telephone lines paralleling the Knoxville Road. Electric service is readily available to all proposed public use areas. Telephone service is now available only on the west side of the reservoir.

At present, some west side portions of the reservoir area are served by public water or sanitary facilities.

A public dump should be provided by the county in the near future.

Fire protection services are now provided by the State Division of Forestry by contract with the County of Napa, with a forestry station located at Spanish Flat.

4. Adjacent Ownerships and Development

The private land adjacent to the taking line is divided into a relatively few large parcels. Ultimately, these lands will probably be subdivided and sold in predominantly small parcels of from 1 to 5 acres, with those areas closest to the reservoir and to the public use areas being subdivided first. Private properties affording a view of the reservoir, or those properties closest to the taking line or entrance to a public use area, will be greatly enhanced in value.

The only present subdivision of note is a 45 acre tract between the Knoxville Road and the taking line about 1 mile south of the Pope Creek bridge. Plans filed with Napa County provide for 105 homesites of approximately one-third acre

each with streets and all utilities installed. Other small parcels have been created, primarily in the Spanish Flat area.

## E. Political, Jurisdictional and Legal Aspects

The responsibilities of the Federal Government within the project area include primarily jurisdiction over the project water and land areas in general, and of the primary project purposes in particular. The Bureau of Land Management controls and makes disposition of other public lands in the project area.

The State of California has the responsibility of maintaining State highways and forestry stations. Other responsibilities of the State at the reservoir include maintaining the fishery and enforcing fish and game laws.

The County of Napa, in addition to the responsibility of management of the project land and water areas for public recreation, presently provides all services and facilities common to local levels of government not provided by special districts or incorporated places including health, safety, and roads other than State and Federal.

## F. Aesthetic Aspects and Scenic Values

In the development of the reservoir area, it is of primary importance to understand and keep in mind the basic purposes of the recreation area as a place to spend leisure time. In order to derive maximum enjoyment and benefits from a day of recreation, much attention must be given to the appearance, and other impressions made during the visitor's time reaching the area, while there, and on his way home. This has to do with visual and other qualities that should be preserved, enhanced or created so his total recreation experience is maximized. Hence, this section of the Public Use Plan will discuss the qualities involved in the aesthetic aspects of the area. Although not spectacular, the aesthetic effects of the project lands in the general area are enjoyable. The scene is greatly enhanced, however, by the deep blue of the reservoir water. The main body of the reservoir pool can be appreciated in its entirety from many vantage points. Unfortunately, few of these vantage points are within the public lands. Travelers along the Knoxville

Road are afforded excellent views of the water and the aquatic activities taking place from some vantage points high above the water's edge, while at others the views are through trees a mere five feet above the maximum pool. The frequent views of the reservoir afforded from the Knoxville Road is a quality worth preserving at all cost, particularly at the Capell Creek arm where the first impact of the reservoir, its color, setting, size and public use can be appreciated by the visitor.

The intimate relationship with the water evident in the creek arms and in other locations along the Knoxville Road also should be preserved. To facilitate the important quality of viewing, parking areas should be created at intervals rather than by a continuous pull-off strip. The traveler continuing toward his destination should not have his view broken by a continuous line of cars pulled off on the shoulder.

Visitors from the Central Valley area obtain their first view of the reservoir from the dam. A public parking area has been created there which also permits a magnificent view down Putah Creek Canyon below the dam. The meandering creek bed lies some 300 feet below this point which also permits a close inspection of the dam. A view of Monticello Reservoir itself from this vantage point is relatively unimpressive since the main body of water cannot be seen. A view of the dam from the low bridge across Putah Creek about one-half mile below and east of the dam is a very important feature of public enjoyment and control of development around this bridge is necessary to preserve this aesthetic value.

However limited the vistas of the reservoir may be, near the dam, views of the aquatic activities taking place are important at this area. Views down Markley Canyon arm are interrupted by frequent highway cuts. Improvement of this situation by removal of some of these remaining land forms would be desirable. Unfortunately, views of the water are not presently possible from the south side of the reservoir except from the dam, down Markley Canyon and from the Knoxville Road as noted. Pleasure driving in the area would be enhanced greatly by additional roads carefully associated with the reservoir.

Peninsulas and islands in the Capell Creek area afford

excellent views of the reservoir and should be made available for public use and enjoyment. Spectacular views are possible from the peninsulas and from large islands about half way up the reservoir along the west side. Because of their accessibility, favorable topography and relationship with the water, these islands should ultimately be made available for public use by roads created from fill from the reservoir. Visitors without boats then would be permitted the luxury of being in the middle of the reservoir and appreciating the views of the surrounding mountains usually afforded only to boaters. Other views are available from a few small peninsulas along the west side and from the areas near the Putah Creek arm on the Knoxville Road.

After the original right of way line for the reservoir was established, certain lands surplus to the project were revested to adjacent or original owners. As a result, the excellent viewpoints along the south shore unfortunately are generally inaccessible or are on private property. One such revestment contains land of relatively high public use potential -- a large peninsula area of favorable topography commanding magnificent views of the main body of the reservoir.

The east side of the reservoir offers a magnificent backdrop for the water area as viewed from the west side. To the boater, the high ridges enclose the reservoir on all sides, creating the impression of a large natural mountain lake. Fortunately, private developments will take place sufficiently back from the water's edge to retain much of the natural qualities of the shoreline areas for the boater. In this regard, public use facilities should be so located as to not prominently interrupt the natural qualities of the shoreline when seen from the water. Cars should be parked well above high water level and hidden by vegetation or behind land forms which would screen them from the water surface. This is also desirable of views from the roads and other onshore vantage points.

Annual drawdown of the reservoir will show the greatest effect on the north and east sides of the reservoir, in certain creek arms and in limited portions of areas south of the Pope Creek arm. In some cases, a drawdown of 20 feet may expose as much as 1,200 feet of previously submerged land. At water levels above elevation 400 feet, the

maximum amount of land exposed by a 20-foot drawdown would be about 400 feet horizontally. The areas subject to excessive horizontal water recession are generally adjacent to land areas having sparse tree and brush growth. In areas where substantial vegetation was removed below the 440 foot elevation, a prominent line of demarcation describes the maximum pool. Horizontal lines of this sort are incongruous with a natural landscape but will be rapidly mellowed by varied regrowth over a short period of years.

Successive dry years resulting in a progressive lowering of the reservoir level to elevations below 340 feet will have a marked effect not only on aesthetic qualities but will also severely limit public use in all respects.

Typical of the coastal valleys and surrounding mountains, the contrast between the live oak and golden mantle covering the earth from June through October is a delightful natural sight. The reservoir water, winter colors in shades of green of the native grasses, oaks and Digger pines make the area attractive throughout the year and provide a continuous change in visual environment. The spring display of Redbud is outstanding and a profusion of wildflowers highlights the season. In fall there is a display of bright autumn colors of the maple, redbud, and deciduous oaks, while winter adds the beautiful reds of the fruit of madrone and toyon which grow profusely.

The species of trees and shrubs used for supplementary planting should be selected from the list of indigenous plants, to further enhance, in variety, with emphasis on the darker greens provided by conifers and certain broadleaf evergreens plus selected types of trees for seasonal color emphasis.

The vegetation and rounded land forms covered by wild grasses complement each other. There are very few sharp, harsh lines present in the area. Since roads requiring excessive cuts and fills are difficult to disguise and blend into the natural landscape, care should be exercised in their location, to minimize adverse effects. Due to soil character in this area, cuts and fills do not rapidly revegetate, resulting in many years of ugly scars.

The area will be subject to excessive erosion by the development of necessary roads and parking areas. Judicious grading and planting will reduce the resulting adverse visual effects.

The natural qualities inherent in the area as described above do not, however, suggest an architectural style nor do they indicate a choice of building materials for structures. An imaginative approach in design and materials with reasonable variation should be considered. Both color and form can be successfully incorporated into the existing natural landscape in amounts and proportions to highlight in variety the dominant natural theme.

The problem of excessive dust through intensive public use should be given serious attention, particularly on roads and in the use areas. Maximum fire prevention and control should be exercised at all times to preserve existing vegetation, promote natural reforestation, and protect wildlife habitats.

Of extreme importance to reservoir values are the approach areas. The access roads from Napa to Moskowite Corners twist through canyons thick with maple and oak, pass occasional ranches, and traverse small valleys. Future road work should preserve as much of this natural beauty as possible since travel should be part of the pleasure of a recreation day. County zoning should also recognize this important aspect of recreation. The natural gateway and distribution point for visitors is Moskowite Corners in Capell Valley. The character of development should be receptive and suggest to the visitor the magnificent recreation area ahead. Public use information and services should be available, including perhaps a large permanent map to direct the visitors to facilities.

From the Central Valley, the natural gateway is the beginning of the steep canyon a few miles east of the dam. This area is not within Napa County; however, appropriate action to maintain the approach quality along Putah Creek is being carried out by Yolo and Solano counties through intercounty cooperation. Particularly important in this area is the redbud display in spring and the beautiful creek next to the highway which, through the control of floods, will soon

become tree-lined, and constant in level with clear cold water for fishing.

Steepness of the upper slopes terminating in the major ridgelines that surround Berryessa Valley give reasonable assurance of a continuous green belt of undeveloped land behind the lower slopes with their probable development. Steepness of the canyon sides through which major entrances to the reservoir wind will help to reduce the amount of development and assist in maintaining a greenbelt adjacent to major access roads.

## III. PUBLIC USE CONSIDERATIONS REGIONAL AND LOCAL

### A. Population

The nine Bay Area counties had a 1955 estimated population of 3,174,500 1/, or an increase of 18.4 percent since 1950. By 1970 it is estimated this population will be between 3-3/4 and 4-3/4 million persons 2/, or an annual increase of from 50,000 to 100,000. The Sacramento Metropolitan area had an estimated 1958 population of 450,000.

The four North Bay counties of Napa, Solano, Sonoma, and Marin had a 1955 estimated population of 420,700 or an increase of 24% from 1950 to 1955. By 1970, this population will probably approach 750,000 3/. For design purposes, the North Bay Aqueduct Study estimated the North Bay population in the year 2010 at 1,600,000. Within a 50-mile radius of the project, present population is approximately 1,500,000, over one-half of which is included within the nine Bay Area counties, and one-third in the Sacramento metropolitan area. By 1970, it is estimated that over 2 million persons will be living within 50 miles of the project.

By comparison, Folsom Lake State Park, serving a more limited metropolitan population, had a 1958 visitation exceeding one million visitor days. Because of its large size and greater population served, Monticello Reservoir can expect probable use in excess of two million visitor days per year in the near future.

### B. General Considerations of Public Use

Reservoirs offer vast opportunities for aquatic activities of all kinds not usually provided for in urban areas. The great interest in water recreation is clearly seen in the increase in purchases of boats, motors, fishing equipment, fishing licenses, etc. The most popular and heavily used areas for regional

1/ State Department of Finance
2/ State Department of Finance
3/ Projected Growth of the Bay Area - 1950 to 1970 published by the San Francisco Bay Area Council, San Francisco, California 1957.

recreation are those which make available a water surface. Approximately 1,000 pleasure boats per year are purchased in the San Francisco Bay Area, with an average annual increase of 4 percent. On most weekends from March to October a great proportion of these boats is transported to inland water areas and the pleasures of boating, fishing, swimming and water skiing are enjoyed by the whole family.

Monticello Reservoir is one of two major fresh water lakes in the San Francisco Bay Area. Although other smaller reservoirs are located within the region, only a few are available, at present, for public use. These are limited in size, have extreme seasonal water level fluctuation, with limited permissible aquatic activities and other special limitations resulting in meager opportunities for enjoyment and use of water for recreation. It does not appear that any major change or development will take place in the foreseeable future to help alleviate this shortage of usable water surfaces.

The only lakes of major proportions serving the Bay Area recreation needs, within reasonable travel distance, are Monticello Reservoir and Clear Lake. With the latter already overcrowded and with minimum public use facilities, the importance of Monticello Reservoir is clearly seen as an integral part of the San Francisco Bay Area park and recreation picture.

The reservoir, located adjacent to or within two large metropolitan areas should be extremely popular for day and weekend use. Patterns of use at similarly situated reservoirs bear out this expectation and indicate a probable increase.

The activities sought by the public at "regional" facilities of this kind include both active and passive types, as well as commercial and non-commercial. These include such day uses as picnicking, hiking and riding, plus aquatic activities of all kinds including swimming, boating, water skiing, and fishing. Pleasure driving, sightseeing, and overnight camping are also enjoyed.

A very important aspect of the day and weekend use of a reservoir is the participation by the whole family, groups of families, and organizations such as church, youth, industrial and fraternal groups. Facilities must be made available to accommodate the many and varied activities and interests

of the users. Groups of 4 and 5 families gathered for a weekend of boating and related activities are not uncommon at reservoirs. Families of 5 or 6 members are also common; the average family size is about 4 persons.

The pattern of use at reservoirs relatively close to urban areas and subject to day and weekend use presents some difficulties in the design, operation and maintenance of its recreation areas. Up to 80 percent of use may take place on Saturdays and Sundays, resulting in a marked fluctuation in weekly use. Seasonal fluctuations in use are dependent on the weather pattern.

Monticello Reservoir should be popular throughout the year. The seasonal pattern shows fishing to be a year-round activity, tapering off only during mid-summer. With the coming of warmer days, other day use activities begin and pleasure boating becomes heavy. During the summer months, aquatic sports and outdoor activities of all kinds are enjoyed. Volume and multiple use of the area tapers off sharply in September to minimum use by mid-October, when the winter use pattern begins. Unusually fine late fall or early spring weather results in substantial weekend use during those seasons.

The major recreation season should extend from March until October with maximum use taking place in July and August and on major holidays from Memorial Day through Labor Day.

The amount of use of the reservoir recreation area will be affected by the variety and extent of facilities provided. Major uses should consist of boating, fishing and swimming with almost all families enjoying the area primarily for at least one of the above activities. Due to high temperatures, relatively steep topography and, at present, somewhat minimum desirable vegetative cover, other activities such as picnicking, sports, and hiking are supplementary to the use of the water. Popularity for camping should continue due to water activities and the very pleasant evening and night temperatures. Considering its proximity to population centers, the reservoir area should be extremely popular for organizational camping during the main season and then throughout the year if permanent quarters are provided. Of greatest importance, however, is the potential of the area for those activities that permit family participation as a unit.

The area surrounding the reservoir should experience considerable growth in both seasonal and permanent population. Although not feasible for all but a small percent of the population at the present time, the weekend or vacation house will probably be very evident. Permanent homes will dot the hills around the reservoir within a few years, with quite a sizeable resident population. Further growth of industry in the North Bay Area and between Vallejo and Sacramento will shorten commute distances to the reservoir from the major employment centers thus created. Other similar employment centers probably will be created within one hour's driving time, particularly in Solano, Napa, and northern Contra Costa counties. The existing commercial centers of Napa and Winters undoubtedly will show great expansion. These factors should result in increased use of areas and facilities during the normal mid-week lull.

The increasing popularity of the mobile home and camp trailer also will affect the weekly and seasonal use pattern of the reservoir area. It is but a short distance from U. S. 40, and should attract many transient as well as "permanent" mobile homes.

A substantial demand exists for facilities for private and quasi-public sporting groups, particularly boating and hunting. Study of the reservoir reveals that insufficient public areas are now available for satisfactory use of this order. The reservation of areas for private groups should be given consideration only if future space conditions permit and they do not interfere with maximum general public use. Public, non-profit youth and civic organizations will probably request space for camping-type activities as will probably religious, fraternal and other special interest groups. Their needs should be accommodated only if space and conditions warrant, but should receive a higher priority than private groups.

Areas in private ownership adjacent to roads and public lands will probably be developed for uses complementary and supplementary to the use of public recreation lands. Uses of private land will probably include commercial uses, and certain commercial forms of recreation in answer to demands not satisfied on public lands. Such uses, however, will be somewhat limited by the nature of the needs of the users. Only very limited facilities for entertainment, overnight accommo-

dations, durable goods and personal services will be required until a permanent year round population is established.

A demand can be expected for certain commercial service and facilities, both within and adjacent to the public areas. However, a large percentage of the goods used by the visitors to the area will be brought from home, and the commercial goods and services will consist primarily of non-durable items such as picnic supplies, refreshments, fuel, and the replacement of lost or broken durable items such as boating, fishing, and camping equipment.

Certain specialized commercial recreation facilities will probably be demanded ultimately, including boat rentals, riding stables, excursion boats, restaurants and outdoor theatres. The establishment of these forms of recreation, whether on public or private lands, should be based upon proven demand. It should be emphasized that the reservoir is the major attraction of the area, and that aquatic and closely related activities will occupy most of the time and interest of the visitor. Hence, other forms of recreation should be supplementary and incidental to this primary use.

## C. Economic Considerations of Public Use

It can be assumed that a very large proportion of the users of the public facilities at Monticello Reservoir will come from the populous San Francisco Bay Area and the Sacramento metropolitan area.

Entrance and use fees are charged in order for Napa County and the concessionaires to provide for regional use. The fees are based upon a comparison with fees charged at comparable or similar public use areas, and upon an analysis of the cost necessary to build, operate and maintain the area and facilities. The area should enjoy great popularity from generally low and middle income groups because it will provide a day's outing at relatively low cost. Fees should remain reasonable for a variety of activities. The fees must also be adjusted with consideration of such factors as source of construction funds, administrative operation, maintenance procedures and costs.

Visitor expenditures for commercial goods and services

will drop off rapidly in areas that are but a short distance from the visitor's destination. With the large number of people anticipated, the reservoir area nevertheless should prompt a substantial user expenditure, with retail sales in the county in excess of normal population increases. Increased income to the County from sales tax returns should be realized; income may also be realized from entrance and use fees, property or possessory interest taxes, fuel taxes, licenses, and possibly percentages of retail sales. Income from these various sources should more than cover the expenditures by the county to provide recreation areas and facilities for public use at a reasonable cost to the public.

In regard to capital improvements, various methods are available to provide public agencies with development funds. Various state agencies have funds to apply to qualified projects undertaken by local public agencies including the State Wildlife Conservation Board and the State Division of Small Craft Harbors. Other development capital is available through revenue bonds, county general funds, or from private sources.

## D. Political and Planning Factors - Land Use and Circulation

Although the Monticello reservoir area is administered by Napa County, it is more importantly of regional recreation significance than local. Probably less than 10 percent of its total use will be made by Napa County residents during the first ten years of operation. Considering this high proportion of use by out-of-county residents and the dependency upon these visitors for a correspondingly large part of the revenues to administer recreation use of the reservoir, the policies of the county regarding recreation programming and development should consider the recreation needs and desires within the region or area of influence.

In addition to a major commercial center, probably located in Capell Valley three miles from the reservoir, a number of minor commercial centers adjacent to the public use areas and related to residential areas should evolve. These centers will serve the daily needs of permanent residents and also provide additional recreation services to the visiting public. It is probable that the two highways leading to the area from the southwest and southeast respectively should ultimately

become four-lane roads insofar as possible. The road from Napa to Moskowite Corners is now wholly inadequate for even present reservoir use. The road from Winters to Moskowite Corners is at best only adequate for anticipated use during the next few years.

The existing road from Moskowite Corners to the beginning of the west side public use areas will probably be adequate for some time. With the imposing of speed limitations on the west side, or Knoxville Road, it will probably be adequate for a number of years; however, future use will probably require its being widened and developed to at least a high standard two-lane road to the north end of the reservoir.

E. Other Recreation Areas and Facilities

Clear Lake has been briefly described in a foregoing section as the other major freshwater area presently serving the San Francisco Bay Area. Its shores are now lined with private, semi-private facilities and homes to an extent that the creation of additional public use areas other than the minimum facilities is improbable. Without major alterations in land availability for public use and access, Clear Lake probably will not affect the anticipated maximum use of Monticello Reservoir. With the population increases anticipated in the Bay Area, ultimately both areas will probably be used to capacity.

Folsom Lake, 22 miles northwest of Sacramento, the Sacramento River and Delta areas, and other lakes and reservoirs in the Sierra foothills will probably continue to be the major water recreation areas for residents of the Central Valley due to their close proximity. However, with population expansion, the overcrowding of these facilities can also be expected. Folsom and Millerton lakes are already frequently used to capacity for boating. Therefore it appears that these water areas will have little effect on the anticipated use of Monticello Reservoir in the foreseeable future.

Because of the existence of nearby park areas offering non-aquatic recreation opportunities, plus probable and possible future regional parks, the necessity of developing the Monticello Reservoir for a great variety of recreation activities, in addition to water and related facilities, seems to be unwarranted.

## IV. GENERAL DEVELOPMENT PLANS

### A. Purpose

The purpose of the Public Use Plan is to assist the County in the future development and management of public use areas and facilities according to: (1) the capacity of the land and water to accommodate public use; (2) the recreation needs and desires of the people who will use the area; and (3) the policies and abilities of the management agency; to determine and make recommendations for the general location, extent, and character of public use areas and facilities; to help in the formulation of policies, codes and ordinances for the management of areas and recreation facilities for maximum use, enjoyment, health, and safety to the visiting public.

### B. Development Concept

Certain general assumptions and objectives form the framework within which physical development takes place. The Public Use Plan is based upon the general principles and standards which guide physical development and help form an administrative policy.

The following assumptions and principles apply to the Monticello Reservoir (Lake Berryessa) area and the Public Use Plan:

1. Existing and future populations in the San Francisco Bay Area and Sacramento metropolitan area need parks of "regional" character and extent within a reasonable travel distance. There will be an increased demand for water areas for public use by these metropolitan area populations.

2. Due to its size, accessibility and usability, Monticello Reservoir will probably be the most important body of fresh water for public use in the San Francisco Bay Area for the foreseeable future and of significant importance to the Sacramento metropolitan area. No primary project purposes are incompatible with recreation uses. Establishment of a permanent warm water fishery appears to be entirely feasible.

3. The management of the project land and water areas is the responsibility of the County of Napa, with areas used

predominantly for public recreation. Initial development, operation and maintenance of public use areas and facilities will be primarily the responsibility of concessionaires under the general administration and supervision of the County. Presently, only public lands will be developed and no private, uncontrolled access to the water should be permitted.

4. The development of public use areas and facilities will be guided by the Public Use Plan and Reservoir Management Agreement. The design and placement of facilities should conform to county standards, policies, codes and ordinances. Such development should aim at optimum public use consistent with modern concepts of park and recreation area standards. Areas to be developed should be logical physical units for the contemplated use.

5. The project area is presently served by freeways from populous areas to within 20 miles of the public use areas. Rapid improvement of roads from these freeways to and within the area for safe access at moderate speeds is essential. For Bay Area visitors, State Route 37 is of primary importance; from the Sacramento metropolitan area, State Highway 128 is the logical route. No additional major access routes are contemplated for the near future. With sufficiently heavy visitation, some public transportation may be possible. Air terminals for increasingly popular private planes can be provided on private lands near the project area.

Roads within the public use areas should be park-like in character, and so located as to permit safe, convenient, and enjoyable access at restricted speeds.

6. Private land in the surrounding area will probably be developed for uses related to the public use areas and facilities, and will be primarily of residential or commercial character of relatively high value. Such development should be controlled by zoning, building codes, and other ordinances so as to encourage and assure land uses compatible with public recreation at the reservoir.

## C. Development Areas

The general location, extent and character of recommended public use areas at Monticello Reservoir are based upon

three major factors:

1. To distribute water surface recreation use insofar as possible in order to maximize the available water surface in relation to drawdown effects of the reservoir.

2. To establish policy of the management agency to lease areas to concessionaires for development, operation and maintenance of public use facilities.

3. The location, character and extent of usable project lands and access roads.

The west and south sides of the reservoir are more favorable for public use, with sufficient land of suitable character available for development of minimum basic public use facilities and, in places, for major use development. This is based on factors of access, vegetation, topography, reservoir drawdown, climate, and other conditions previously described.

Project lands between Putah and Eticuera Creeks are recommended for future expansion of park areas and facilities based on demand. Additional boat launching facilities in this area would not be necessary or desirable due to capacity use of the water surface by boats launched at initial public use areas. Future uses for this area will include picnicking, camping, trails, organization camps, primitive camps, swimming, and other activities. If public demand is insufficient to warrant expansion to provide for the above activities, the use of this area for controlled resort and/or summer home development may become feasible.

Public use facilities on the east side of the reservoir are not considered necessary or desirable within the foreseeable future because of excessive shoreline recession due to drawdown, high temperatures, sparse vegetation, extreme travel distance, and lack of road access. Future use of the area for riding trails, bank fishing, and other public uses requiring only minimum improvements may become feasible, however, if guest ranches are developed nearby. Project lands there should remain as a buffer strip between the water and future possible land uses on adjacent private property. The management agency should prohibit boat landing on the

east shore in order to avoid maintenance problems and possibility of fire and other damage to adjacent private property and stock. Limited reforestation is recommended.

Launching areas should be located at frequent, logical intervals along the south and west sides. The location and number of these facilities should be based upon factors of topography and relation to relatively deep water channels where the effect of seasonal and long range reservoir drawdown is minimized. Conflict between sites during periods of low water should be avoided by selecting areas with logical boundaries and sufficient land to develop other minimum basic public use facilities in proper proportion to the number of boats served.

Insofar as possible, the number of individual ramps should be fairly equally divided between the various concession (public use) areas in order to reduce as much as possible any undue advantage of one concessioner over another.

D. Development Considerations

The development of minimum basic public use facilities should precede or be concurrent with the development of non-basic or other facilities on project lands. Minimum basic facilities include access roads, parking areas, picnic areas, boat launching facilities, drinking water, sanitary facilities, grading and dredging for swimming areas and small boat harbors, conservation planting and seeding, signs and fencing, and fire suppression.

Related minimum basic facilities should be provided in at least the minimum proportion to the number of boats practical to be accommodated at any one site. Each concession area should be of sufficient size to permit economical development, operation and maintenance, considering fixed development costs required for certain facilities independent of size. In addition to the recommended number of ramps at each launching area, extent of parking should be controlled to prevent excessive launching and overuse of both water surface and related land areas. Parking capacity should relate to the number of boats that can be removed from the water in the early evening without excessive waiting, rather than based on the number of boats that can be launched during the relatively longer day period. Parking areas also should be provided in relation to the

amount of usable land for necessary on-shore facilities. Hence, a proper proportion between number of ramps, amount of parking, and space for on-shore facilities should be achieved.

Usable land within each concession area in excess of that necessary for minimum basic public use facilities may be used for non-basic recreation facilities including concession buildings, camp sites, expansion of picnicking sites, and marina facilities. The Public Use Plan suggests the use to which all project lands are best adapted, whether for initial or long range development. At Monticello Reservoir, public use demand should be sufficient to make necessary ultimate full development of all project lands.

Certain project lands and water surface areas should be developed for special purposes. Areas should be available for development of organization camps, with priority given non-profit, non-sectarian youth organizations. Organization camps should be located in less accessible areas not subject to major public day use impact. Primitive camp sites, accessible only by boat or hiking, should be provided only in specified locations due to maintenance, health, and safety requirements.

The administering agency should reserve certain areas for future development for uses not adequately provided for in concession areas, or those of a nature normally provided by a public agency. Such special facilities may include viewpoints and overlook parking areas, hiking and riding trails, picnicking and bank fishing areas, free access play fields, primitive areas, or special use areas. One large area has been so designated as a future major public use area and park (See Sheet 4). The area is of a scale and character warranting future development by a public agency.

Long range programs such as reforestation, landscaping of roads, and area plantings should be initiated. Existing natural features of the area should be preserved and enhanced through the establishment of development standards for land alteration and use of building materials.

Lands along the northwest portion of the reservoir near the Pope and Putah Creek arms are suitable for future resort-type development and mobile homes. These sites are less subject to extreme traffic problems and day use impact.

The bulk of public use areas and facilities should be located in the southern one-half of the reservoir adjacent to deeper water for sustained use through dry seasons and conditions of excessive drawdown. The future resort areas to the north will probably have adjacent usable water areas most of the time. During successive dry periods when the reservoir may reach minimum pool level, resort activities would probably be sustained due to the variety and type of leisure time activities offered; whereas, in the same location, public use areas and facilities would be greatly reduced in value.

## E. Analysis of Public Use

The demand for camping facilities will probably be relatively high during the first year or so of public use. However, demand for day use will probably soon predominate and exceed the capacity of the water area and facilities as the population of the North Bay counties increases and road improvements permit easier access and reduce travel time. The extent of camping areas indicated on the Public Use Plan is based on the suitability and capacity of the land, its location, and availability without undue impairment of day use opportunities. Primitive camping facilities should be made available in areas accessible by boat or trail only.

Additional campsites may eventually be necessary and would best be located in the expansion area at the north end of the reservoir. However, no additional launching areas should be created in the expanded camping areas except for the exclusive use of the on-site campers due to the optimum capacity of the reservoir for boats having otherwise been planned.

With boating and other aquatic activities as the primary recreation objective, certain on-shore areas and facilities in addition to camping are necessary to fully enjoy and use the reservoir. Based on the desirable maximum number of boats utilizing the water surface, not less than a 1:1 proportion of on-shore facilities per boat should be considered; a desirable minimum would be 2:1. A proportion of on-shore facilities for family use (camping and/or picnicking) per number of boats of 4:1 would provide for all boating families and a reasonable number of non-boating families attracted to the area. The latter group could prevent maximum use of the water surface by occupying on-shore facilities needed by boating families.

Areas should be provided permitting free or low cost use of day use facilities such as picnic sites, parking areas, trails, comfort stations, viewpoints, and bank fishing areas. Such facilities should be provided by a public agency and will help reduce non-boating day use impact on concession areas.

F. Special Considerations

Monticello Reservoir is not expected to attract large numbers of waterfowl. However, as urbanization near other existing waterfowl areas increases, this area may become popular for migratory birds. In the event it is found desirable in the future to permit hunting of waterfowl, an area may be so designated and zoned at the north end of the reservoir, north of a line generally perpendicular to the reservoir axis from the Putah Creek arm. The judgement of whether to permit hunting of waterfowl should be based on future recommendations of the California Department of Fish and Game and subject to all State and local laws. No hunting should be permitted to interfere with other recreation activities.

Portions of the reservoir found to be particularly good for fishing should be designated "slow" boat speed areas. Water skiing and unrestricted boat speeds should not be permitted in narrow creek arms less than 400 feet in width.

No change in reservoir capacity will be permitted by the dumping of earth fill to create public use areas. However, in certain locations as previously noted, seasonal drawdown will expose extensive land areas located only a few feet below maximum water surface. With permission of proper authorities, some of these areas might desirably be reclaimed for public use. The earth fill used for such purposes should be obtained from borrow pits below elevation 440 so as to assure no net change in reservoir capacity. This is of particular importance for public use of the "islands" created by maximum water elevations. Seasonal drawdown will expose natural "land bridges" or peninsulas very attractive to visitors, resulting in demand for public use development. Controlled use of the islands, through the development of proper facilities, would be desirable. Earth fill for the improvement of the land bridges should be obtained from borrow areas below maximum water level.

Structures such as refreshment buildings, sanitation facilities, and other permanent buildings which would be seriously damaged or would pollute the reservoir under flood conditions should be placed above the 455.5 foot surcharge elevation.

Firebreaks should be created between the public use areas and adjacent private property. The trails so created could be used for riding trails, being somewhat removed from the high density public use areas.

Existing roads entering the public lands and continuing down into the reservoir should be closed to public use unless they are integral parts of a concession area or under controlled use.

Water and land areas in the immediate vicinity of the Dam or Reclamation Zone are closed to public access and use except for the public parking and observation area presently provided. Additional pull-off and parking areas should be provided on the reservoir side of the highway short distances above the dam.

## G. Utilities and Services

It is unlikely that potable water will be available to public use areas from the existing springs rising on adjacent private property except by purchase. A number of good springs are being developed by private interests, and the formation of private water companies is likely. Other sources of potable water include the yields of year-round streams entering the reservoir, and water from the reservoir itself. Use of water from sources other than the reservoir may not require complete treatment, whereas reservoir water would probably require full treatment.

The use of wells may become practical in certain locations; however, past experience of drilling wells in the area has proved generally fruitless. Wells may be feasible adjacent to the reservoir if the water table is substantially affected by the impoundment. Sources of water for public use from springs, creek beds or wells should be preferred over the reservoir water due to quality, taste, and temperature. In the use of water from year-round creeks, the status of water rights should be determined and appropriate filing be done, if necessary, due to

possible upstream diversion from the smaller creeks for private use. Water intake from the reservoir should be from submerged pumps in locations where a sustained supply is assured regardless of drawdown. Napa County public health authorities will be responsible for water supply requirements, standards, and inspection. In most cases, the individual concession areas have storage tank locations of sufficient elevation to provide at least minimum usable water pressure. Water for fire suppression is available from the reservoir by auxiliary pumps. Due to management agency policy, water supply and distribution systems should be a responsibility of each concessionaire unless water is purchased from a public utility company. Sanitary facilities will be based on the requirements of appropriate public agencies. The use of portable chemical toilets is recommended for a limited initial period only, in public use areas. Permanent comfort stations and service buildings should be established in all day-use and camping areas, and should be based upon optimum capacity use of the area. The use of portable chemical toilets should be permitted near launching areas during periods of excessive drawdown and in primitive camp areas.

Permanent sanitation facilities and disposal systems should be above the 455.5 foot surcharge elevation.

Garbage and trash should be removed from the concession areas to a centrally located off-site dump or disposed of in an appropriate gas-fired incinerator located so as to be least offensive to visitors. The County of Napa may otherwise provide a free dump for the use of concessionaires.

## H. Recommended Standards

### 1. General

With full development, and at optimum water surface elevation, it is estimated the reservoir should accommodate 3,000 boats, needing approximately 125 launching ramps. A minimum of 8,000 picnic sites and 800 camp sites should be provided. Maximum slope for public use facilities is considered to be 25 percent. Each launching ramp should be provided with a minimum of three acres of usable land, including three-fourths of an acre for parking and space for a minimum of 30 picnic sites.

2. Areas and Facilities

(1) Circulation: Main roads to launching areas should be as direct as possible and should not require day visitors to pass through camping areas. Maximum speed limits should not exceed 25 miles per hour. Intersections of entrance roads with concession areas and main county roads should have a minimum of 300 feet sight clearance in both directions. All vehicular and pedestrian ways in day use areas should be surfaced with a dust palliative. Parking areas should be provided for unhitched boat trailers, cars and trailers, and cars without trailers.

(2) Roads and Trails: Major roads should consist of two 12-foot travel lanes and three foot stable shoulders, occasionally widened to eight feet for emergency use. Maximum grade should not exceed 10 percent. Minimum right of way approaches through private property should be 84 feet.

Main roads should consist of two 10-foot travel lanes with two foot shoulders or one 12-foot travel lane for one-way, with a maximum grade of 15 percent.

Main pedestrian trails should be not less than six feet and minor trails not less than four feet in width.

(3) Parking Areas: A minimum of three-fourths acre should be provided for parking in connection with each launching ramp at the rate of 800 square feet per car and boat trailer; 350 square feet for unhitched trailers; 350 square feet for car only (including parking lot circulation). Parallel parking should be permitted on eight foot shoulders along the access roads to the parking areas.

(4) Picnic Sites: A minimum of 30 picnic sites should be made available per launching ramp. Each site should have one table on stabilized surface, and one outdoor cooking unit should be provided for each two picnic sites. Group sites for three to four families also should be made available. A garbage disposal unit should be provided for each three or four sites, based on a maximum pick-up distance of 50 feet from each site. An open space for active play should be located within 1/8th mile of all sites. A maximum of 40 sites per net usable acre (exclusive of open play space, roads and parking) with a minimum of 500 square feet for the developed portion, is recommended.

(5) Camp Sites: (For tents, camp trailers and tent cabin or semi-permanent shelters). Picnic and camp sites may be interchangeable for peak loads. Each camp site should have off-road parking space. Equipment and facilities should include one table, an outdoor cooking unit, and trash disposal within 50 feet, or one for each three or four sites. Areas should be maintained preferably as turf. Camp trailer sites should be located on two-way roads, or at an angle to the road. Screen and buffer plantings are desirable.

A maximum of 15 camp sites per net usable acre is recommended, with a minimum of 1,000 square feet of developed area per site.

Primitive camp sites should consist of a fire pit or rock cluster and a cleared area of 10-20 feet in diameter. Sanitation facilities, preferably chemical toilets, should be available, as well as a concrete garbage or trash pit. Potable water is desirable but not mandatory.

(6) Swimming Areas: Small children's or beginners' areas should not exceed three feet in depth. Reservoir swimming areas should have a stabilized bottom of sand, gravel, bituminous materials, or soil cement. Underwater areas should be cleared of holes, vegetation, boulders, debris or other hazards. Beaches should be of sand, or sand over a stabilized base. All swimming areas should be enclosed by floats or other barriers which can support the swimmer. Diving boards should not be permitted on floating platforms. Life guards should be provided in day use swimming areas. SCUBA and skin diving may be permitted in protected, designated areas if found desirable.

Maximum slope for beaches is considered as 10 percent, while underwater slopes may be from 5 to 10 percent. Forty square feet of beach area should be available for each person, plus a 15 to 20-foot buffer strip adjacent to the water. Maximum swimming area from shore to barrier should not exceed 150 to 200 feet with floats not over 75 feet from 5 feet depth area.

3. Boating and Boat Facilities

Marinas should always be located at a safe distance

from swimming areas, and should contain the following facilities; gas station, rental boat and visiting boat docking area, and a boom, launching ramp or other launching device, berthing stalls with minimum 4 feet wide access walks, and boat wash rack. Facilities should be adjacent to steep banks and deep water to minimize their shifting due to drawdown, preferably in protected location from wind and wave action. Mooring, if provided, should not impede boat circulation. A minimum of 1/2 acre for on-shore facilities, plus 400 square feet land area per boat berth is recommended.

In camping areas one double ramp or two-lane road is recommended for each 100 camp sites. Parking is not required, but a car and boat trailer turn-around is essential.

4. Other Aquatic Activities

Water skiing take-off and landing areas should be designated and marked with appropriately colored markers on floats, preferably near day use and camp areas where a relatively stabilized underwater earth surface is available. Landing areas should be 100 to 200 feet long, approximately 800 feet apart in day use areas and a minimum distance of 200 feet from launching areas, marina or swimming areas. Likewise, water skiing should not be permitted within 200 feet of shore except at designated take-off and landing areas.

A non-power or small boat area is recommended for each day use area with a minimum of two acres of water surface area.

In construction of high water launching ramps (those above the 400-foot contour) reinforced concrete or other stabilized surface material, roughened for traction, is recommended. One way circulation to launching area is advised with a waiting zone on the entrance road. No direct access from parking area to ramp, except past the waiting zone, should be provided. A passenger loading and temporary tie-up area adjacent to ramp is desirable. Recommended width of ramp is 15 feet with slopes between 12 and 16 percent.

Access roads to low water launching ramps (those below the 400 foot contour) should be constructed on gradients of 1 to 5 percent, and the launching ramps on slopes of

12 to 16 percent; boats should be launched off side of the access roads by means of portable screens or landing mats with traction cleats laid on a natural launching slope extending approximately 20 feet below the water line.

5. Utilities and Services. (See Napa County Codes and Ordinances, included in the Addenda.)

(1) Sanitation Facilities: Permanent comfort stations and service buildings should ultimately be provided in all areas except in primitive camp areas or adjacent to low water launching areas or other temporary use areas. Disposal may be made by pumping from chemical concrete pit toilets with off-site removal, by septic tank system, or by treatment plant without effluent discharged into reservoir, unless complete treatment is provided. Bathing and laundry facilities should be provided in main camping areas.

In day use areas a minimum of one toilet for each sex should be provided for each 80 persons or fraction thereof. Recommended maximum distance from picnic sites or other day use facilities is 300 feet.

In camp areas one toilet for each sex should be provided for each 40 persons, or one for each sex up to 10 camp sites with one additional toilet for each sex for each additional 10 camp sites or fraction thereof; also, one shower for each sex should be provided for each 15 camp sites. All toilets, showers and lavatories should be located at a maximum distance of 300 feet from each camp site.

(2) Water Supply: A water supply should be made available within 100 feet of each picnic or camp site, with a desirable maximum pressure of 40 p.s.i., to all buildings including comfort stations and service buildings. All pipes should be installed underground.

(3) Electric System: This Service should be extended to all permanent buildings (except day use comfort stations), marinas, beaches, launching areas and special use areas such as outdoor theatres or tent cabins. Underground weatherproof conduit is preferred. Combination underground-overhead systems may also be used.

Southeasterly view down Putah Creek from confluence with Wragg Canyon entering right foreground. State Highway 128 in distant left center leading to right through Markley Canyon.

## I. Specific Public Use Areas and Facilities

### Area A1 (Markley Canyon - Map Sheet No. 1)

#### 1. Location, Size and Description

Area A1 is a relatively small bench of land situated in Markley Canyon between State Route 28 and the reservoir. It includes about 8 acres of land for development at a point approximately 1-1/2 road miles south and west of Monticello Dam. The bench is one of few similar land areas in Markley Canyon, a steeply V-cut arm of the reservoir, but is of greater size and better character for limited development of day use areas and facilities than are others.

#### 2. Existing Physiographic Conditions

The small ridge lines have slopes of from 15-30 percent with side slopes of 50 percent or greater; three minor ridges extend from the major ridge line bench adjacent to the highway and bisect it in a 20-30 foot cut.

The area is classed as "rough mountainous", but with easily worked rock below the surface soil.

The area has a fair cover of oak, brush and grass. Without vegetation, it would be subject to erosion and sliding.

#### 3. Existing Land Use and Circulation

A temporary unimproved road provides access to a rain gauge station and former water loading area.

#### 4. Existing Utilities and Services

A power line is located within one mile of the area.

#### 5. Public Use Resources and Potentiality

Area A1 is one of few small land areas adaptable to public use close to the Dam and available to users from the Central Valley with a minimum of travel distance. Facilities at this location, however limited, will ultimately be

required. Land alteration will be necessary to permit public use. Very minor use is now made of the area by walk-in anglers and picnickers. Greater use of the area is prevented by topography and limited off-highway parking.

6. Specific Design Proposals

Alteration of the site as noted above would permit boat launching, parking, limited picnicking, boat berthing, and service structures. Parking areas of two to three acres maximum would permit approximately four launching ramps or comparable launching devices to be developed. Picnic areas should be adjacent to water surface for bank fishing and be linked by pedestrian paths. Fill material may be placed in the canyon areas to create additional usable areas.

A water ski launching and landing area should be provided; boat berthing and limited on-shore marina facilities may be established. A hiking trail to overlooks at about elevations 1,260 and 1,470 feet should be established in this area.

Desirable commercial facilities would include a restaurant or refreshment building, and store for fuel, bait, and other supplies.

Domestic water supply from either on-shore wells or the reservoir would be feasible; concrete lined pit toilets probably would be entirely adequate.

Areas A2 and A3 (Markley Canyon - Map Sheet No. 1)

1. Location, Size and Description

These two areas are located at the upper end of the Markley Canyon arm, and are considered jointly due to their interdependence. Area A2 is approximately 2 miles south and west of Monticello Dam and adjacent to State Route 128. It includes about 3 acres of land between the highway and the reservoir. Area A3 is adjacent to the highway, about 800 feet south and across the road from Area A2. It would include about two acres of usable land after necessary alteration. Included within Area A2 is a shoreline area on the west side of Markley Canyon.

2. Existing Physiographic Conditions

Area A2 is characterized by a general slope of 15-20 percent from the highway to the reservoir. The west side of Markley Canyon at this point has very steep slopes with a number of usable benches of land just above the maximum water level.

Area A3 is made up of level land adjacent to the creek below the highway.

Thin topsoil covers easily-worked subsurface rock.

A six-foot culvert permits drainage under the highway to the reservoir in Area A2; the reservoir pool penetrates Area A3 through a 12-foot diameter culvert under the highway. Access across the highway via the main culvert for passage of cattle has been granted an adjacent land owner, but has been found to be impractical for the purpose.

Both areas are well covered with oak, brush and grass.

3. Existing Land Use and Circulation

A private residence is located within Area A3 and action for removal should be instigated by the proper authorities. An unimproved private access road has been established at approximately the 500-foot contour level on the west side of Markley Canyon, with access onto the highway opposite Area A3.

4. Existing Utilities and Services

Power is available from a point two and one-half miles north of Area A-3.

5. Public Use Resources and Potentialities

Areas A2 and A3 relate to a need for access to the water surface for visitors from the Central Valley. Although demand is great for public use in this area, limited usable land prevents extensive development. Land alteration would be required for the development of public use facilities.

Facilities at Area A2 are proposed adjacent to the reservoir pool, at water levels above 400 feet elevation.

Due to limited space, Area A3 has minimum potentialities for public use; however, its location suggests commercial recreation uses to coordinate with Area A2.

6. Specific Design Proposals

Site alteration and culvert extension would permit the development of parking areas, launching ramps, limited picnicking, boat berthing and on-shore marina facilities with a refreshment and supplies building on the portion between the highway and the reservoir.

Picnic sites with access by foot or boat should be provided adjacent to the water surface on the west side of Markley Canyon. No general public access by road should be permitted to this side of the canyon.

Up to four ramps or mechanical launching devices can be accommodated, with a parking area of approximately two acres.

Portions of State Route 3 should be used for free public parking with access to the water for bank fishing.

Permanent concrete pit toilets should be provided in the main public use area, with portable chemical toilets located along the west side of the canyon serving boat access picnic sites. Possible domestic water sources include on-shore wells or use of treated reservoir water.

Public pedestrian access between A2 and A3 could be provided through the existing 12 foot diameter corrugated metal culvert. It is recommended that, in time, the culvert be replaced by a box culvert of appropriate size. Since only minimum flows through the culvert occur most of the year, visitors to Area A2 could have access to additional picnicking and day use facilities in A3. However, unless improved access through the culvert is provided, pedestrians should not be encouraged to cross the highway between the two areas. Therefore it is recommended that the development of Area A3 be confined to special uses including refreshment

and supply buildings, overnight accommodations, or other highway-oriented commercial recreation uses.

For low water periods, launching roads should extend from the permanent ramps to the low water.

7. Other Public Use Considerations

In addition to the parking area now provided at the dam, a pull-off parking area and overlook should be established west of the dam overlooking Markley Canyon and the reservoir.

Public use of the old detour highway should be discontinued. The use of this road into the water for launching and parking is very limited and extremely dangerous. The large peninsula adjacent to State Route 128 and the detour highway may be desirable for future development. However, development is not warranted at this time due to the extreme site alteration required to make it usable.

In the construction of State Route 128, many small ridge-lines were bisected leaving high land forms between the highway and the reservoir. Removal of these land forms would enhance views of the reservoir and, at the same time, permit off-highway public parking. However, development of the flat areas thus created should be confined to Areas A1, A2, and possibly near the detour highway as mentioned above.

Boat speed restrictions should be imposed in portions of the canyon as shown on Map Sheet 1. The private road within the reservoir right-of-way on the west side should be used as a riding and hiking trail, ultimately extending to Wragg Canyon and other public use areas on the west side of the reservoir.

Reforestation of the Markley Canyon area should be undertaken, particularly in the developed and altered areas. Power is available from the main line near the dam or at a point on the peninsula between Wragg and Markley Canyons -- a distance of approximately 2-1/2 miles for Area A3.

In the use or alteration of the highway, right-of-way permission must be secured from the State Division of High-

ways and precise plans coordinated with highway policies and requirements.

## Area B (Wragg Canyon - Map Sheet No. 1)

### 1. Location, Size and Description

Area B is located in Wragg Canyon about 6-1/2 miles south and west of Monticello Dam. It is accessible via State Route 128. The reservoir right-of-way boundary is 2-1/2 miles via unimproved county road from State Route 128; the point at which the county road joins the state route is approximately 4 miles east of Moskowite Corners.

Wragg Canyon is a major arm of the reservoir, extending 3 miles south from the Putah Creek channel. At maximum pool, the reservoir in Wragg Canyon is from 400 to 800 feet wide near the proposed public use area.

A floodage easement was established by the Bureau of Reclamation at the head of the reservoir in Wragg Canyon. Land within the floodage easement is retained in private ownership.

A relatively flat bench approximately 300 feet wide and 1,300 feet long on the west side of the canyon is adjacent to the water within the reservoir right-of-way. Flat land making up the floor of the canyon, and located just south of the reservoir right-of-way, is about 600 feet wide. This land also is under private ownership and under floodage easement.

The area proposed for public use within the right-of-way includes the benches of land between maximum pool level (el. 440) and approximately the 500-foot contour elevation. Private land within the floodage easement should be developed for public use in conjunction with the public land.

### 2. Existing Physiographic Conditions

Wragg Canyon is a narrow but relatively flat-bottomed canyon flanked by steep slopes of 50 percent or greater. The canyon floor has a very shallow gradient, and a change in reservoir pool elevation of 10 feet will result in approximately 1,000 feet of horizontal water line recession. A few small

benches of land are adjacent to the reservoir surface. The regularity of the steep side slopes is occasionally broken by deeply V-cut drainage courses.

The canyon floor has top soil of reasonable depth, while the side slopes are very rough with thin soil over rock. They are subject to erosion and slipping if not protected by vegetation.

The centerline of the channel in Wragg Canyon meanders greatly within the width of the canyon floor. All streams within Area B are intermittent.

The floor of the canyon supports large oaks, lending a park-like character to the scene. Brush has been removed and the area supports a good stand of grass. The east facing slopes are well covered with oak, while the west facing slopes are thickly brush covered.

3. Existing Land Use and Circulation

The area is presently used for seasonal grazing. A private residence and other buildings remain within the floodage easement, which permits "... The right to repair, maintain, use and retain the existing structures in Tract 2 of said land subject to the prior right of the United States to flood, seep and overflow said Tract 2."

The County of Napa has retained a 40-foot right-of-way including the unimproved road from State Route 128 to the reservoir right-of-way. The road will permit and assure access to the public use area through the floodage easement with a minor relocation required in the floodage easement area due to the intrusion of the reservoir pool at maximum water level. County road improvements are necessary. Relocation of the intersection with State Route 128 to a point approximately one-half mile north of the present intersection is recommended.

4. Existing Utilities and Services

At the present time the area is not served by power, telephone or other utilities. The main Winters power line crosses Wragg Canyon approximately two miles north of the

proposed public use area. Existing domestic water is from wells or springs.

5. Public Use Potentialities

The Wragg Canyon site is important for the provision of public use areas and facilities for visitors from the Central Valley, and to decentralize and distribute recreation use. It is recommended that private lands under floodage easement be made available for public use. Facilities can be accommodated on the public land available in Wragg Canyon above maximum water level, but only to a very limited degree.

Considering the excessive horizontal movement of the water surface due to drawdown, the rather extensive road work required, and the minimum space available for facilities, public use of this area may not be feasible if visitors demand from the Central Valley does not warrant development or the floodage easement land is not made available for recreation purposes. However, the natural beauty of this canyon and reservoir arm and the remoteness from highway and reservoir day use impact suggest its development for public use and enjoyment.

6. Specific Design Proposals

Areas and facilities which should be provided include boat launching, parking areas, picnicking, swimming, boat berthing, and riding and hiking trails. Recommended uses of the floodage easement include expansion of the picnicking, swimming, parking areas, overnight accommodations, and various commercial forms of recreation including possibly a resort area, restaurant, riding stables, boat sales including repair and storage, and perhaps a mobile home area.

Up to ten launching ramps can be developed. Excessive horizontal water recession due to drawdown will require a number of relatively short ramps located at frequent intervals down the canyon adjacent to a low water access road.

A permanent parking area of approximately 3 acres should be developed near the high water launching ramps, with supplemental roadside and picnic area parking.

Picnic sites, at a relatively high density, should be created in the main public use area with permanent comfort stations installed. Additional picnic sites, equipped with water supply and portable chemical toilets, should be established along the west side of the canyon above and below the proposed access road.

Small improved swimming areas are recommended at frequent intervals along the west side. Other recommended facilities for aquatic sports include water ski launching and landing areas.

Boat docks and berthing should be provided and located in a separate area so as to least affect boating and other day use activities. A possible location on the west side, at the end of the proposed access road, is recommended.

A concession building for refreshments and supplies is indicated within the public use area. If the development of the floodage easement land is coordinated with the public use area, commercial recreation land uses such as refreshment buildings, boat berthing and a marina, may be located within the easement area.

Other feasible public use facilities in Wragg Canyon include the continuation of the hiking and riding trails from Markley Canyon. Certain benches of land adjacent to the water surface may be used for primitive camps, accessible by boat only. These camps should be provided with portable chemical toilets.

No restrictions on boat speed, other than those provided in the county boating regulations are deemed necessary.

Water supply for public use could best be provided by on-shore wells due to the excessive reservoir drawdown and the probable low quality and high temperature of the reservoir water in the upper reaches of this canyon. Purchase of water from off-site springs or wells also may be feasible.

The area should be further enhanced by planting of appropriate trees.

A large parcel of public domain land under project withdrawal lies adjacent to portions of the reservoir right-of-way and includes most of the ridgeline between Markley and Wragg Canyons. Due to the present inaccessibility of this estimated 500 acres, the area was not included in the Public Use Plan. However, because of favorable topography on the ridgeline, future possible public use may be made of this parcel. Campsites, mobile home areas, and other overnight accommodations could be desirably developed with direct, although relatively steep, access by trail to the reservoir at two locations in Wragg Canyon. Road access to the area would extend along the ridgeline from State Route 128 to the site. A small parcel of public domain land is located on the west side of the canyon near the public use area; this parcel should be made available for limited public use, and the small strip of intervening private land should be purchased to link the areas together.

7. Other Public Use Considerations

The private land surrounding the Wragg Canyon public use area will probably be developed into large-parcel homesites. With the improvement of the county road to the public use area, commercial enterprises of various kinds will probably be established at the junction with State Route 128 as well as near the public use area.

## Primitive Camp Area
(Wragg Canyon - Steel Canyon Peninsula: Map Sheet No. 2)

### 1. Location, Size and Description:

The area is located on a large peninsula formed by the reservoir arms of Wragg and Steel Canyons. The peninsula is at the southwest corner of the main body of the reservoir at the point where the "lake" enters the narrow, deep channel leading to the dam. It commands a magnificent view of the reservoir.

An area of approximately 1,500 acres is of importance to future public use; however, 500 to 600 acres remain in private ownership adjacent to the taking line, including 200 acres along the major ridgeline of the peninsula.

Presently inaccessible by road, the area is the most attractive portion of the reservoir area from the standpoint of natural beauty and scenic quality. The appeal of the area is further enhanced by many small bays and reservoir arms remote from the portions of water surface destined for heavy boating use, yet is adjacent to relatively permanent deep water. The area is characterized by very favorable topography with flat ridgelines and benches of land adjacent to the water surface. However, the side slopes above these benches are steep to the crest of the ridge.

A strip of private property 150 feet wide prevents the linking of each side of the peninsula through a saddle in the ridgeline at an elevation of approximately 150 feet above maximum water level.

### 2. Existing Physiographic Conditions

Many small side ridges and knolls extend outward from the main peninsula ridgeline. The areas of less than 25 per cent slope are along the ridgelines, in saddles, on knolls and on benches both at higher elevations and adjacent to the water surface, and at the ends of many of the small bays or reservoir arms. One such area has as much as 10 acres with slopes of less than 10 percent.

Although rough, mountainous and rather rocky, soils

Southerly view of peninsula area. Wragg Canyon on far right. Area B—Day use area at upper end. Primitive camp site in lagoon area at right of center.

support an existing tree cover which prevents excessive erosion and slippage.

There are no year-round streams within this area. The west side of the peninsula has one main channel forming the reservoir arm, while the east side has three small drainage courses which form a protected bay with a single outlet to the main reservoir (Putah Creek-Wragg Canyon confluence). The area is well covered by native oaks, and is one of few areas near the reservoir having excellent tree growth. There is little brush in the usable areas, but it supports a good stand of native grasses.

3. Existing Land Use and Circulation

A jeep trail serves the peninsula along the ridgeline within the private property. The land is presently used for seasonal grazing.

4. Existing Utilities and Services

The main east-west power line crosses the peninsula approximately one-half mile south of the southern limits of the public use area.

5. Public Use Resources and Potentialities

Based on physiographic conditions and location with respect to the reservoir, this peninsula is very favorable for public use. However, lack of direct access prevents intensive use by the public.

Development of the private property within the foreseeable future will probably include improved roads to the area, followed by large parcel homesites. These uses may be detrimental to the enjoyment of the natural beauty of much of the area, and access to the private development probably will create a demand for further development of the public area.

Since the area is one of the few having great natural qualities and is remote from public use impact and access, this character should be retained. Development should be minimum, and facilities should be provided only for very

limited and special public uses, even though public access by road is provided in the future.

6. Specific Design Proposals

The area should be used primarily for boat and trail access only. Boating campsites with minimum improvements should be provided including portable chemical toilets and a limited water supply. Certain underwater areas should be graded for swimming.

Space for a semi-permanent organization camp is indicated, to be accessible by trail or boat. Water supply for the camp would be from on-shore wells or from the reservoir with appropriate treatment as required. Other minimum improvements may be made in the organization camp area including: swimming area, playfields, and necessary buildings or shelters. To maintain a stable reservoir level near the organization camp area, a small dam might be developed.

A service and fire road should be created to serve the area. It should be closed to general public use except for hiking and riding. If road access is provided in the future, very low density campsites, accessible by auto, may be developed in portions of the area. An easement across private property should be provided for the service road and trails.

Acquisition of adjacent private property important to public use and enjoyment is recommended.

## Area C (Steel Canyon-Sage Canyon Area - Map Sheet No. 3)

### 1. Location, Size and Description

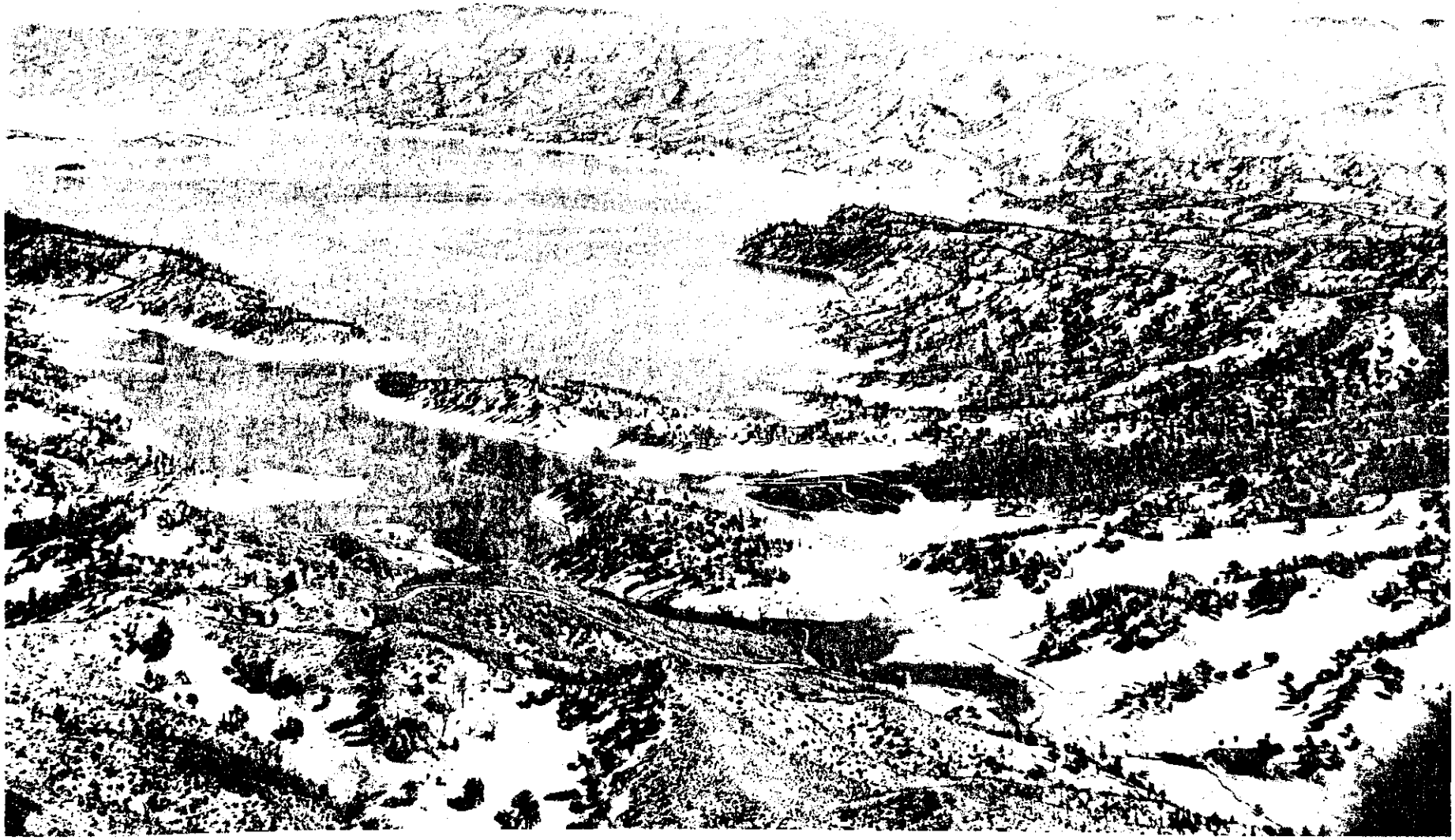
Included within Area C is the east side of Steel Canyon, an arm of the reservoir at the southwest portion of the main body of the "lake". Located in the canyon is Monticello Road, formerly State Route 37, which linked the city of Napa with the now inundated town of Monticello.

The road enters the public land adjacent to the reservoir approximately four road miles north of Moskowite Corners, at the junction of State Routes 37 from Napa and 128 from Winters to the east, and from Rutherford to the west.

This proposed public use area includes approximately 200 acres of usable land between the taking line and the reservoir. It is approximately two miles in length. The area averages about 1,000 feet in width, except for a large 35 - 40 acre peninsula at the confluence of the Steel Canyon arm and the main body of the reservoir.

### 2. Existing Physiographic Conditions

The land adjacent to the reservoir pool is characterized by rounded knolls, benches and ridges broken by V-cut drainage courses forming many small peninsulas. The ridgelines and benches have favorable slopes of five to 10 percent with side slopes to the water of 20 percent or more. Behind the proposed public use area, near the taking line, the land becomes steeper with slopes exceeding 50 percent on the adjacent private property. The minor ridgeline forming the large peninsula in the public use area slopes gently and is from 400 to 600 feet wide, terminating in a knoll near the end. In topography and form, the peninsula is very favorable for public recreation development and use. The land below maximum water level, adjacent to the peninsula, slopes steeply, and the horizontal effects of drawdown will be minimum. Further south in the canyon the land under the maximum pool level slopes more gently. Here, reservoir drawdown will probably have a marked effect on the sustained usability and visual quality of this portion of the public use area.



Northerly view of reservoir down Steel Canyon arm. Sage Canyon enters at left center. Area C is on right of stream. Area E is extreme left of center. Islands show in upper distant left.

The soils in this area seem more favorable to tree planting than is generally the case around the reservoir. Successive burns for grazing purposes have resulted in a minimum of vegetative cover, and the area is presently subject to severe erosion.

No apparent year-round streams enter or traverse the area. Run-off is rapid due to relatively thin top soil and sparse vegetation.

Considerable tree and brush cover is found where the canyon narrows at the southern end of the reservoir arm. Large portions of the area are treeless, particularly near the center of the portion proposed for public use. Vegetation on the remainder is sparse and brush-like. A good growth of native grasses covers most of the area.

3. Existing Land Use and Circulation

A few cabins and small permanent houses are found in Steel Canyon but no improvements exist adjacent to the proposed public use areas. The lands were previously used for seasonal grazing.

Monticello road is in poor condition, with a narrow width and many sharp turns. Repair or reconstruction will be necessary to provide safe, comfortable public use, at moderate speeds. The underwater portions of the road surface would probably have to be cleared of silt following recession to permit safe low water use of the road.

A small amount of private lands with floodage easement is located on the west side of the canyon. These lands are not considered an obstruction to public use, but acquisition would be desirable for protection of the character of the area.

Private lands adjacent to the proposed public use area and between Moskowite Corners and the reservoir will probably be developed into homesites for permanent and seasonal residences. Limited roadside retail commercial development will, no doubt, be developed. Other commercial developments near the public use area will probably include resorts and motels. With access already provided, private

development will probably begin immediately whether or not the public use area is developed initially.

4. Existing Utilities and Services

The main Winters power line bisects the proposed public use area.

5. Public Use Resources and Potentialities

Area C should become one of the major public use areas at this reservoir. It is of sufficient character and extent to provide for the development of extensive areas and facilities for all types of water-associated public use activities. Less desirable qualities of the area include sparse vegetation, poor road access, effects of drawdown along about one-half of the usable land adjacent to the reservoir, and the excessive distance necessary to extend roads so as to place public use areas and facilities near a relatively permanent water surface and the main body of the "lake."

With off-site road improvements, development of on-site public use areas and facilities and reforestation, Area C can serve large numbers of visitors. Its advantages include proximity to Moskowite Corners, the main entrance to the recreation area, land of a quality and extent permitting extensive development for various uses, plus an excellent relationship to the main body of the reservoir as well as providing a protected bay and reservoir arm.

6. Specific Design Proposals

Areas and facilities should include boat launching and berthing, picnicking, swimming, camping, hiking and riding trails, playfields, and commercial recreation uses including a refreshment and supplies building, overnight accommodations, and possible resort features.

The day use area should be located near the main body of the res ervoir for sustained use of facilities during periods of low water. Up to 25 launching ramps should be developed near the peninsula with launching roads extending to low water levels. Additional launching facilities should

be provided in the camping area for the use of campers only; these should link with the inundated Monticello road to provide low water launching for camp areas.

A minimum of 600 picnic units should be developed; as many as 1,200 picnic units can be accommodated in Area C. An improved high water level swimming area is recommended for the day use area. Other day use area facilities should include playfields, improved water ski launching and landing areas, boat tie-up areas, and aquatic sports observation areas and viewpoints.

A minimum of 300 campsites should be established; the camping area should include launching roads for camper use only, two small high water swimming areas and overnight mooring.

Concession-type facilities recommended for Area C include boat berths and marina, boat rental docks in the day use area as well as refreshment buildings and store available to both overnight and day use visitors, and possibly a resort-lodge development.

The main proposed access road within Area C parallels and is close to the taking line from the existing Monticello road to the day use area, and leads to the low water launching areas. Minor proposed roads will serve the camping area, various parking facilities in the day use area, and the marina and resort areas. A proposed service road, (hiking and riding trail) continues on to the primitive camp area. The riding trail will parallel the main access road to the vicinity of the floodage easement and then continue through the undeveloped public land on the west side of Steel Canyon to the Capell Creek arm. Road development in Area C will be a major cost item due to the distance necessary to reach the better public use areas. A maximum of 20 acres of parking should be developed in the day use area.

The use of wells, if feasible, or reservoir water with appropriate treatment appear to be the best source of potable water. Water from the reservoir could be obtained and stored at the north end of Area C in the vicinity of the suggested resort-lodge. Wells could be located at a number of points throughout the area with frequent storage points to serve limited areas.

Small sewage treatment plants may be feasible to serve the overnight camping area and suggested resort-lodge development. Permanent sanitation and service buildings should be established in all areas except within the temporary picnic areas reserved for peak visitor use.

Other considerations for Area C include low water launching areas to utilize the Capell Creek channel in order not to conflict with low water launching in adjacent Area E.

Development of Area C should begin with the overnight camping area and expand to the day use development as demand requires.

Boat speeds should be restricted in the Steel Canyon arm as indicated on the Public Use Plan. Minor grading will be required in the launching and swimming areas. No extensive land alteration above high water levels should be necessary.

7. Other Public Use Considerations

Other public use areas and facilities in the Steel Canyon arm include the use of the high water "island" for limited boat camping and the west side of the canyon for bank fishing with free public parking within the taking line and above maximum water level along the remaining portion of Monticello road.

## Area D (Capell Creek Arm - Map Sheet No. 3)

1. Location, Size and Description

Area D is located in the Capell Creek arm adjacent to the Knoxville Road (west side road) approximately one and one-half miles from the intersection with State Route 128 to Rutherford. It is the first public use area encountered on the Knoxville Road, lying just inside the project limits along Capell Creek.

The area contains a relatively flat, wide, triangular-shaped parcel with the Knoxville Road and Capell Creek as the base of the triangle. The area of significance for public use contains between 30 and 35 acres.

The main portion of this area is adjacent to the reservoir only when the water surface elevation exceeds elevation 420.

At a water surface elevation of approximately 430 feet, the reservoir passes under the Knoxville Road through a culvert and inundates portions of the triangular parcel mentioned above as the area of significance for public use.

Area D comprises the land between the Knoxville Road and the center line of Capell Creek, extending for a distance of approximately one mile east of the above public use area including the paved road that extends into the Capell Creek arm.

2. Existing Physiographic Conditions

In the main public use area, the relatively flat portion contains approximately 15 acres of land with slopes of less than 15 percent. There is about 1,000 feet of level highway frontage.

The land slopes steeply from the highway to the Capell Creek arm except for a small, rocky portion opposite the main public use area. The remainder of the land in Area D is made up of steep slopes exceeding 50 percent.

At the east end of Area D, approximately two acres of usable land are available, including the old improved road entering the reservoir. This portion is proposed for a high water stabilized pool.

In the main public use area, the soil is of marginal agricultural value. It supports a number of orchard trees and ornamentals and, under irrigation, a good stand of grass. The slopes are easily eroded and are subject to extensive slides frequently covering the Knoxville Road in Capell Creek Canyon.

The public use area is bisected by an intermittent stream bed, the sides of which form the proposed high water level stabilized pool mentioned above. Capell Creek, contained in a narrow, steep-sided, rocky canyon, is an intermittent stream with minimum flows under the gravels during dry periods. This arm will be approximately 300 feet wide at maximum pool level. Above the maximum pool level, the creek is a beautiful natural stream with occasional small pools lined with trees and grasses. It supports seasonal trout fishing.

A large field of approximately five acres has been cleared within the proposed public use area, and now supports a good grass cover. Large oaks are found adjacent to the inter-

mittent side stream beds while olive and other fruit trees, as well as ornamentals, which were planted by an early resident, remain. A recent burn destroyed all other tree growth from the slopes and surrounding hills. These are now thickly covered by brush.

3. Existing Land Use and Circulation

The Knoxville Road serves the area and lies between the flat usable portions of the area and the reservoir. At the east end of the area an old improved road intersects the Knoxville Road and is used for limited boat launching.

The main public use area was formerly the site of a residence and numerous other buildings. These have been removed from the site, but much refuse still litters the area.

4. Existing Utilities and Services

Both power and telephone service are readily available. Water was obtained from Capell Creek by the former residents.

5. Public Use Resources and Potentialities

Due to favorable topography, size and location with respect to Knoxville Road, ultimately Area D will be subject to development. Its position as the first and last public use area encountered by the visitors using this route gives it added importance. Its somewhat remote relationship to the usable sustained reservoir water surface suggests that a special use be developed which could be of a character that would complement other facilities and areas at the reservoir.

The proposed small stabilized pool, for example, could be of particular value and could desirably meet special needs such as swimming, bank fishing, and a family-type recreation area. Boating should not be permitted.

There is not sufficient land to develop public launching in connection with the old improved road at the east end of the area.

6. Specific Design Proposals

The recommended development of Area D includes commercial uses, day use facilities and possibly special overnight accommodations.

The proposed two-acre high water level pool should be stabilized at the 440 foot elevation thus creating a constant level swimming pool. Necessary water circulation would be maintained by pumping water from the Capell Creek gravels to the far end of the pool, with a controlled water outlet to the reservoir at the culvert under the Knoxville Road. Minimum grading and pool bottom stabilizing would be required.

A commercial and refreshment building should be located on the west side of the main area so as to serve highway traffic as well as park visitors to Area D.

Other day use facilities include picnic sites, special children's amusement facilities such as a fishing pond, pedal boats, bank fishing, and riding stables. The latter may be particularly appropriate with the riding trail to the dam available on the south side of the Capell Creek arm and a possible trail link with Quarry Canyon as shown on the Public Use Plan.

Rental boat docks may be located opposite the public use area at periods of water surface elevations greater than 415. At lower elevations, the docks may be moved to the east end of Area D. Boat berthing docks are also feasible at the eastern end, with parking provided adjacent to the existing reservoir access road. Limited public day use facilities may also be provided at the eastern end, including picnic units with access to bank fishing. A maximum of one launching ramp or mechanical launching device should be provided to accommodate boats berthed in the area. The parking area at the east end of the area should not exceed one acre.

Other facilities may well include a mobile home park on the east side of the main area, where space for a maximum of about 100 such homes is available. Overnight accommodations, such as a motel, may also be feasible along the highway in front of the mobile home area.

Access from the Knoxville Road to both sides of the stabilized pool should be provided. The east and west sides of the main area should be linked by road if the area is used entirely as a recreation park; however, if only a mobile home area is established on the east bank, a service road should suffice to connect the two sides.

Continuation of the hiking and riding trail through Area E into Area F (Quarry Canyon) would cross private property; hence, an easement would have to be secured from the respective owners.

The Area D water supply would probably best come from the travels of Capell Creek. It may be necessary to supplement this supply with water from the reservoir or by on-shore wells.

7. Other Public Use Considerations

In order to protect and enhance the Capell Creek arm which may be called the main "entrance" to the reservoir area, acquisition of the existing private lands between the Knoxville Road and Capell Creek from State Route 128 to the project taking line is recommended. This action is desirable in order to preserve the natural qualities of the canyon and to permit public access to the creek for trout fishing, hiking, and roadside picnicking, as well as to prevent uncontrolled and indiscriminate roadside commercial development which would be of marginal economic success.

The Peninsula between the Knoxville Road and the reservoir at the confluence of the Capell Creek and Steel Canyon arms includes an approximate one-half acre triangle of private property. Acquisition of this property also is recommended to assure a high quality of development and to further preserve the character of the general area. It is at this point that the main body of the reservoir is first seen by the visitor.

Future development of the peninsula should include 150 picnic sites, not over one and one-half acres of parking, access for bank fishing, and viewpoints. This area should be available for limited public use, with no entrance fees. Commercial development on the peninsula should be confined to a quality restaurant or similar use, placed well back from the highway so as to not interrupt the view of the reservoir.

## Area E (Vicinity Capell Creek to Spanish Flat - Map Sheet No. 3)

### 1. Location, Size, and Description

Area E is the first major public use area and launching site along the Knoxville Road. The area is of such size and character as to permit the establishment of all facilities relating to public use of the reservoir in such quantity as to create a logical park unit for development, operation and maintenance without requiring extensive land alteration or change of character.

The area begins approximately one-half mile north of the mouth of the Capell Creek and includes all project lands northward to a point on the taking line opposite the county maintenance yard and residential area at Spanish Flat, including the high water level "island" in the southwest corner of the main body of the reservoir. It contains approximately 65 acres of usable land for development of day use facilities including the "island".

### 2. Existing Physiographic Conditions

The land between the Knoxville Road and the maximum pool in Area E slopes generally less than 25 percent. A saddle less than 10 feet below the maximum water surface connects the mainland with the "island" onwhich there are approximately 30 acres of usable land for development.

A narrow, V-cut, intermittent creek channel divides the area adjacent to the Knoxville Road from a high ridge and peninsula area. The side slopes of the large peninsula exceed 25 percent; the main ridgeline and many lateral smaller ridges have slopes of less than 25 percent. The dead storage elevation of approximately 309 is within 1,500 feet of the island.

Soils are classified as "rough mountainous", but with a top soil of 2 to 3 feet in some areas which support good tree and grass growth. They are marginal in absorption quality for drain fields and when once wet they turn into a gumbo. The subsurface rock can be easily broken up, a condition fairly typical of the lower slopes on the west side of this valley.

Water courses in the area are only seasonal. A few springs rise on adjacent private property, which have already been appropriated for private development. The main intermittent stream channel is very narrow and deep.

Area E supports many small to medium size oak andDigger pine, with a good native grass cover. Very little brush occurs. Removal of cover would result in rapid erosion of slopes.

3. Existing Land Use and Circulation

An existing unimproved private road extends from the Spanish Flat loop road to the reservoir. A gravel road serves the county residential area and extends to the main ridge from the loop road. Another gravel road serves a private residence on the same ridge north of the county residential area. The Spanish Flat loop road is an improved county road.

The project lands in Area E are already used for recreation with access along the unimproved private road. Improvements on adjacent private property have been made for picnicking and camping. Water supply and sanitation facilities have been provided. A charge for the use of the road and facilities is made.

Other significant existing and planned private land uses in the Spanish Flat area include a possible elementary school adjacent to the loop road, the existing county maintenance yard and residential area, the relocated Monticello cemetery, the state forestry fire station, and a proposed commercial center of which a building for refreshments, gas, and supplies has been built with a sport and building materials store to be built immediately. Extensive residential homesite development is anticipated.

A small commercial enterprise has been established on a one-acre site between the Knoxville Road and the taking line immediately south of Area E. This development, known as Edgewater Cove, has offered gas and refreshments, and permitted boat launching from a small bench immediately below the store. The operation of this enterprise has presently been halted due to congestion and

non-compliance with county codes. It is recommended that no future boat launching be permitted from this location.

4. Existing Utilities and Services

Power and telephone service is readily available from a line adjacent to the Knoxville Road and from Spanish Flat. Water lines from springs now serve the existing private and public facilities. No water lines extend to project lands.

5. Public Use Resources and Potentialities

The location of Area E as the first major public use area available to the visitor on the west side road will subject it to extremely heavy day use impact. The demand for facilities will far exceed the usable land available. In order not to overload the optimum capacity of the area for public use and enjoyment, the extent of facilities should be rigidly controlled.

The portion of Area E between the Knoxville Road and the small bays is very favorable for day use. The "island" should also eventually be made available for similar use. The high ridgeline and peninsula adjacent to the main body of the reservoir has a magnificent overlook but, due to extremely steep side slopes, presents a rather poor relationship to the water surface. Hence, this area can best be used for special facilities including campsites, other overnight accommodations or resort-lodge development.

A low water level boat launching can be readily provided, but should be located well to the north to prevent possible conflict, during periods of low water level, with Area C across the Capell Creek channel.

6. Specific Design Proposals

Recommended day use facilities including boat launching ramps, picnic sites, parking areas, marina and boat berths, swimming areas, commercial buildings, trails, overlooks, and necessary utilities and services. Campsites and special overnight accommodations may be developed in portions of the area.

Up to 15 boat launching ramps should be developed in the day use area with low water launching ramps located as shown on the Public Use Plan. A minimum of 700 picnic sites should be established throughout the day use area to serve boating families and other visitors. An improved swimming area should be established with a minimum of one acre of beach.

A maximum of ten acres for car parking, plus roadside parking, should be developed in the day use area. Parking areas in excess of this amount would encourage over-use of the usable land. Access to the day use area is recommended by way ov existing road from Spanish Flat, which should be improved to accommodate heavy public use. Due to a necessary gradient in excess of 10 percent and possible traffic congestion during peak periods, access directly from the Knoxville Road in the vicinity of the day use area is not recommended.

Access to the island could be provided by a land bridge created with a small amount of fill applied on the present underwater saddle. Other fill areas might be desirable to accommodate parking in order to retain existing tree-covered areas for public use. A minimum of fill also could be applied to areas but a few feet below maximum water level to reclaim them for use. All material to be placed below elevation 440 must be removed from areas to be inundated.

A boat berthing and rental area is recommended in the deep, protected bay created by the intermittent creek channel. Boat tie-up, and ski launching and landing areas should be provided.

Other public day use facilities include the continuation of the riding and hiking trail, and playfields.

Camping, resort-lodge and special accommodations may be provided on the main peninsula and ridgeline across the canyon from the day use area. Up to 250 sites for camps, tent cabins or other camp shelters can be accommodated; a minimum of 75 campsites should be developed on the minor ridgelines if a resort-lodge development is adjacent.

Access to this latter area can be provided from the day use area or from the vicinity of the county residential area.

Water supply from the reservoir or on-shore wells, with storage on-site for gravity flow, is the most practical. A sewage treatment plant, preferably off-site, would best serve the resort-lodge and camping areas, while the public day use area could be served by chemical, concrete-pit toilets.

7. Other Public Use Considerations

With the county corporation yard and residential area adjacent to Area E, and the probable development of a small community in the Spanish Flat area, the residences of park personnel may be established on county property or within the right-of-way adjacent to the county area. Large equipment and material storage for park operation and maintenance should be located at the Spanish Flat corporation yard, with only minor storage facilities provided in the main park headquarters and information area (See Area F).

The acquisition of the land presently occupied by the Edgewater Cove commercial development is recommended so park quality and control can be preserved between the Knoxville Road and the reservoir.

View to northwest taken over State Highway 128. Napa County maintenance area and employee residences off loop road in central left. Area F with Future Major Public Use Area and main island areas in distant right.

## Area F (Park Headquarters and Future Major Public Use Area -- Map Sheet No. 4)

### 1. Location, Size and Description

Area F is approximately 1-3/4 road miles north of Spanish Flat on the Knoxville Road. The area is adjacent to Quarry Canyon and at the south end of the future major public use area. Included in the area is one main peninsula and two small high water level islands comprising a total of some 25 to 30 acres of usable land.

### 2. Existing Physiographic Conditions

The land is gently rolling with the highest point in elevation being approximately 500 feet m.s.l., or 60 feet above maximum reservoir pool level. Practically all of the area is usable. The first of two high water level islands contains approximately two acres. It is less than 100 feet from the main peninsula, and is connected with it by a ridge-line saddle less than five feet below maximum water surface. The second island is approximately 200 feet away from the first, also with a connecting saddle less than five feet below maximum water surface. It comprises approximately five acres. The Quarry Canyon side slopes are relatively steep where they are adjacent to the main peninsula. Slopes in other portions above and below maximum water levels are 20 percent or less.

Soils are fair in composition, with as much as 2 to 3 feet of adobe or clay top soil, while sub-strata are rocky but easily broken up. When wet, these soils become gumbo and are easily eroded in the absence of vegetation. They are extremely dusty when dry.

One minor V-shaped drainage course crosses the area. Quarry Canyon, adjacent to the peninsula, is narrow, very rocky, and deeply cut. The reservoir pool is reasonably close to the area at low water levels. Off site springs supplement intermittent stream flows in Quarry Canyon.

The area is well vegetated, primarily with oak trees and a good grass cover. The oaks are relatively small in size, but are quite pleasing in character.

3. Existing Land Use and Circulation

Area F was formerly the site of a residence and oil exploration operation. An existing on-site well can be made usable for water supply. The area is presently used extensively for recreation, with access by way of an unimproved road, to and within the area, from the Knoxville Road. A large, flat highway pull-off area exists near the entrance to the area. Area F may be seen by visitors in approaching cars for a quarter of a mile along Quarry Canyon.

Nearby private land uses include the Sugar Loaf Park commercial enterprise, which offers refreshments, supplies, fuel, picnicking and boat storage. The adjacent private land is very steep, and provides but limited opportunity for commercial or residential development.

4. Existing Utilities and Services

Power and telephone service is available nearby.

5. Public Use Resources and Potentialities

Area F is a part of the major future public use area forming the southern boundary of a large water basin. The development of the future major public use area should be by a public agency. Area F will be an excellent location for park headquarters and public information center. Sustained deep water in Quarry Canyon will permit the docking of maintenance and patrol craft near the center of the main body of the reservoir.

The headquarters site commands an extensive view of the reservoir, particularly the future major public use area. Located adjacent to the highway, it is readily accessible from the existing large pull-off and parking area, and visitors to this recreation area will find it conveniently located. The presence of potable water will make the site immediately useful, and there is a minimum of development problems.

Although the remainder of Area F would permit the development of all types of public use facilities, it is

considered to be of minimum size for their feasible operation. The presence of larger nearby areas for the development of these facilities reduces the demands on Area F, hence there is only minimum need for boat launching and commercial buildings. The probable very low density private residential development nearby will further minimize the need for marina and boat berthing.

Due to a probable future demand for limited day use areas at minimum or no-charge, Area F offers the best opportunity for permitting controlled public use near the park headquarters.

6. Specific Design Proposals

The Park headquarters area should occupy a 5 to 7 acre site adjacent to the Knoxville Road and Quarry Canyon. It should include a park headquarters and administration building, possible park personnel residences in addition to those in Area E, and structures for the storage of vehicles, life-saving equipment, administrative and non-bulk operational equipment and supplies. Boat berthing and tie-up with administrative launching device or ramp should be established. Limited on-shore boat repair facilities should be constructed. Outdoor areas near the headquarters building should be developed for official park agency meetings and conferences as well as sufficient on-site parking for personnel and official visitors. Limited quarters for official visitors might also be included.

The location and character of the site permits all work areas to be well screened from visitors. All structures should be of high quality in both design and character, due to the prominence of the location and the importance of the use of the site by the administrative agency.

The remainder of the site should include up to 250 picnic units. Parking areas of up to four acres should be developed, including smaller parking bays rather than extensive parking lots.

Access from the highway to the public use area and the non-public portions of the headquarters area should be provided north of the visitor pull-off parking area. Vehicular

access to the "islands" may be provided on land bridges requiring less than five feet of fill.

Pedestrian access to the major high water swimming area should be provided from both Area F and from possible parking areas adjacent to the Knoxville Road.

No boating facilities other than for official purposes, should be provided in Area F and no commercial facilities are recommended.

Sanitation facilities include septic tank and drainage field for the headquarters area (pending percolation tests) and chemical concrete pit-toilets in the public use areas.

Water supply from the existing well may be sufficient to serve the public use as well as headquarters area. Otherwise, water from the gravels of Quarry Canyon or onshore wells should be considered. No on-site storage location is available; therefore, use of pressure tanks rather than an elevated water storage tank is recommended.

7. Other Public Use Considerations

The area on the south side of Quarry Canyon includes only the riding and hiking trails from Area E on the south. It is suggested that the trail cross the highway and continue up the canyon to join the trail from Area D in the vicinity of Sugar Loaf. However, permission to cross private property would be required.

Development of the limited day use facilities in Area F should be based on demand and any lack of visitor accommodations in concession areas.

## Future Major Public Use Area (Map Sheet No. 4)

1. Location, Size and Description

The entrance to the future major Lake Berryessa public use area will be approximately one mile north of Area F, or park headquarters area. This area is adjacent to the Knoxville Road for a distance of approximately two

and one-quarter miles, from Quarry Canyon to Smith Creek, including the Area F frontage.

Included within a line circumscribing the land areas and bays is approximately 1,000 acres of land and water surface areas, over half of which is land.

This area is bisected by waterways creating two islands. One is of approximately 250 acres, while the other is of about 50 acres. Many smaller islands dot the area and a very irregular shoreline is created by minor ridgelines and small canyons.

The main island is adjacent to the now inundated Monticello town site and extends far out, over one-half the width of the reservoir, or for a distance of approximately one and one-half miles from the Knoxville Road. This island area more or less divides the reservoir in half and is prominently seen from anywhere on the water surface. This future major public use area is truly the most magnificent portion of the reservoir in all respects.

2. Existing Physiographic Conditions

The main island includes extensive land with less than 5 percent slope on the western side. The west and south facing slopes are very favorable for public use, whereas the north and east sides slope more steeply to the main body of the reservoir. A large bay is prominent on the southeast side of the island and is guarded, midway, by a smaller island. The bay is flanked for one-half its length by relatively flat land.

An earth-fill bridge could be constructed to connect this island with the mainland. The widest channel separating the two is approximately 500 feet. Extent of fill will vary from maximum pool level to 25 feet in depth.

The smaller, 50-acre island located to the northwest is characterized by steeper topography with one main ridgeline forming the backbone of the area. Slopes with as much as 30 percent and as little as 10 percent grade are encountered with a wide, relatively flat bench on top. A so-called natural land bridge, portions of which are above maximum pool, can connect this smaller island with the

mainland. The widest water channel bisecting this land bridge is about 200 feet wide with the low point in the saddle being about 15 feet below maximum pool.

The southern half of the future major public use area adjacent to the Knoxville Road is made up of very favorable topography. Relatively flat benches and ridgelines are flanked by steep-sided narrow drainage courses. One long narrow peninsula extends well into the bay between the islands.

The northern half of the area adjacent to the Knoxville Road, including the access to the smaller island, is characterized by more prominent ridgelines defined sharply by many steep-sided drainage courses. The narrow ridgeline benches are favorable for public use. However, the side slopes limit extensive development. The steepness of the slopes in this northern portion results in a sustained water surface near public use areas, whereas, in the southern portion and near the main island, gently sloping terrain results in greater horizontal water recession during reservoir drawdown. The northern and southern portions of this future major public use area are separated by a deep canyon which has extremely steep slopes.

The southern portion is made up of upland valley soils marginal in agricultural values but supporting ample vegetation. Here the soils are similar to those of Area F. The higher portions of the main island have a thin soil cover. The northern portion of this public use area has a thin soil cover with more rock and occasional small rock outcrops. All portions are subject to erosion in the absence of vegetative cover.

Run-off is rapid in the northern portion but less so where the soil is deeper or adobe as in the southern portion. The presence of springs, both seasonal and permanent, in off-site locations, results in a few minor creeks. A few small springs rise within the area, but are located below maximum pool level.

The area is well forested predominantly with oak on the southern portion and mixed oak and Digger pine on the northern portion. The latter area supports a thinner

grass cover with occasional brush, whereas the southern portion has an ample grass cover. Larger oaks of park-like character dot the southern area with occasional patches of closely spaced small oaks. The southern half of the main island contains fewer, but larger, oaks. The large flat area on this island was previously dry farmed and contains few trees. Only a minimum of supplementary reforestation would be required to produce excellent shade for public use. A tree-planting program should be initiated prior to public recreation use of the area in order to achieve maximum results without destruction or interruption by public use.

3. Existing Land Use and Circulation

Unimproved roads honeycomb the area with gates located at infrequent intervals along the Knoxville Road for the control of cattle. The area is presently used for day and overnight recreation activities, but not as extensively as other areas due to the lack of convenient access. The main island is now accessible by boat only.

No improvements have been made on adjacent private land between Area F and Smittle Creek. Steep slopes on the west side of the Knoxville Road should deter development, particularly roadside commercial development.

4. Existing Utilities and Services

The area is readily served by power and telephone throughout its length. No other facilities exist.

5. Public Use Resources and Potentialities

This future major public use area is of such size, character and quality as to permit the development of all types of public use facilities in sufficient quantity to constitute a major park. Ultimate demand for all public use facilities, particularly those not feasibly included in concession areas, will require the future development of this area. Considering the size of the area, and the kind of facilities to be ultimately needed such as extensive picnicking areas, playfields, additional swimming areas or other facilities of limited income producing character,

future development by a public agency, preferably Napa County, is strongly recommended.

The development of the area, however, should not be undertaken until concession areas around the reservoir are used to capacity and a demand for the additional facilities mentioned above, usually provided by a public agency, are found to be essential. Until conditions warrant development, this major public use area should remain undeveloped except for tree planting, and possibly portable chemical toilets and other primitive camp facilities.

The southern portion of the area (exclusive of the main island) is more suitable for public day use under initial development. Boat launching facilities may be necessary because capacity use of the concession areas are presently at optimum numbers considering the extent of land available at each. An expansion of approximately 20 percent at each concession area would be the maximum possible without very seriously overcrowding those areas. Therefore, additional launching will undoubtedly eventually be required at this future major public use area.

The presence of inlets suggests the opportunity to provide for aquatic sports incompatible with power boating. Ultimate accessibility of the islands by land bridges would permit the non-boater to enjoy the luxury of going to the center of the reservoir. The islands would provide ideal viewing areas for regattas and boat races taking place in the adjacent deep water areas. Such extensive and favorable lands and their pleasant environment should be available to the non-boating public as well as to the boater, since the island areas are accessible during periods of lower water levels for non-boater use.

The northern portion of this future major public use area is favorable in all respects for overnight use. The sustained presence of water due to steepness of slope, the relatively dense vegetation, limits of internal circulation and numerous small mooring basins, all contribute to an excellent camping environment. The natural barriers provided by steep slopes permit camping pleasures without the creation of artificial buffers, whereas public

day use would be severely limited by such slopes. The absence of logical swimming and launching areas of any great extent preclude development of more than limited day use facilities.

The smaller 50-acre island should be made accessible by a land bridge and utilized for camping. On this island a 10-acre, relatively level peninsula area provides an excellent setting for a supplementary camping area, including limited launching and swimming opportunities.

6. Specific Design Proposals

This major public use area will eventually provide for day and overnight use. The southern portion or day use section should include areas and facilities for boat launching, picnicking, swimming, hiking, field sports, non-power boating, SCUBA diving, and viewing. No marina, boat berthing, or special amusement facilities requiring charges, except for small boat rental and refreshment buildings should be provided in this area. Such facilities are more advantageously provided for in concession areas.

Initial development should exclude the use of the main island. Up to 30 boat launching ramps should be developed on the mainland with an additional 20 provided on the island when developed, or a total of 50 launching ramps. Low water launching roads should extend from the respective launching areas to the dead storage water level. In the vicinity of the 30 launching ramp facility, borrow material from below 440 feet should be used to fill a number of small V-shaped canyons to create additional usable areas and more adequate parking spaces.

Featured in the day use area could be a small boating basin protected from power boat use by a floating barrier and land bridge. Related to this quiet water basin would be the swimming area, SCUBA diving area, small boat rental and launching road.

The total day use area including the main island can accommodate between 4,000 and 5,000 picnic units to supplement those provided in the concession

areas, with approximately 1,000 being located on the mainland portion.

Other areas and facilities include frequent boat tieup and water ski launching and landing areas. Topography and existing non-forested areas permit large playfields to be provided, particularly on the island. Portions of the island should remain relatively undeveloped, particularly on the north and east facing slopes.

Structures for refreshment and supplies should be provided, supplemented by mobile units at appropriate locations for peak days.

Considering its ultimate development, the logical and appropriate main entrance to the day use area is opposite the main access drive to the island. An additional exit location is recommended for peak day use near the boat launching ramp sites. As much as 50 acres of parking will be required at full development. Two main parking areas are proposed near the launching ramps and swimming areas; the remainder of the parking should be in relatively small bays related to the picnic sites.

No public vehicular access is proposed between the day use area, overnight area or Area F. A service road and pedestrian path may connect these respective areas.

The northern portion of this major public use area, including the 50-acre island, should be developed with a minimum of 300 camp units, accommodating both camp trailers and tent campers. As many as 600 units ultimately can be accommodated.

The ridgelines and benches should be used for camping, leaving the side slopes as buffers. The 50-acre island should be developed last. The 10-acre peninsula should serve as the camp area activity center, and provide launching roads for camper use only, a swimming area, small playfield, outdoor theatre in a community use area, and a small camp store. Overnight mooring should be provided near the campsites. Water ski launching and landing

areas should be developed near the activity center.

Access to the camping area should be provided directly from the Knoxville Road with two supplementary "exit only" openings for convenience due to probable narrow twisting roads necessitated by topography.

Water may best be supplied to the major public use area directly from the deep water channels adjacent to the islands. On-site storage is possible on the islands and in the northern portion of the mainland. On-shore wells may prove more feasible for the mainland day use area. Portions or all of this major public use area may be served by off-site water from large springs on private property located above Smittle Creek or from other off-site sources by a public utilities corporation or district.

The use of predominantly chemical concrete pit toilets in the day use area is probable with installation of on-site disposal systems for special purposes. Feasibility of an on-site treatment plant should be considered for the camp activity center, if possible. It should be properly located and screened from the public.

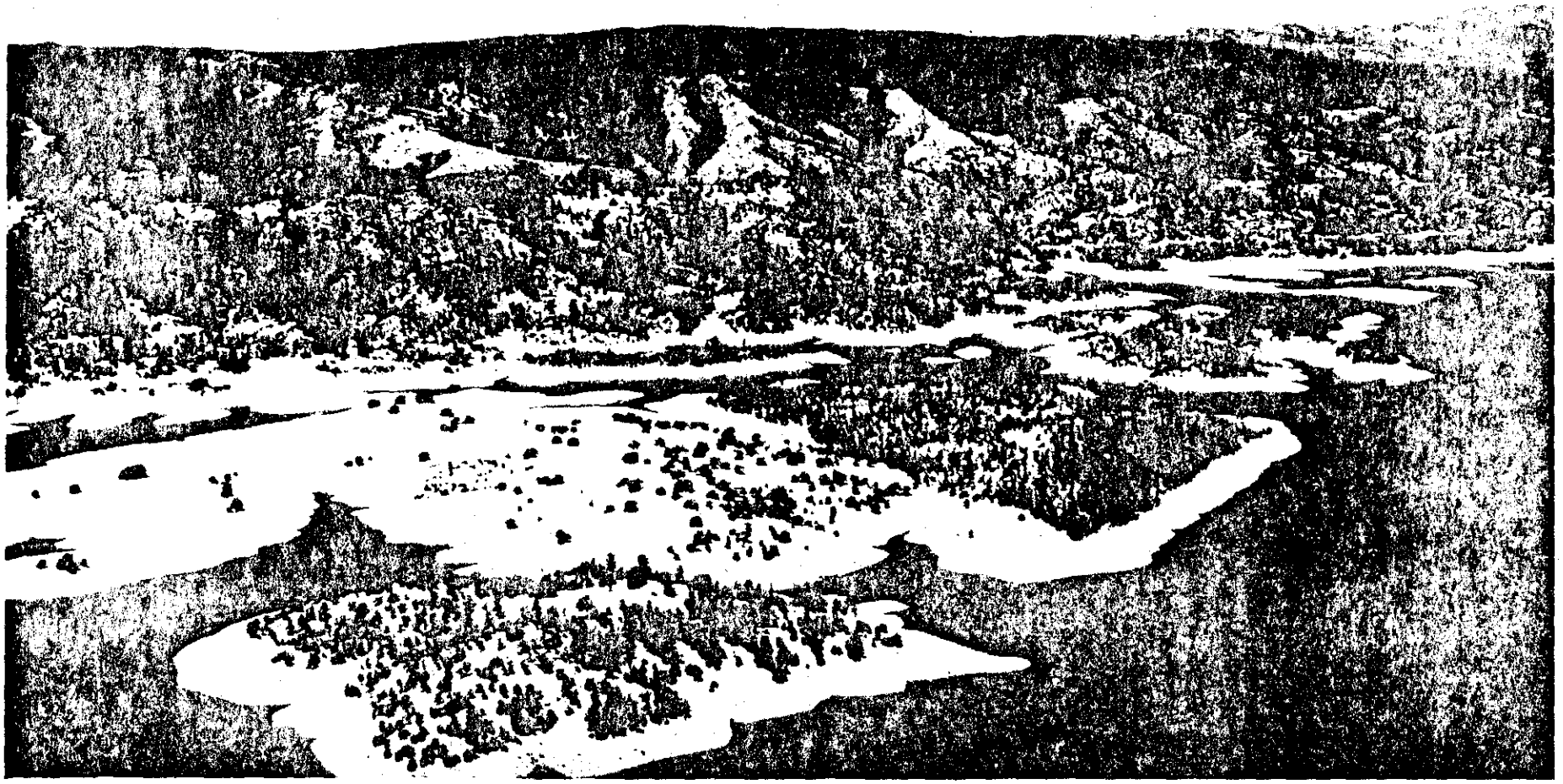
All power and telephone lines provided to the islands should be submerged.

7. Other Public Use Considerations

A boat racing course located along the old Putah Creek channel, off the islands, would permit maximum public viewing.

Puff-off parking adjacent to the Knoxville Road should be provided for spectator use at the south end of the day use area.

No public use of reservoir lands west of the Knoxville Road is contemplated.



Westerly view showing extent of islands in foreground with Smittle Creek entering at distant right. Future Major Public Use Area is proposed along distant left shore. Area G is at extreme left.

## Area G (West Shore Area North of Smittle Creek - Map Sheet No. 5)

### 1. Location, Size and Description

Area G is a relatively small but excellent area, favorable for concessionaire development of public use facilities. The area is located about midway between Spanish Flat and the Pope Creek bridge. It is adjacent to the Knoxville Road with a proposed entrance approximately one and one-half miles north of the main entrance to the future major public use area.

The area contains approximately six-tenths of a mile of frontage along the Knoxville Road extending north from Smittle Creek, with a total of approximately 40 acres between the highway and the maximum pool level.

Two main peninsula arms extend out into the reservoir, major portions of which are inundated at water levels of about 425 feet. Area G is separated from the future major public camp area by the Smittle Creek channel. The northern boundary of Area G is defined by land forms and topography which abruptly separate it from the adjacent area to the north.

### 2. Existing Physiographic Conditions

Topography is very favorable for public use. The peninsulas contain 5 to 10 percent slopes along the ridgelines with less than 25 percent side slopes except along portions of the Smittle Creek channel. The northern portion of the area slopes from the highway to the reservoir at approximately a 30 percent grade. The peninsulas are divided by a narrow drainage course with the steep side slopes below the maximum pool level.

The rocky substratum is covered by adobe or clay surface soils averaging from one to three feet in thickness. This rock is easily broken.

The soil has poor percolation. In the absence of grass cover, it is subject to erosion and is extremely dusty when dry. When wet, it produces a gumbo. Native vegetation can be supported, but pockets of crumbly red soil in

limited areas are devoid of tree growth. Large rock outcrops exist on private lands across the highway.

Smittle Creek contains minimum year round flows from off-site springs. The channel is deep and rocky, permitting a sustained reservoir water surface in close proximity to Area G. The Putah Creek channel is less than one-half mile from the highway in the vicinity of Area C, thus also assuring a sustained reservoir pool nearby. Fewer drainage courses cross the area than is characteristic of areas further south and the shoreline is more regular.

Area G is well wooded, predominately with oak trees. A few large specimens are present but most oaks are small and closely spaced. As for tree cover, the area is one of the more desirable. Ample grass cover exists, while brush is found only near the highway. Supplementary planting of some shade trees is desirable.

3. Existing Land Use and Circulation

The area has already become very popular for day and overnight use. Access to date has been by way of an old construction road in the Smittle Creek canyon, and is used for boat launching. The main peninsula is honeycombed with dirt roads.

No improvements have been made on adjacent private lands. Due to topography, a minimum future private development can be expected in the immediate vicinity.

4. Existing Utilities and Services

Power and telephone services are readily available to the area. Water may be provided for the area from off-site springs.

5. Public Use Resources and Potentialities

The area is attractive and favorable for the development of public use areas and facilities for which minimum alteration of the site is required. The area can be observed by the approaching motorist for over a quarter of a mile as the highway enters Smittle Creek canyon.

The size and character of the area suggests the ultimate development of facilities for day use only. Considering that development of the major public use area is a long-range future possibility, Area G is the first day use concession area north of Spanish Flat and is the first concession area located in the northern portion of the reservoir.

The presence of favorable topography and vegetation, adjacent deep water, proximity to dead storage pool level, protected location, and availability of utilities and water supply indicate that intensive public use development is warranted.

6. Specific Design Proposals

Area G contains a natural boat launching site adjacent to the Smittle Creek channel. A maximum of ten launching ramps can be accommodated here, with a low water launching road extending to the dead-storage water level.

Approximately three hundred picnic units could be developed between the park access road and the shoreline along the full length of this concession area. A desirable swimming area requiring only minimum land alteration is situated in a well protected location off-shore from the center of the picnic area.

A permanent concession building is proposed near the launching ramps and the use of a mobile refreshment unit near the beach is recommended. A marina location in the Smittle Creek canyon offers a well protected mooring and berthing area easily serviced by the existing construction road and adjacent to a proposed commercial building.

Boat tie-up and ski launching and landing areas should be developed along the shoreline near the picnic sites.

The use of borrow from areas to be inundated to fill two small drainage courses would create sufficient parking space without destroying any of the natural beauty of the site, and thus permit it to be used more desirably for picnicking and other activities.

The proper location of the entrance road is a critical factor in planning of Area G due to the sharp curves on the Knoxville Road. The entrance should be located at a point with at least 300 feet of sight clearance in either direction.

Except for the two filled areas, parking areas should consist of relatively small bays along the access roads. A maximum of approximately seven and one-half acres for parking is recommended.

Chemical concrete lined pit toilets are recommended, with possible limited use of on-site disposal systems for special purposes. Water service from off-site springs is possible and preferable; otherwise, a water supply from the Smittle Creek gravels, from on-shore wells, or from the deep water portions of the reservoir is recommended in that order of preference. An on-site storage location exists in the north part of Area G. The use of pressure tanks is also possible.

7. Other Public Use Considerations

Public use of reservoir lands located west of the Knoxville Road is not contemplated.

## Area H (West Shore Area North of Area G - Map Sheet No. 5)

1. Location, Size and Description

A buffer strip of approximately 500 feet separates the limits of Area G and Area H. A concession is adjacent to the Knoxville Road for about 1,000 feet; however, from this point, an intervening strip of private and county land separates the road from the public land up to the Pope Creek arm. Area H consists of project lands between the Bureau of Reclamation's right-of-way line and the reservoir extending for a distance of approximately one and three-fourths miles and containing some 140 acres. The County of Napa owns a strip of land commencing at the intersection of the reservoir right-of-way and Knoxville Road and running northward for six-tenths of a mile between the right-of-way and the Knoxville Road.

The concession area varies in width from 400 to 900 feet between the shoreline and the right-of-way except for two large peninsulas which extend from 1,300 to 1,600 feet out into the reservoir. The area is divided into two portions by a prominent lake-side rock outcrop and canyon.

2. Existing Physiographic Conditions

The southern portion of Area H is characterized by slopes up to 20 percent above the maximum pool elevation. Below elevation 440 the land slopes steeply to the bottom of small drainage courses or to the Putah Creek channel. The shoreline is fairly regular and the slope is relatively constant. The peninsula is the only prominent narrow ridgeline or bench that occurs. The extreme southern portion of the area has some very favorable topography of less than 10 percent slope.

The land north of the rock outcrop and canyon has a fairly even slope of greater than 20 percent to near the shoreline. However, below the 440 foot elevation here the land slopes very gradually. Included in this portion is a relatively flat peninsula of approximately 15 acres flanked by two drainage courses. The shoreline is fairly regular.

A soil depth of from two to three feet exists in the relatively flat portion of the area which is interspersed by occasional rock outcrops on the slopes. The soil is rocky in some portions and adobe-like in others. The rocky substratum is easily broken except where bedrock is encountered. Percolation is generally poor. When wet the soil is gumbo-like and dusty when dry.

One major canyon bisects the area in the vicinity of the outcrops. Flows from a small spring are evident in a drainage swale north of the flat peninsula. Other small drainage courses occur but are not as steep in profile as in other concession areas.

Fairly large springs are located below the Knoxville Road on private property adjacent to the right-of-way line. This water has already been appropriated by the land owner. Other large springs are located on private property

near the area. However, it is believed that all spring water will be used for private development. Some may possibly be for sale.

At dead storage elevation, the northern limits of usable water surface is in the vicinity of the main canyon of Area H. At low water periods, extensive land is exposed adjacent to and north of Area H.

Tree cover, predominately of oak, is excellent, and is rated as some of the best in the reservoir area. Larger, well-spaced specimens dot the lower portion. The upper slopes contain some brush growth as do the northern and southern limits of the area. Grass cover is good on the low slopes and level areas.

3. Existing Land Use and Circulation

Due to the intervening strip of private and county land between the Knoxville Road and the right-of-way line, Area H has thus far not been subjected to public use except for minor walk-in and boat access traffic. An unimproved road provides access to the northern and southern portions below the large rock outcrops. High water elevations will inundate these roads.

No determination has yet been made as to whether the County owned land will be made a part of the concession area through separate lease or by deed to the Bureau of Reclamation. It is recommended that this land be included for public use development.

The private land between the Knoxville Road and the project taking line along the northern portion of the area will probably be developed for residential and commercial purposes.

4. Existing Utilities and Services

Power and telephone service is readily available to Area H. Springs on adjacent private property have been improved, wells dug, and pumps and storage tanks built in preparation for the sale of water and development of private property. A water company is being formed by the

interests controlling the water sources.

5. Public Use Resources and Potentialities

Area H is very favorable for the development of public use areas and facilities. Topography, vegetation, and natural beauty are its major qualities. Problems encountered in the area include the private property situated between the Knoxville Road and the public land. Access will be required across this private land to reach the area.

The rock outcrop presents some construction problems in connecting the northern and southern portions. Although physical barriers plus the outcrop and canyon produce a large cove upon which the two areas front, a natural relationship and common harbor exists for both.

Area H is the transition zone between the areas subject to day use impact and the major resort areas to the north.

Considering the location, qualities, and relationships to the reservoir, it is recommended that camping and overnight accommodations be given major emphasis in Area H. This includes possible future resort use or special overnight accommodations to supplement the camp sites. Limited day use facilities, such as boat launching ramps and swimming areas, will be necessary to accommodate campers and to supplement day use facilities at other areas until the future major public use area is developed as previously described. Conversion of the day use area to resort type facilities may be feasible at that time.

Substantial site alteration will be required to provide day use and overnight facilities only in the development of camp sites and the provision of access and circulation.

6. Specific Design Proposals

The relatively level peninsula area in the northern portion is recommended for day use facilities including

boat launching ramps, swimming area, picnic sites, boat rentals and berthing area, and structures for refreshments and supplies. The shallow areas and drainage courses can be reclaimed with borrowed fill material from areas below maximum pool elevation. Approximately five to six acres can be readily reclaimed in this manner, and portions can be used for parking without destroying or reducing existing natural areas needed for picnicking and other day use activities.

Up to 15 launching ramps can be accommodated on a natural launching slope with low water launching roads extending to dead storage level.

One hundred and fifty picnic units should be developed in the day use area, with a maximum of 300. A natural slope provides for the development of a large swimming area. The marina and boat berthing area is recommended near the deep water channel created by the canyon. The main concession building should be located near the center of the day use area to make it readily accessible to all campers.

Boat rental docks and tie-up facilities should be developed near a mobile or floating refreshment building. Water ski launching and landing areas should be created along the shoreline adjacent to the picnic areas. A small boating basin and an outdoor theater can be attractive features for day users and campers.

The extreme northern portion of Area H can accommodate up to 100 camp sites adjacent to but independent of the day use area.

Possible future resort activities may supplement or replace the above described day use area facilities. The camping area to the north would then be available for permanent overnight accommodations, such as cabins, associated with the resort.

The southern portion of Area H is recommended for the development of camp sites for tent and trailer campers. A maximum of 300 camp units can be accommodated.

The day use facilities could be made available to campers. Likewise, the camp areas closest to the day use area may be used interchangeably as picnic sites during peak day use periods.

Limited facilities for boat launching, either mechanical or ramp type, and swimming may be developed in connection with the camp areas for convenience. Commercial structures for refreshments and supplies are considered unnecessary in these areas. Centrally located camp service and sanitation structures will be required.

Overnight boat mooring areas should be designated and developed for campers. Water ski launching and landing areas also should be provided in limited numbers in connection with camping.

Access to the day use area should be provided as directly as possible, with the least possible interruption of the camping areas. An entrance road across the County-owned strip at the north end of the camp area offers a safe and logical entrance. It permits an excellent approach view of the day use area. An alternate entrance location directly opposite the day use area would require a right-of-way across private property but would eliminate a possible traffic conflict within the camping area. A possible future entrance to the camp area also may be feasible at the extreme southern end of Area H. It is not recommended as a main entrance, however, as it would require day users to interrupt camping activities.

Access between the camping and day use areas should be developed between the rock outcrops and the reservoir. The main park road in the day use area should not penetrate the main activity area. Parking should be provided on the perimeter of this area and on filled land to permit a maximum relationship between the picnic sites and the shoreline. A maximum of seven to eight acres of parking should be developed in the day use area.

Chemical concrete lined pit toilets and service structures are recommended in the camp areas. If economically feasible, a sewage treatment facility is recommended at the south end of the camping area. Chemical concrete pit toilets

in the day use area and north camping area should be developed. If resort development occurs a treatment plant is recommended.

A water supply from off-site sources is recommended for Area H, through agreement with appropriate owners. The use of on-shore wells or direct supply from the reservoir are alternate solutions, in order of their acceptability. On-site storage may be possible pending further detailed engineering studies.

7. Other Public Use Considerations

Acquisition of all private property between the Knoxville Road and and the reservoir right-of-way adjacent to Area H is recommended in order to provide for additional public use expansion and to prevent incompatible private use of those areas.

Any park access roads crossing private property should be of appropriate width and character and should exclude private access.

Possible future access between Area H and Area J (Sheet 6) to be described in subsequent sections, may be feasible.

The buffer strip between Area G and Area H offers an excellent overlook and a possible free picnic site. Development of this area by the County is recommended.

## Area J (Pope Creek Area - Map Sheet No. 6)

### 1. Location, Size and Description

The entrance to Area J is approximately one-half mile south of the Pope Creek bridge on the Knoxville Road. The southern boundary coincides with the northern boundary of Area H. A strip of private land separates the public use area from the Knoxville Road.

The portion of Area J recommended for development contains approximately 80 acres, including an eight-acre island above high water level.

The area varies in width from 500 to 1,200 feet between the reservoir right-of-way and the shoreline.

Except for the northern portion, which is adjacent to the Pope Creek channel, the bulk of the area cannot be seen from the Knoxville Road.

### 2. Existing Physiographic Conditions

The land slopes fairly evenly at 20 percent or more from the taking line to near the reservoir shoreline except for a few relatively small swales, narrow ridge lines and benches. A saddle at elevation of approximately 430 feet connects the island with the mainland. The topography of the island, with over six acres of level land, is very favorable for day use development.

Area J is bisected by two narrow, V-shaped drainage courses which form a deep channel to Pope Creek. The south and east facing slopes below the maximum pool elevation are very gentle; extensive lands will be exposed with a minimum drawdown. A number of formidable rock outcrops exist within the area.

The soil is rocky and thin except in the few swales and saddles, and is of poor quality. In most portions, the rocky substratum is easily broken except for occasional bedrock areas. The land is subject to erosion if vegetative cover is removed. Percolation is very poor and run-off is rapid. The soil on the island is of greater depth and better quality, supporting good vegetation.

Northwesterly view showing Pope Creek Bridge on left with Putah Creek Bridge more distant on right. Foreground peninsula will become a small island. Area J is at extreme left. Area K is located between bridges.

No year-round streams traverse the area, but many small V-shaped drainage courses cross it near the center.

The vegetation is poor to fair in quality. A few areas of limited size support large specimens of oak and Digger pine. Trees in other parts are small and scattered. Thick brush covers the upper slopes, and native grasses are thin. The island contains a few beautiful large oaks and ample grass cover. It has a pleasing, park-like quality.

3. Existing Land Use and Circulation

The strip of private land between the Knoxville Road and the reservoir right-of-way adjacent to the area is the site of a 103-lot subdivision. Other private land uses in this strip include additional residences, possibly a mobile home development and certain commercial land uses. The present Monticello School is temporarily housed within the area. Planned roads to serve the above residential areas border the public use area. An existing unimproved road leads from the Knoxville Road to the public lands near the center of Area J. A few old dirt roads exist within the proposed public use area, including one that formerly provided access from the Pope Creek canyon to the Knoxville Road.

4. Existing Utilities and Services

The area is presently served by power. Although a number of large springs exist on the high slopes west of the Knoxville Road, all will be developed by private interests. Thus, no off-site water will be available for the public use area except by negotiation.

A sewage treatment plant is proposed on private land adjacent to the reservoir right-of-way in the southern portion of the area bisected by the two main canyons.

5. Public Use Resources and Potentialities

Area J has a rather limited public use potential. The topography is marginal, vegetation is generally poor, access is unfavorable and relation to low water level is poor. However, due to its proximity to the Pope Creek arm, better fishing areas that will be available, and the probability that future

demands will be made for its development, consideration should be given in order to integrate it with the development of other areas.

Development of limited public use facilities is recommended. However, future emphasis of the area should be primarily on its resort potentiality.

6. Specific Design Proposals

Public use facilities including boat launching ramps, swimming areas, a boat berthing area, and picnic and camp units are recommended to be developed in Area J.

Up to five launching ramps should be provided adjacent to the main body of the reservoir rather than to the Pope Creek arm due to low water launching conflict with Area K, described below. A supplemental low water launching road is also recommended.

The public day use facilities proposed for the southern portion of the area include 150 picnic units and a high water swimming area.

The proposed boat berthing area relates to the Pope Creek arm adjacent to the main concession building.

Access to the island and its proposed picnicking and swimming area is recommended only when water levels are below elevation 430. Sufficient land for parking may then be available without destroying the natural beauty of the island. At high water periods, the island can be used for boat access, camping and picnicking.

Other facilities recommended for public use in Area J include a mobile concession in the day use area, water ski launching and landing areas and boat tie-up.

The northern portion of the area is recommended for limited camping use of up to 50 sites. The camping area and concession building location may be developed into a resort and cabin area if and when demand indicates a need for such uses or when the future major public use area described previously is developed, thus possibly reducing the public use need in Area J.

A park entrance road through the private property would permit the more direct access to the day use area without disruption of the camp or future resort area. Direct access from the Knoxville Road is entirely possible, but is less desirable due to more difficult location. Larger parking area sites are possible near the main concession, marina area, and boat launching ramps, while smaller parking areas are proposed in the picnic unit areas. A maximum of four acres for parking should be developed in the day use areas including the marina vicinity.

Water sources include, in order of preference, spring water by purchase from off-site sources; from Pope Creek gravels or on-shore wells; and from the reservoir directly. Water storage locations exist on-site.

Use of chemical concrete pit toilets is recommended unless negotiations permit pumping into the proposed sewage treatment plant off-site; the latter solution is recommended in event of resort development.

7. Other Public Use Considerations

Planting of appropriate trees throughout Area J should be undertaken initially for purposes of improving the landscape, for shade, and as a buffer against possible incompatible adjacent land uses. No direct access from the adjacent private property should be permitted except by the park entrance road. Public use of reservoir lands on the west side of the Knoxville Road near Area J is not recommended at this time.

## Area K (Putah Creek Area - Map Sheet No. 6)

1. Location, Size and Description

Area K is located between the Pope and Putah Creek arms in the northwest corner of the reservoir. It is approximately eight miles north of Spanish Flat at the junction of the road from Pope Valley and the Knoxville Road at the reservoir. The area includes extensive land of marginal quality, including small peninsulas with steep topography adjacent to the road. Most of the usable land is

is located in the northern portion of the area, near the Putah Creek arm. The total area is estimated at 150 acres.

2. Existing Physiographic Conditions

The location and construction of the Knoxville Road has created a number of small, disconnected peninsulas between the road and the reservoir with the road bisecting the ridges in deep cuts. An area adjacent to the Pope Creek arm at the southern end of Area K has topography favorable for public use development, but is of limited size and is accessible only from the Knoxville Road. A number of small, high-water level islands are off-shore of the southern portion. These are limited in public use potential. The Pope Creek canyon has nearly vertical sides, with prominent rock outcrops. A major valley divides the area located north of the Pope Valley road and west of the Knoxville Road. High water reservoir levels flood a portion of this area through a culvert. A prominent ridgeline with 20 to 30 percent side slopes further divides the northern and southern portions west of the Knoxville Road.

Adjacent to the Putah Creek arm and west of the Knoxville Road there are areas with very favorable topography and with slopes ranging between five and ten percent.

East of the Road and adjacent to the main body of the reservoir are a number of small peninsulas with slopes of less than 20 percent. Included in this section are approximately 25 acres of usable land with one high water level island of very favorable character and topography for public use. The elevation of the saddle connecting the island is about five feet below maximum pool level. A minimum application of fill can physically link all these peninsulas and islands together for public use purposes.

Natural launching and swimming area slopes are below maximum pool level in the northern portion. The side slopes of the Putah Creek canyon below maximum pool are over 20 percent.

The soil is thin and rocky in areas west of the Knoxville Road except in the more level portions. In areas favorable for public use, soil cover is two to three feet deep, adobe-like, with a rocky substratum which is easily broken. Few rock outcrops are evident in the area. The soil erodes easily in the absence of cover, is poor in percolation quality, gumbo-like when wet and very dusty when dry.

A number of drainage courses cross the area. No year-round water flows are evident, other than Putah Creek.

Good tree cover, predominantly of oak, exists in the northern portion near the Putah Creek arm. The cover on the peninsulas east of the road is particularly favorable. A good stand of grass occurs throughout the area.

3. Existing Land Use and Circulation

Since reservoir impoundment Area K has been used extensively by the public for camping, picnicking and boat launching. An unimproved road to the reservoir, adjacent to the Pope Creek bridge, has been particularly popular for boat launching.

Access to the high water level island is provided by a dirt road. This area has been a very popular spot for camping. With the reservoir shoreline immediately adjacent to the road, a great deal of walk-in use occurs, particularly for bank fishing.

No improvements have been made on adjacent lands in this area.

4. Existing Utilities and Services

Power is readily available to the area.

5. Public Use Resources and Potentialities

Area K is of a size and character and in a location to be planned as a major resort and public use area.

The road from Pope Valley will ultimately become a relatively important access route to the reservoir from the north, including Eureka, Santa Rosa and other areas north of St. Helena.

The Putah and Pope Creek arms of the reservoir will continue to be outstanding fishing areas. They will not be as subjected to day use impact or speed boating and water skiing as will other sections of the lake. Views of the reservoir and its Putah Creek arm are excellent from Area K.

Present use and popularity indicate that the distance of eight to ten miles from where the lower reservoir is first observed is not a handicap to this upper area. Existing natural launching slopes, swimming areas and favorable topography will permit development of facilities with a minimum of site alteration. Usable reservoir water surface will be adjacent to Area K as low as elevation 340, or about 30 feet above dead storage.

Problems encountered in the area include, most importantly, the bisecting of the area by the Knoxville Road and the lack of physical connections between the small peninsulas.

With emphasis being placed on resort and special public use development, only limited public day use facilities should be provided. The portion east of the highway and in the northern half is more favorable for public use development, including the island at high water level.

The portion east of the highway, adjacent to the Pope Creek arm, is very limited in size and contains a large proportion of unusable land. Special commercial uses are recommended for this area because of its location at the road intersection, its outlook, and its good relathinship to the water surface and to the Pope Creek Canyon.

The southern portion of the area west of Knoxville Road, between the Pope Valley Road and the high ridgeline has

no direct relationship to the reservoir water surface. However, the area contains usable land and the valley floor is attractive with good tree cover.

The northern portion of Area K west of the Knoxville Road from the ridgeline to the small bay of the Putah Creek arm is very favorable for resort and special overnight accommodations. It relates visually and physically to the quiet waters of the arm, has favorable topography and vegetation, is fairly well screened from the Knoxville Road, yet is easily accessible. The relationship to outstanding fishing and its relative remoteness from day use impact suggests accommodations for longer than weekend use, such as cabins, mobile homes and vacation trailer sites.

6. Specific Design Proposal

The public day use area contains approximately 25 acres on which facilities for boat launching, picnicking, swimming, boat berthing and rental, refreshments and supplies should be developed.

Up to ten launching ramps, with low water launching roads, can be accommodated. A natural launching slope exists on the high water level island offering direct boat access to the reservoir.

The various land areas can accommodate 300 picnic units indicated as desirable in connection with the potential launching operation. Because of the infeasibility of road construction some sites will be reached by pedestrian paths from the parking areas.

The proposed swimming area is on a natural underwater slope requiring only minor slope adjustment. Included in the swimming area is a small island-beach area.

Other public day use facilities include boat rental docks near the launching area, boat tie-up space, water ski launching and landing areas, and a viewpoint with pedestrian trail.

A main concession building is proposed for the island and a mobile concession building is recommended near the swimming area.

Access to the day use area is proposed directly from the Knoxville Road, while a park road will provide access to the island across a saddle less than five feet below maximum pool, thus requiring only a small amount of fill. The swimming area and land near the view point is linked to the main park road. A maximum of approximately seven acres for parking should be developed in the day use area.

A resort-lodge development is recommended on a knoll adjacent to the Putah Creek arm, west of the Knoxville Road. The main lodge building commands a magnificent view over the public use area to the main body of the reservoir, and to the north up the Putah Creek arm. The site is readily accessible directly from the Knoxville Road and is visible to the approaching visitor for some distance to the south. Cabins may be developed near the reservoir shoreline below the main lodge building.

The entrance road to the resort-lodge development can also provide access to the mobile home area where up to 100 units may be accommodated on the north-facing slope up to the ridgeline. A marina and mooring basin is recommended adjacent to the resort-lodge with access directly from the Knoxville Road.

Future expansion of the mobile home area into the valley to the south may be possible, if found desirable. Limited camping and future expansion of resort activities also may be accommodated.

The land near the Pope Creek bridge east of the Knoxville Road is recommended for commercial recreation land uses including possibly a restaurant and motel. Direct access by boat to the restaurant would be a feature of the area.

Day use sanitation facilities should be chemical concrete pit toilets. The resort-lodge and mobile home area, and the restaurant motel development should be served by an on-site treatment plant.

Water to the day use area, the resort-lodge and the mobile home area can probably be best supplied from the Putah Creek gravels with on-site storage.

The restaurant-motel development should also obtain water from the Pope Creek gravels or from off-site springs on the south side of the Pope Creek arm.

Alternate water supply possibilities include onshore wells, or water from the reservoir, in order of acceptability. Based on further engineering studies, the day use area may be supplied by an independent water system.

7. Other Public Use Considerations

The Pope and Putah Creek arms of the reservoir should have boat speed restrictions applied from the bridges to the upper ends of the arms. Such restrictions should eliminate water skiing and speed boating in the interest of safety and fishing.

Certain benches of land adjacent to the water levels are proposed for boat access camping.

An existing road permits access to portions of the Pope Creek arm. A large flat area in the canyon is accessible at water levels below elevation 420 feet. This area is recommended for very limited day use with parking and picnicking facilities for bank fishing.

A park administration sub-station is recommended at the intersection of the Pope Valley and Knoxville Roads. Located at the southwest corner of the inter section, it could provide for first aid and safety equipment, an information center for visitors, and for limited material and equipment storage. Administration docks can be provided adjacent to an old road leading to and into the Pope Creek arm.

The access road to the mobile home area may be extended in the future to provide access to the organizational camp areas, to be described in the following section.

View to northwest up Putah Creek arm with bridge in left foreground. Recommended organization camp area is in left central section.

## Organization Camp Area
(Putah CreekArm - Map Sheet No. 7)

### 1. Location, Size and Description

The general area under consideration includes three benches and ridgelines on both sides of the Putah Creek arm for a distance of approximately one and one-quarter straight-line miles generally north of the Putah Creek Bridge to a point where the canyon narrows to less than 100 feet in width at the high water levels.

Two prominent ridgeline benches of approximately 20 acres and 40 acres, respectively, are located on the west side of the Putah Creek arm. They are separated by the narrow, steep Dyer Creek Canyon.

Less than 1,000 feet distant from the Knoxville Road, on the east side of the Putah Creek arm is a third bench of approximately 15 acres, relatively flat in topography, and only a few feet above maximum pool elevation.

### 2. Existing Physiographic Conditions

The 20 and 40 acre benches include considerable land suitable for facilities of all kinds. The larger and northern area has two saddles with gentle slopes to the reservoir. The east facing slope, toward the reservoir, is precipitous, whereas the north and south sides have usable land adjacent to water.

The smaller bench has very steep slopes to the water level. Development would probably be confined to the saddle and contoured around the top of the ridge.

The 15 acre bench on the east side of the canyon has topography very favorable for full utilization of the site. Underwater portions adjacent to the site slope at less than 20 percent.

The 20-acre bench has thin rocky soil throughout. The 40-acre bench contains fair soil in the saddles but it is thin and rocky elsewhere. Run-off is rapid, and erosion occurs in the absence of cover.

The 15-acre bench has soil favorable for vegetation.

There is a sustained, year-round flow in Putah Creek adjacent to each site.

The 150 acre site is well covered with small, closely spaced oaks and has a good stand of grass. The two sites on the west side of the Putah Creek arm support a vegetative cover of brush broken by a few trees.

3. Existing Land Use and Circulation

An unimproved private road provides access from the Pope Valley Road to within a few hundred feet of the reservoir right-of-way in the vicinity of Dyer Creek.

Camping use, with boat access, is presently made of these sites.

4. Existing Utilities and Services

Power is readily available to the 15-acre bench off the Knoxville Road and is within approximately one mile of the sites further north.

5. Public Use Resources and Potentialities

The three areas described above are not well located or adaptable for general public use. Only the 15-acre site is readily accessible from the Knoxville Road.

Demand for sites for youth and certain civic organizations can be expected in the near future.

Sites for such groups should be provided in areas such as these, which are less suitable for public use facilities and are desirably removed from areas of general public day use.

The provision of facilities and other improvements should be borne by the requesting organizations. The county may provide access to the sites.

6. Specific Design Proposals

The three sites preferably should be reserved for use by youth organizations. This might be in the form of a primitive type camp, or a development with permanent structures and facilities.

The 40-acre bench will accommodate a swimming area and a restricted boat launching road. Camp docks may also be developed. A boating basin in the Dyer Creek Canyon would serve both organizational camp sites.

Access to the west side is difficult, but can be provided by a road from the Knoxville Road or by a right-of-way over the existing unimproved road from Pope Valley. An access road from the Knoxville Road should be available for public use for bank fishing. Initial access to the camp sites may be by boat or by a riding and hiking trail.

The 15-acre site on the east side of Putah Creek will accommodate a swimming area, boat docks and launching ramps. Non-public access from the Knoxville Road may be easily provided.

Water supply is feasible from the Putah Creek gravels or on-shore wells with storage possible within the reservoir right-of-way. Sanitation facilities should be provided according to respective needs.

7. Other Public Use Considerations

Public land adjacent to the main body of the reservoir north of the Putah Creek bridge should be reserved for future park expansion. Interim use for organization camping and grazing is recommended, but no general public access should be permitted without the development of minimum facilities.

Private land between the Knoxville Road and the reservoir right-of-way should be acquired early in expectation of future park expansion.

## J. Estimated Cost of Recreation Development

A detailed tabulation of estimated capital investment costs, normally a part of the public use plan, has been omitted from this report for the reasons stated below.

The Monticello Reservoir situation is unique so far as reservoir development and management are concerned. Since most of the recreation use undoubtedly will be made by out-of-county residents, Napa County assumed management of the reservoir area on condition that County funds would not be spent for development, at least initially. In line with this policy, the County plans to retain concessioners to provide not only the required public services but practically all recreation facilities as well.

Under this type of development, wherein concessioners develop for the County and, in effect, for the Federal Government and the public, these investments may become more elaborate, costly, and diversified than at most reservoirs where the National Park Service has been engaged in cooperative planning.

It is anticipated that in many instances practical experience, on the part of the concessioner or the County, will result in changes or modifications of the suggested public use plan.

In view of the above factors and because of the quality of development anticipated, which will be determined, we believe, only by competition and the financial resources of the investors, without any necessity for exacting, detailed rules or restrictions by governmental authority, it is considered impractical to prepare detailed advance estimates of development costs.

As explained and illustrated elsewhere in the report, Napa County may ultimately develop a major public use area with County funds. Such future expenditures, by the County, over a long period of years, may total $800,000. It is estimated that capital investment costs by Napa County and by concessioners may approximate $2,000,000 within a period of five years.

Drawing 413-OA-208-22

Foldout, cannot be scanned.

For more information contact

**Stephen Rodgers**
Park Manager
(707) 966-2111

srodgers@mp.usbr.gov

Drawing 413-OA-208-24

Foldout, cannot be scanned.

For more information contact

**Stephen Rodgers**
Park Manager
(707) 966-2111

srodgers@mp.usbr.gov

Drawing 413-OA-208-32

Foldout, cannot be scanned.

For more information contact

**Stephen Rodgers**
Park Manager
(707) 966-2111

srodgers@mp.usbr.gov

Drawing 413-OA-208-25

Foldout, cannot be scanned.

For more information contact

**Stephen Rodgers**
Park Manager
(707) 966-2111

srodgers@mp.usbr.gov

Drawing 413-OA-208-26

Foldout, cannot be scanned.

For more information contact

**Stephen Rodgers**
Park Manager
(707) 966-2111

srodgers@mp.usbr.gov

Drawing 413-OA-208-27

Foldout, cannot be scanned.

For more information contact

**Stephen Rodgers**
Park Manager
(707) 966-2111

srodgers@mp.usbr.gov

Drawing 413-OA-208-28

Foldout, cannot be scanned.

For more information contact

**Stephen Rodgers**
Park Manager
(707) 966-2111

srodgers@mp.usbr.gov

Drawing 413-OA-208-29

Foldout, cannot be scanned.

For more information contact

**Stephen Rodgers**
Park Manager
(707) 966-2111

srodgers@mp.usbr.gov

Drawing 413-OA-208-30

Foldout, cannot be scanned.

For more information contact

**Stephen Rodgers**
Park Manager
(707) 966-2111

srodgers@mp.usbr.gov

Drawing 413-OA-208-31

Foldout, cannot be scanned.

For more information contact

**Stephen Rodgers**
Park Manager
(707) 966-2111

srodgers@mp.usbr.gov

# ADDENDA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
Solano Project, California

## MANAGEMENT AGREEMENT WITH NAPA COUNTY FOR LAKE BERRYESSA (MONTICELLO RESERVOIR) AREA

On this 31st day of July, 1958 THE UNITED STATES OF AMERICA, hereinafter referred to as The United States, pursuant to the authority contained in the Act of Congress of June 17, 1902 (32 Stat. 388, 43 U.S.C. 391 et seq.) and acts amendatory thereof and supplementary thereto, represented by the Regional Director, Region 2, Bureau of Reclamation, in cooperation with the Regional Director of THE NATIONAL PARK SERVICE, and NAPA COUNTY, pursuant to resolution duly adopted, hereinafter referred to as the County, do hereby agree that the following principles shall govern the administration and development of lands and facilities at Lake Berryessa (Monticello Reservoir) for recreation and other uses, which reservoir is a feature of the Solano Project, constructed for the primary purposes of irrigation of land and furnishing domestic, municipal, and industrial water in Solano County, California:

1. For the purpose of permitting the County to assume the responsibility of administering for recreation and other uses, the United States hereby transfers to the County the administration of the federally owned or controlled lands of the reservoir area in Napa County, California, as shown on the Public Use Plan map marked "Exhibit A" attached hereto and, by this reference, made a part hereof, subject, however, to the following exceptions and reservations:

(a) Any prior rights which have attached at the date of this agreement.

(b) The right of the officers, agents, employees, and permittees of the United States at all times and places to have full ingress for passage over and egress from all of such lands for the purpose of carrying on operations of the United States.

(c) The right of the Bureau of Reclamation, after written notice to the County, to make such use of the reservoir area or any portion thereof as may be required in carrying out the purposes of the Solano Project.

(d) The United States shall have primary jurisdiction over the areas designated as Reclamation Zone on Exhibit A, which lands include the dam and appurtenant works and other tracts, as shown on Exhibit A. Such jurisdiction is reserved for the purpose of insuring proper operation and protection of the reservoir, but shall not preclude recreation development by the County within the Reclamation Zone. Any such developments, however, shall receive prior approval by the Bureau of Reclamation, and it is further understood that in its operation of the project the Bureau of Reclamation may close the Reclamation Zone at any time.

(e) The Monticello Reservoir is constructed and operated primarily for irrigation and domestic, municipal, and industrial water supply purposes. The fulfillment of these purposes will require that the level of the reservoir be fluctuated to meet use demand, and the United States reserves the right to vary the water level to the extent deemed necessary or desirable for the purposes of project operation. Over the years the water level will fluctuate between a minimum of about elevation two hundred and fifty-three (253) and a maximum of about four hundred and fifty-five (455) feet.

(f) The right of the United States, its agents, lessees, or permittees to remove from said lands any and all material necessary for the construction and operation and maintenance of project facilities. There is also reserved to the United States, its agents, lessees, or permittees the right to prospect and carry on the development for oil, gas, coal, and other minerals, and the right to issue leases or permits to prospect for oil, gas, or other minerals on said lands under the Act of February 25, 1920 (41 Stat. 437) and acts amendatory thereof or supplementary thereto and the Act of August 7, 1947 (61 Stat. 913). However, the County will be consulted concerning any proposal for the exercise of such rights. The Bureau of Reclamation will furnish to the County a record of all rights or authorizations to use the land within the area covered by this agreement.

2. In the development and administration of the area, the County shall follow the Public Use Plan, or mutually approved revisions thereof, to be prepared by the National Park Service for and in cooperation with the Bureau of Reclamation in consideration of administration of the area by the County. This plan shall serve as a guide for the County and all parties having responsibilities hereunder in achieving the highest public benefit through the development of the recreation potential of the area covered by this agreement. The County shall not be obligated to spend any money for the development or administration of the area except revenues received from fees, leases, licenses and permits which the County may collect in accordance with subdivision (f) of this article. The County shall permit free and ready access to the area by the public consistent with its administration of the area. However, such requirement will not prevent the County or its licensees from making a reasonable charge for use of any designated recreational sites when good and sufficient justification is made therefor.

Pursuant to the Public Use Plan:

(a) The County shall be responsible for maintaining the perimeter fence and gates around the area.

(b) The County may construct roads, trails, docks, sanitation facilities, water supplies, camp and picnic grounds, bathing beaches, or other facilities and provide services incidental to recreation use and the location of such developments shall be in general accordance with the Public Use Plan and mutually approved revisions thereof.

(c) The County may issue and administer licenses, permits, and contracts to persons or associations making available services and facilities for the use of the public and for the purpose of regulating the privileges to be exercised in the area. All licenses, permits and contracts affecting the lands within the primary jurisdiction of the United States, as defined in Article 1, shall be submitted to the Bureau of Reclamation before issuance and all instruments used for such purposes throughout the area shall be subject to applicable terms of this agreement and shall contain certain language recognizing the purposes of the Solano Project and effecting releases and indemnification to and for the United States, its successors

and assigns, and its officers, agents, and employees engaged in the construction and operation and maintenance of project works. The term of such licenses, permits, or contracts shall not exceed twenty (20) years and such licenses, permits and contracts shall contain the following provisions:

(1) "In the event of the termination of the management agreement between the United States and the County, the United States shall be deemed to stand in the stead of the County as grantor for the remainder of the term of this agreement: Provided, however, in the event of such termination, the United States, at any time within ninety (90) days thereafter, may terminate this agreement by giving to the (licensee, permittee, or contractor) thirty (30) days' written notice thereof and in such event the (licensee, permittee or contractor) shall have the privilege of selling or removing, for a period of ninety (90) days after termination of this agreement, or such longer period as may be determined by the Bureau of Reclamation to be reasonable, improvements which have been constructed on the premises at the sole cost or expense of the (licensee, permittee, or contractor); otherwise, after the expiration of such period of time, the title to such improvements shall vest in the United States."

(d) Upon the termination of any lease, license, or permit heretofore granted by the Bureau of Reclamation governing any and all of the lands and water surface in the entire area, the County may issue and administer new leases, licenses and permits for such use in accordance with the Public Use Plan and this agreement.

(e) The County shall, within the limits of its administration, make and enforce such rules and regulations for the use of the area as are necessary and desirable to protect the health and safety of persons using the area and for the preservation of law and order in the interest of public safety.

(f) The County shall have the right to collect and retain all receipts derived from fees, licenses, leases, permits or contracts which it issues or administers. Such receipts shall be used only for the administration, development, and maintenance of said area. The County shall submit to the Bureau of Reclamation, not later than March 1 of each year during the term of this agreement, a report of all such receipts

and expenditures from such receipts during the preceding calendar year. At such time, the County shall transfer to the Bureau of Reclamation any unobligated surplus of such receipts over such expenditures for the preceding calendar year in excess of Ten Thousand Dollars ($10,000.00) including any carry-over from former operations. On the termination of this agreement, any and all uncommitted remaining excess of such receipts over such expenditures shall be paid to the Bureau of Reclamation in full within thirty (30) days after such termination. All improvements installed or constructed in whole or in part with expenditures from such receipts shall be and remain the property of the United States. All improvements installed or constructed by the County at its sole cost or expense shall be and remain the property of the County, subject, however, to the provisions of Article 7 of this agreement. The County shall maintain such accounting records as are necessary to satisfy the requirements of this article and will have those records available for inspection upon request.

(g) (1) The United States assumes no responsibility for damages to property or injuries to persons which may arise from or be incident to the use and occupation of the said premises by the County, or for damages to the property or injuries to the persons of the County's officers, agents, servants, or employees or others who may be on said premises at their invitation or the invitation of any of them.

(2) The County shall incorporate in the licenses, permits, and contracts mentioned in Article 2 herein the following provision:

"The (licensee, permittee, or contractor) recognizes that Monticello Reservoir is a feature of the Solano project, constructed for the primary purposes of irrigation and domestic, industrial, and municipal water supply in Solano County. The fulfillment of these purposes will require that the level of the reservoir be fluctuated to meet use demand, and the United States reserves the right to vary the water level to the extent deemed necessary or desirable for the purposes of project operations. Over the years the water surface will fluctuate between a minimum elevation of about two hundred fifty-three (253) feet and a maximum of about four hundred fifty-five (455) feet. The (licensee, permittee, or contractor) shall not do or omit to do, or knowingly suffer, or permit to

be done by others, anything by which act or omission, any persons may be endangered or injured by the use of the reservoir area. The (licensee, permittee, or contractor) shall save the United States and the County harmless from any claim on account of any personal injury or property damage by reason of anything done, or knowingly suffered or omitted to be done by the (licensee, permittee, or contractor) in his exercise of the privileges granted by this (license, permit, or contract)."

(3) The County shall require all contractors, permittees, and licensees to carry such public liability insurance as is customary among prudent operators of similar businesses under comparable circumstances. This shall not apply to grazing permittees or individual boat permittees who operate boats solely for private and personal use.

(4) Nothing in this agreement shall be construed or interpreted as authorizing the County, its agents, or employees, to act as agent or representative for or on behalf of the United States, or to incur any obligation of any kind on behalf of the United States.

(h) In the development and administration of the area the County shall take precautions to prevent soil erosion and the destruction of vegetation and improvements by fire.

(i) The County shall incorporate within any and all licenses or permits for agricultural or grazing purposes provisions for approved soil and moisture conservation practices, including those required by the appropriate regulations promulgated by the Secretary of the Interior.

(j) The County shall not do or knowingly permit to be done any act which will cause measurable deterioration in the quality of the water released from Monticello Dam.

3. Subject to concurrence of the Bureau of Reclamation, as to the amount taken and the places and manner of taking, the County may take water from Monticello Reservoir for use in connection with the development and operation of recreational facilities within the area covered by this agreement as shown in "Exhibit A", attached hereto. Nothing in this agreement shall be construed to authorize diversion of

water from Lake Berryessa except for use in the development and operation of recreational facilities within the area covered by this agreement as shown in "Exhibit A".

4. Upon request of either the Bureau of Reclamation or the County, the parties hereto will meet to review the administration and development of the Monticello Reservoir area together with representatives of the National Park Service.

5. The term of this agreement shall be for a period of fifty (50) years from the date hereof, unless sooner terminated as hereinafter provided.

6. This agreement shall terminate and all rights of the County hereunder, except as hereinafter provided, shall cease:

(a) Upon expiration of term as provided in Article 5.

(b) Upon the failure of the County to observe any of the conditions, exceptions, or reservations set out in this agreement, the Regional Director, Bureau of Reclamation, shall give written notice to the County of the obligations that are in default or the provisions of this agreement that have been violated, and shall give the County ninety (90) days in which to initiate measures to correct the default or violation. Unless the County shall have initiated measures to correct such default or violation, this agreement shall terminate on the ninety-first (91st) day following service of the written notice on the County of its failure to initiate corrective measures. The County shall promptly and expeditiously conclude corrective measures which have been initiated to cure the defaults or to correct the violations.

7. For a period of ninety (90) days after termination of this agreement, or such longer period as may be determined by the Regional Director, Bureau of Reclamation to be reasonable, the County shall have the privilege of selling or removing all improvements on the premises installed or constructed by the County at its sole cost or expense; otherwise, after the expiration of such period of time, the title to such improvements shall vest in the United States.

8. It is agreed that the cost of police protection, fire protection, sanitation facilities, and roads and trails within the Monticello Reservoir area shall be deemed proper expenditures to be made by the County from funds from the sources mentioned in Article 2(f) of this agreement.

9. The County shall not assign this agreement or any interest therein without written consent of the Regional Director, Bureau of Reclamation, but the provisions of this agreement shall apply to and bind the successors and assigns of the United States and the assigns of the County.

10. (a) In connection with the performance of work under this agreement, the County agrees not to discriminate against any employee or applicant for employment because of race, religion, color, or national origin. The aforesaid provision shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other form of compensation; and selection for training, including apprenticeship. The County agrees to post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of the nondiscrimination clause.

(b) The County further agrees to insert the foregoing provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

11. In carrying out this agreement the County shall not discriminate against any person by refusing to furnish any accommodation, facility, service, or privilege offered to or enjoyed by the general public because of race, creed, color or national origin, and shall require an identical provision to be included in all its contracts made pursuant to this agreement, but this provision shall not refer to, or extend to or govern the business or activities of the County which are not related to or involved in the performance of this agreement.

12. The County warrants that no person or selling agency has been employed or retained to solicit or secure this agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established com-

mercial agencies maintained by the County for the purpose of securing business. For breach or violation of this warranty, the United States shall have the right to annul this agreement without liability.

13. The performance of any obligation or the expenditure of any funds by the United States under this agreement is made contingent on the Congress making the necessary appropriations. In case such appropriation as may be necessary to carry out this agreement is not made, the County hereby releases the United States from all liability due to the failure of Congress to make such appropriation.

14. No Member of or Delegate to Congress or Resident Commissioner, and no officer, agent, or employee of the Department of the Interior shall be admitted to any share or part of this agreement or to any benefit that may arise herefrom but this restriction shall not be construed to extend to this agreement if made with a company or corporation for its general benefit.

15. This agreement shall not become effective until concurred in by the Regional Director, National Park Service.

IN WITNESS WHEREOF, the parties hereto have executed this agreement as of the day and year first above written.

ATTEST:
By: C. S. SHIPPY
County Clerk of the County of Napa, State of California, and ex-officio clerk of its Board of Supervisors.

E. E. KIMBROUGH

I Concur: AUG. 4, 1958

(Sgn.) LAWRENCE C. MERRIAM
Regional Director, Region Four, National Park Service

THE UNITED STATES OF AMERICA

By: A. N. MURRAY
Acting Regional Director, Region 2, Bureau of Reclamation

NAPA COUNTY

By: N. D. CLARK
Chairman of the Board of Supervisors of the County of Napa, State of California.

Drawing 413-OA-208-23

Foldout, cannot be scanned.

For more information contact

**Stephen Rodgers**
Park Manager
(707) 966-2111

srodgers@mp.usbr.gov

COPY OF CONCESSION AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____ 195__, by and between COUNTY OF NAPA, a political subdivision of the State of CALIFORNIA, hereinafter called "County", and LAGUNA HERMOSA, INC., a California Corporation, hereinafter called "Concessioner",

WITNESSETH:

THAT WHEREAS, on July 31, 1958, an agreement was made and entered into between UNITED STATES OF AMERICA and COUNTY OF NAPA entitled "Management Agreement with Napa County for Lake Berryessa (Monticello Reservoir) Area", whereby UNITED STATES OF AMERICA transferred to County the administration of the federally owned or controlled lands of the reservoir area of Monticello Reservoir in Napa County, which said agreement is attached hereto, marked "Exhibit A", and made a part hereof by reference thereto; and,

WHEREAS, United States and the County have not provided facilities and services for the public visiting the area and desire the Concessioner to establish and operate the same at reasonable rates within area "H" as shown upon the Public Use Plan for said area, which said area "H" is more particularly described as follows, to wit:

> Beginning at a point on the westerly boundary of the parcel of land acquired by the United States of America for the Monticello Reservoir, now known as Lake Berryessa; said point is North 05° 58' East 1981.0 feet from post L.P. 13 of the Rancho Las Putas as shown on the Plat of said Rancho, filed September 24, 1867 in the Office of the County Recorder, Napa County; running thence from said point of beginning North 25° 47' West 50.0 feet, more or less along said westerly boundary to the center of a draw; thence northeasterly along the center of said draw to the first crossing of elevation 350; thence southeasterly along the 350 foot contour to a point that is North 61° 32', East 1550 feet, more or less from a point on the aforesaid

westerly boundary of the land of the United States of America; said last mentioned point is North 66° 33' East 3696.9 feet from post L.P. 10 of the Rancho Las Putas; thence South 61° 32' West 1550 feet, more or less to said westerly boundary; thence along said boundary as follows: North 28° 28' West 1050.0 feet, North 57° 52' West 3046.4 feet, and North 22° 00' West 3283.8 feet to a point; said point is South 84° 01' East 1533.4 feet from the Point of Beginning; thence North 84° 01' West along said westerly boundary 1533.4 feet to the point of beginning.

WHEREAS, the establishment and maintenance of such facilities and services involve a substantial investment of capital and the assumption of the risk of operating loss, and it is therefore proper that the Concessioner be given assurance of security of said investment and of a reasonable opportunity to make a fair profit;

NOW, THEREFORE, the said parties, in consideration of the mutual promises herein expressed, covenant and agree to and with each other as follows:

1. "As provided for in the Management Agreement with Napa County for Lake Berryessa (Monticello Reservoir area) the County may issue and administer licenses, permits, and contracts to persons or associations making available services and facilities for the use of the public and for the purpose of regulating the privileges to be exercised in the area. All licenses, permits and contracts affecting the lands within the primary jurisdiction of the United States, as defined in Article 1, shall be submitted to the Bureau of Reclamation before issuance and all instruments used for such purposes throughout the area shall be subject to applicable terms of this agreement and shall contain certain language recognizing the purposes of the Solano Project and effecting releases and indemnification to and for the United States, its successors and assigns, and its officers, agents, and employees engaged in the construction and operation and maintenance of project works. The terms of such licenses, permits and contracts shall not exceed (20) years and such

licenses, permits and contracts shall contain the following provisions:

(a) In the event of the termination of the Management Agreement between the United States and the County, the United States shall be deemed to stand in the stead of the County as grantor for the remainder of the term of this agreement: Provided, however, in the event of such termination, the United States, at any time within ninety (90) days thereafter, may terminate this agreement by giving to the Concessioner, thirty (30) days written notice thereof and in such event the Concessioner shall have the privilege of selling or removing, for a period of ninety (90) days after termination of this agreement, or such longer period as may be determined by the Bureau of Reclamation to be reasonable, improvements which have been constructed on the premises at the sole cost or expense of the Concessioner; otherwise, after the expiration of such period of time, the title to such improvements shall vest in the United States."

(b) "The Concessioner recognizes that Monticello Reservoir is a feature of the Solano Project, constructed for the primary purposes of irrigation and domestic, industrial and municipal water supply in Solano County. The fulfillment of these purposes will require that the level of the res ervoir be fluctuated to meet use demand, and the United States reserves the right to vary the water level to the extent deemed necessary or desirable for the purposes of project operations. Over the years the water surface will fluctuate between a minimum elevation of about two hundred fifty-three (253) feet and a maximum of about four hundred fifty-five (455) feet. The Concessioner shall not do or omit to do, or knowingly suffer, or permit to be done by others, anything by which act or omission, any persons may be endangered or injured by the use of the reservoir area. The Concessioner shall save the United States and the County harmless from any claim on account of any personal injury or property damage by reason of anything done, or knowingly suffered or omitted to be done by the Concessioner in his exercise of the privileges granted by this contract."

2. Terms of Contract. This contract shall be for and during the term of twenty (20) years from _____ ____, 19____, except as it may be terminated as herein provided;

3. Accommodations, facilities and services authorized. The Concessioner agrees to develop the said area H in accordance with the design and area use shown upon the Public Use Plan, which said Public Use Plan is an exhibit to "Exhibit A" attached hereto, and on file in the office of the County Clerk of the County of Napa, and Concessioner agrees to install in accordance therewith and substantially, or in general conformity, with the plan and design attached hereto marked "Exhibit to Exhibit A".

The Concessioner agrees to construct within said area H substantially in accordance with Public Use Plan the following improvements:

Calendar year 1959:

(a) Entrance and gateway office as per proposal;

(b) Access road and roads within the area will meet the requirements outlined upon Exhibit "C";

(c) Fifteen (15) launching ramps, each ramp to be fifteen (15) feet in width. Ramps to be of sufficient structural design for the loading conditions applicable; of a type suitable for the usage intended and the physical conditions of the location, all installations subject to the approval of the Park Director;

(d) Fifty (50) picnic units of the design shown on Exhibit "B";

(e) One hundred (100) camp sites of the design shown upon Exhibit "B";

(f) Eight (8) acres of graded parking area in the day use area;

(g) One (1) swimming area having a frontage of at least one hundred-fifty (150) feet with sand bottom and beach;

(h) One (1) store building and one (1) restaurant of the general design shown upon Exhibit "B" and the final plans of which shall be approved by the Park Director.

Calendar year 1960:

(a) Twenty-five (25) additional picnic units;

(b) One hundred (100) additional camp sites;

(c) One (1) boat dock;

(d) Boat storage shed.

Calendar year 1963:

(a) The entire area to be developed in accordance with the Public Use Plan.

4. Plant, personnel and rates.

(a) The concessioner shall maintain and operate the said accommodations, facilities and services to such an extent and in such manner as the Park Director of County may deem satisfactory provided that the Concessioner shall not be required to make investments inconsistent with an opportunity to make a fair profit on the total of its operations hereunder.

(b) All rates and prices charged to the public by the Concessioner for accommodations, services or goods sold or furnished hereunder shall be subject to regulation and approval by the Park Director, provided that such rates and prices shall not be inconsistent with an opportunity for the Concessioner to make a fair profit from the total of its operations hereunder. In determining fair profit for this purpose consideration shall be given to the rate of return required to encourage the investment of private capital and to justify the risk assumed on the hazard attached to the enterprise, the cost and current sound value of capital assets used in the operation, the rate of profit on investment and percentage profit in gross revenue considered normal in the type of business involved, the financial history of the future prospects of the enterprise, and other significant factors ordinarily taken into consideration in the determination of a fair profit or return upon investment.

Reasonableness of rates and prices will be judged primarily by comparison with those currently charged for comparable accommodations, services or goods furnished or sold outside of the area under similar conditions, with due allowance for length of season, provision for peak loads, accessibility, availability and cost of labor and materials, type of patronage, and other conditions customarily considered in determining charges.

5. Land and improvements. In addition to the improvements which the Concessioner agrees to construct under Paragraph 3 of this contract, the Concessioner may construct or install within the area which is the subject of this agreement such other buildings, structures and improvements consistent with the Public Use Plan, or mutually approved revisions thereof. Specific plans and specifications of all improvements and structures to be constructed will be approved in advance of construction by the Park Director of the County, which plans and specifications may be subject to the approval of the Bureau of Reclamation as the Park Director may determine.

The Park Director shall have the right at any time to enter upon any lands which are the subject of this agreement for any purpose he may deem reasonably necessary for the administration of the area, but not so as to unreasonably interfere with the Concessioner's use of such lands or the improvements thereon.

Any permanent type buildings or structures shall be equipped with flush type toilets and all toilets and sanitary installations shall be constructed and maintained in accordance with requirements of the Napa County Health Department whether such requirements are now in existence or hereafter adopted by said County Health Department.

6. Concessioner's improvements. Concessioner's improvements as used herein means buildings, structures, fixtures, equipment and other improvements affixed to or pertaining to the land assigned hereunder to use of the Concessioner in such manner as to be a part of the realty, including all such improvements herein constructed upon or affixed to the lands assigned to the Concessioner and all alterations, additions or improvements thereto.

Concessioner agrees to keep and maintain all improvements upon said lands in a good state of improvement and repair during the term of this agreement and to insure such improvements against loss by fire in such amount as may be agreeable to the Park Director with loss payable to Concessioner and to County as their interest may appear at the date of a loss; County agrees to promptly restore any of Concessioner's improvements damaged or destroyed by fire during the term of this agreement to the extent that the proceeds of such fire insurance are available for such restoration.

All plans, appliances and machinery to be used in connection with the rights granted to Concessioner by this contract as well as the location and installation of such appliances and machinery shall first be approved by the Park Director in writing.

7. Accounting records and reports. The Concessioner shall maintain such accounting records as may be prescribed by the Park Director. It shall submit annually no later than January 15 in each year of the term of this agreement a written report for the calendar preceding year of operations giving such information about its business and operations under this contract as may be prescribed by the Park Director and such other reports and duty as may be required by the Park Director. The Park Director shall have the right to verify all such reports from the books, correspondence, memoranda and other records of the Concessioner and of the records pertaining thereto of any affiliated company, if any, during the period of the contract and for such time thereafter as may be necessary to accomplish such verification.

8. Franchise fee. The Concessioner shall pay to the County quarterly in each year during the term of this contract a franchise fee for the privileges authorized herein as follows: A sum equal to three (3) percent of the Concessioner's gross receipts as herein defined for the preceding quarter. For said purpose the quarters of the year shall be January 1, April 1, July 1, and October 1 and said fee shall be payable on the 10th day of each month following the close of the quarter.

The term "gross receipts" as used herein shall be construed to mean the total amount received or realized by or

accrued to the Concessioner from all sales for cash or credit of services, accommodations, materials and other merchandise made pursuant to the privileges authorized in this contract, including gross receipts of subconcessioners, and commissions earned on contracts or agreement with other persons or companies operating in this area, but excluding intracompanies earnings on account of charges to other departments of the operation (such as laundry, charges to employees for meals, transportation, etc.), cash discounts on purchases, cash discounts on sales, returned sales and allowances, interest on money loaned or in bank accounts, income from investments, income from subsidiary companies outside of the area, sales and excise taxes, gasoline taxes, fishing licenses, postage stamps and items for which the Concessioner is accountable in full.

9. Termination of contract by County. In cases of any substantial default or continued unsatisfactory performance by the Concessioner under this contract, the County may terminate this contract by the following procedure:

(a) The County shall give to the Concessioner written notice specifying the particulars of the alleged default or unsatisfactory performance.

(b) No less than thirty (30) days after receipt by the Concessioner of such notice the County shall grant to the Concessioner an opportunity to be heard upon the charges;

(c) Following such opportunity to be heard the County shall have power to determine by action of its Board of Supervisors whether there has been such a default or unsatisfactory performance;

(d) If the County shall determine that there has been such a default or unsatisfactory performance it shall give to the Concessioner written notice of such decision specifying the particulars thereof;

(e) If the Concessioner fails or refuses to remedy such default or unsatisfactory performance within such period of time as may be fixed by the County, then the County may determine this contract terminated upon such date or such contingency as it may deem proper to protect the public

interest and thereupon all right of the Concessioner under this contract to use or occupy the area which is the subject of this agreement shall forthwith terminate and title to all improvements in said area installed by the Concessioner shall vest in the County without right on Concessioner's part to remove any of the same or to recover the cost or value thereof.

10. Assignment or Mortgage. No transfer or assignment by the Concessioner of this contract or of any part thereof or interest therein directly or indirectly, voluntary or involuntary, shall be made unless such transfer or assignment is first approved in writing by the County.

11. Insurance. The Concessioner shall carry such insurance against loss by fire, public liability or other hazards as may be required by the Park Director, and shall hold harmless the County for all loss occasioned by operations of the Concessioner, its agents or employees.

12. Concessioner's employees. The Concessioner shall employ at least one (1) employee whose primary duty shall be the enforcement of law and order in the concession area and who shall be approved as to qualifications by the Sheriff of the County. The Concessioner shall not employ or retain in its service or permit to remain upon any of the premises herein provided for any person declared by the Park Director to be unfit for such employment or otherwise objectionable. The Concessioner shall require its employees to observe all impartiality as to rates and services and in all circumstances to exercise courtesy and consideration in their relations with the public.

In connection with the performance of work under this agreement, the Concessioner agrees not to discriminate against any employee or applicant for employment because of race, religion, color or national origin. The aforesaid provision shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Concessioner agrees to post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the

contracting officer setting forth the provisions of the nondiscrimination clause. The Concessioner further agrees to insert the foregoing provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

13. General provisions: The Concessioner shall maintain the area which is the subject of this agreement in a clean, orderly and sanitary condition and strictly obey all laws, rules and regulations pertaining to health and public safety promulgated by any governmental agency having jurisdiction over the area.

Concessioner shall maintain in boating and swimming areas within the area covered by this agreement such buoys, markers and safety devices as may be required by law or by regulation of the Park Director.

Concessioner shall participate in the Napa County annual registration and licensing of boats. The Concessioner to receive five percent (5%) of the registration fee.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands the day and year first above written.

COUNTY OF NAPA, a political subdivision of the State of California,

By_____
CHAIRMAN of its Board of Supervisors

ATTEST:

_____
COUNTY CLERK of the County of Napa and ex-officio Clerk of its Board of Supervisors.

COUNTY

LAGUNA HERMOSA, INC., a California Corporation

BY _____
Its

and

_____
Its

## SELECTED SECTIONS FROM ORDINANCE NO. 201

AN ORDINANCE OF THE COUNTY OF NAPA CREATING A LAKE BERRYESSA PARK COMMISSION; CREATING THE POSITION OF PARK DIRECTOR, AND PRESCRIBING THE POWERS AND DUTIES OF SAID COMMISSION AND DIRECTOR.

The Board of Supervisors of the County of Napa do ordain as follows:

Section 1. Creation of Commission. There is hereby established in the County of Napa a commission consisting of five (5) members, to be known as Lake Berryessa Park Commission.

Section 2. Appointment of Members. The members of the said Commission shall be appointed by the Board of Supervisors of the County of Napa.

Section 3. Term of Office. The members of said Commission shall serve as such for a term of one year commencing January 10 in each year. Members may be removed during their term of office by majority vote of the Board of Supervisors.

Section 4. Organization of Commission. Within ten (10) days of the date of appointment, the Commission shall meet and organize by electing one of its members Chairman, and one of its members Secretary, both of whom shall serve as such for a term of one (1) year. The Commission shall adopt rules of procedure for the transaction of business before the Commission.

Section 5. Meetings -- Quorum for Conduct of Business. The Commission shall establish a regular meeting place and a date and time for regular meetings of the Commission, which shall be held at least once each month; special meetings may be held in the same manner as special meetings are called by the Board of Supervisors.

Section 6. Compensation of Members of Commission. Members of the Lake Berryessa Park Commission shall receive as compensation for the performance of their duties the sum of Ten Dollars ($10.00) for each meeting of the

Commission actually attended, not to exceed five (5) meetings in each month, together with their actual and necessary travelling expense incurred in attending meetings of the Commission and incurred in the performance of their duties.

Section 7. Powers and Duties of Commission. The Commission shall have the following powers and duties:

(a) To recommend to the Board of Supervisors the appointment of a Park Director for the Lake Berryessa Park area and such assistants as may from time to time appear to be necessary.

(b) To advise the Board of Supervisors with regard to management and operation of the Lake Berryessa Area under the terms of any contract now or hereafter existing between the United States of America and County of Napa relating to said area.

Section 8. Park Director -- Duties, Compensation. The Board of Supervisors may appoint upon the recommendation of the Commission a Park Director and may appoint such assistants and other employees as may from time to time be necessary for the proper management and operation of the Lake Berryessa Area. The Park Director shall attend all regular meetings of the Commission and such special meetings thereof as requested to attend by the Commission. The Park Director shall make to the Board of Supervisors and the Commission an annual report of the management and operation of the Lake Berryessa Area, and such other reports as may be requested by the Board of Supervisors or the Commission. The Park Director shall perform the duties of general manager and administrator of the Lake Berryessa Area and such other duties as may hereafter be prescribed by resolution of the Board of Supervisors. The compensation of the Park Director, his assistants and other employees shall be fixed by resolution of the Board of Supervisors.

Section 9. Lake Berryessa Area Defined. "Lake Berryessa Area", herein referred to, shall be defined to be the federally owned or controlled lands of Lake Berryess

reservoir area in the County of Napa, the administration of which has been now or may hereafter be transferred to County of Napa by United States of America by contract or otherwise.

Section 10. Lake Berryessa Park Fund Created. There is hereby established a fund in the County Treasury to be known as Lake Berryessa Park Fund. There shall be deposited in said fund all monies derived from the management and operation of the Lake Berryessa Area under this ordinance and pursuant to the terms of any contract with United States of America relating to the management and operation of the Lake Berryessa Area.

All monies in said fund shall be used for the purpose of defraying the cost of operation, maintenance, and development of Lake Berryessa Area and for the purpose of payment of salaries and wages of persons employed by the County for said work including the expenses of Lake Berryessa Park Commission.

Section 11. Amendments. This Ordinance may hereafter be amended by Resolution of the Board of Supervisors duly and regularly adopted.

Section 12. Publication -- Effective Date. This ordinance shall be published once in The Napa Register, a newspaper of general circulation printed and published in the County of Napa, within ten (10) days of its final passage and shall be in effect thirty (30) days from and after the date of its adoption.

The foregoing Ordinance was duly and regularly passed and adopted at a regular meeting of the Board of Supervisors of the County of Napa, State of California, held on the 16th day of July, 1958, by the following vote:

AYES: Supervisors CLARK, LAURITSEN, DICKENSON, CAIOCCA and FAGLANI.
NOES: Supervisors - None.
ABSENT: Supervisors - None.

N. D. CLARK
CHAIRMAN of the Board of
Supervisors of the County of
Napa, State of California.

ATTEST:

C. S. SHIPPY
COUNTY CLERK of the County
of Napa, State of California,
and ex-officio Clerk of its
Board of Supervisors.

## SELECTED SECTIONS FROM ORDINANCE NO. 202

AN ORDINANCE OF THE COUNTY OF NAPA PRESCRIBING REGULATIONS FOR BERRYESSA LAKE AND PARK AREA AND THE WATERS THEREOF AND PROVIDING FOR PENALTIES FOR THE VIOLATION THEREOF.

The Board of Supervisors of the County of Napa, State of California, do ordain as follows:

Section 1. Berryessa Lake and Park Area defined. "Berryessa Lake and Park Area," herein referred to is hereby defined to be the federally owned or controlled lands and reservoir area and waters thereof in the County of Napa, the administration of which has been or may hereafter be transferred to County of Napa by United States of America by contract or otherwise.

Section 2. It shall be unlawful for any person:

(a) To camp, picnic, hunt, launch or land boats on any portion of the Berryessa Lake and Park Area situate on the easterly side of Berryessa Lake and lying between Eticuara Creek and the Monticello Dam, or to swim or bathe in the waters of Lake Berryessa within one hundred feet of the shoreline of Lake Berryessa between Eticuara Creek and Monticello Dam.

(b) To pick flowers, foliage, berries or fruit, or cut, break, dig up, or in any way mutilate or injure any tree, shrub, plant, fern, grass, turf, fence, structure or improvement of any kind, unless an employee of the County of Napa engaged in work of improvement authorized by the Park Director.

(c) Unless authorized by the Park Director, to cut, carve, paint, mark, paste, or fasten to any tree, fence, wall, rock, building monument or other object within the Berryessa Lake and Park Area, any bill, advertisement or inscription.

(d) Unless authorized by the Park Director, to dig up or remove any dirt, stones, rocks, or other substance whatever, make any excavation, quarry any stone, or lay or set off any blast within the Berryessa Lake and Park Area.

(e) To leave or abandon in the Berryessa Lake and Park Area, except in receptacles designated for that purpose by the Park Director, human waste, cans, bottles, waste, paper, broken glass or other rubbish or garbage.

(f) To light, build or maintain in the Berryessa Lake and Park Area any open fire; provided that fires may be maintained in fireplaces provided and designated for that purpose by the Park Director, and provided that fires may be maintained in camp and picnic areas designated by the Park Director in oil or gasoline stoves.

(g) To bring any dog or cat or other domestic animal into the Berryessa Park and Lake Area, except on leash.

(h) To ride, drive, lead or keep a horse or other animal in the Berryessa Park and Lake Area, except upon roads and trails designated for that purpose by the Park Director or in such other areas as may be designated as pasturage areas under lease by the Board of Supervisors. No horse or other animal shall be hitched to any tree or shrub in such manner as to cause damage to such tree or shrub.

(i) To molest, injure or kill any bird or mammal, or disturb its habitat in the Berryessa Lake and Park Area unless certain areas are designated from time to time to be hunting areas by the Park Director.

(j) To use threatening, abusive, boisterous, insulting or indecent language or gesture in the Berryessa Lake and Park Area.

(k) To operate any vehicle at a speed in excess of fifteen (15) miles per hour on any road in the Berryessa Lake and Park Area, other than upon State or County Highways and to operate vehicle within said Area except upon roads and thoroughfares and parking areas designated for said purpose by the Park Director.

(l) To sell, peddle or to offer for sale any food, liquids, edibles for human consumption, or any goods, wares, services or merchandise within the Berryessa Lake and Park Area except under permit issued by the Park Director, and subject to such laws and regulations as may now or hereafter exist, promulgated by the Board of Supervisors of the County of Napa, the Park Director or the Director of Public Health of the County of Napa.

(m) To camp, picnic or occupy any portion of the Berryessa Lake and Park Area as a trailer site, except in areas designated for such purpose by the Park Director.

(n) To wade, swim, bathe, operate a boat or water ski within fifteen hundred (1500) feet of Monticello Dam.

(o) To contaminate or pollute the waters of Lake Berryessa or the shore area thereof or the tributaries thereof or to discharge any human waste, litter, garbage, oil or other debris therein.

(p) To enter any areas of the Berryessa Lake and Park Area which are closed to entry by the Park Director and posted against trespassing in accordance with the provisions of Section 627 of the Penal Code of the State of California.

(q) To carry or possess any firearms in the Berryessa Lake and Park Area without a Permit in writing issued by the Park Director.

Section 3. Water Ski-ing. The following regulations shall relate to water ski-ing on Lake Berryessa and any violation of said regulations shall be unlawful:

(a) No person shall operate a boat or other means of motor power which is pulling or towing any aquaplane or water skier or ride an aquaplane or water skis except between the hours one-half hour before sunrise and one-half hour after sunset.

(b) All boats towing water skiers shall take off counter clockwise and come into ski landing docks or ramps counter clockwise and shall take off and land only in areas designated for such purpose by the Park Director.

(c) All persons shall wear a life jacket while riding an aquaplane or while water ski-ing.

(d) Tow lines for water ski-ing or aquaplaning shall not exceed one hundred twenty-five (125) feet in length, and not more than two (2) skiers shall be towed by any boat at any one time.

(e) There shall be one person other than the operator of a boat present therein at all times while such boat is engaged in the act of towing a water skier or skiers or aquaplane, competent to handle the tow lines thereof, all boats while engaged in towing a water skier or aquaplane shall be equipped with a rear view mirror.

(f) No person shall engage in waterski-ing or aquaplaning while under the influence of intoxicating liquors.

(g) To tow a ski line in excess of one hundred (100) yards without a rider.

(h) To follow any person engaged in water ski-ing or aquaplaning within a radius of two hundred (200) feet of such person.

(i) Nothing contained herein shall prevent or make unlawful exhibitions of water ski-ing and aqua-

planing in contravention of the foregoing provided that such exhibitions are conducted under permit in writing issued by the Park Director and in accordance with rules established therefor by the Park Director.

Section 4. Operation of Boats. The following regulations shall relate to the operation of boats upon Lake Berryessa and any violation thereof shall be unlawful:

(a) To place in, use or operate any boat on Lake Berryessa without having submitted said boat to inspection by the Park Director or his duly authorized representative, and without obtaining from the Park Director or his duly authorized representative a permit decal which shall be affixed to the port bow of such boat before such boat is placed in or operated upon Lake Berryessa. Such permit decal shall be issued by the Park Director for such fee as may from time to time be established by the Board of Supervisors by Resolution and shall be valid for one calendar year and shall terminate on December 31st in each year. All boats issued a permit to operate upon Lake Berryessa shall be of design and type possessing sufficient buoyancy to keep afloat if overturned or swamped if loaded to capacity, and shall be not less than ten (10) feet in length, gunwale measurement, and not less than forty-two (42) inches in width.

(b) To permit any child under the age of twelve (12) years to be in or on board any boat upon Lake Berryessa unless such child is wearing a Coast Guard approved life preserver.

(c) To operate upon or to place in Lake Berryessa any boat having operating sink drains or flush toilets, and all boats maintained on Lake Berryessa shall be kept in a safe and sanitary condition, and all such boats while in operation shall be equipped with not less than one adult life preserver, life ring or buoy of approved Coast Guard type for each person occupying such boat.

(d) To operate upon Lake Berryessa a boat which is occupied by a greater number of persons than the number for which said boat is rated as shown upon the permit decal for such boat issued by the Park Director or his representative.

(e) To operate upon Lake Berryessa a motor boat unless the operator thereof is in possession of a valid Motor Vehicle Operator's license, or unless accompanied by an adult person possessing such license, who shall supervise the operation of such boat; provided, however, that this section shall not apply to motor boats unless capable of attaining a speed in excess of ten (10) miles per hour. No person under the age of ten (10) years shall operate a motor boat upon Lake Berryessa.

(f) To use or operate any boat on Lake Berryessa except between the hours one hour before sunrise and one hour after sunset, unless such boat is licensed by the Park Director to operate as an excursion boat under rules established by resolution of the Board of Supervisors.

(g) No person shall operate a boat within fifteen hundred (1500) feet of Monticello Dam or pass through any log boom or line of buoys designating a closed area.

(h) No person shall mutilate, damage or move from position any buoy placed in Lake Berryessa or operate any boat at a speed in excess of five (5) miles per hour within three hundred (300) feet of any buoy.

(i) No person shall operate any motor boat unless the motor thereof is equipped with a muffler or other silencing device excepting motors with underwater exhausts which are not equipped with a cut-out, and racing boats actually participating in authorized races in designated areas.

(j) No person shall operate any boat while under the influence of any intoxicating liquors.

(k) No person shall operate any motor propelled boat at a speed greater than is reasonable or prudent, having regard for the traffic on the lake and the condition and width of the lake, or in such manner as is likely to endanger the safety of persons or property.

(l) No person shall operate any motor propelled boat upon the waters of Lake Berryessa at a speed in excess of five (5) miles per hour within three hundred (300) feet of any way or landing wharf to which boats are made fast and which is used for the embarkation or discharge of passengers; or within two hundred (200) feet of any buoy or boom, or within an area designated as "slow" area or within two hundred (200) feet of any person who is bathing or swimming or a designated swimming area, or within two hundred (200) feet from the shore at any place except while in the act of launching or landing an aquaplane or water skier; or within one hundred (100) feet of any sail boat or within one hundred (100) feet of any water craft sixteen (16) feet in length or smaller, which might be seriously in danger by the action caused by the wake created by the passing vessel or within one hundred (100) feet of any person riding water skiis or an aquaplane; or within two hundred (200) feet of any authorized boat, sheriff's boat or any other boat while said boat or boats are in the act of rescue operations, dragging for bodies or equipment or in the pursuit of any violator of the provisions of this ordinance provided such boats are marked.

(m) No person shall operate any boat within such a distance of any anchored fishing boat so that the wake thereof shall endanger such anchored fishing boat.

(n) No person shall operate any boat so as not to allow at least two hundred fifty (250) feet clearance behind trolling fishing boats so as to avoid fouling the trolling lines. Trolling fishing boats shall display a white flag not less than two (2) feet by two (2) feet in size, to give adequate warning of such boat's trolling activities.

(o) No person shall operate or navigate any commercial motor boat carrying passengers for hire without being licensed in accordance with law, or without being authorized by the Board of Supervisors to engage in such services.

(p) No person shall use or operate any boat without the consent of the owner or person in charge thereof, or to be an accessory to the taking, or use or operation of any boat without the consent of the owner or person in charge thereof. The consent of the owner or person in charge of a boat to its taking, or use or operation shall not be presumed or implied because of such consent on a previous occasion to the taking, or use, or operation of said boat by the same or different person.

(q) No person shall use a siren on any boat used, operated, driven, or propelled on Lake Berryessa, except, a police boat or a boat used by an authorized officer in the performance of his duty.

(r) No person shall land or moor any boat except at an approved dock site or mooring site or such other areas as may be specifically designated by the Park Director.

(s) No person shall launch any boat except at approved launching areas, designated by the Park Director.

Section 5. Amendments. This Ordinance may be amended hereafter by Resolution of the Board of Supervisors of the County of Napa regularly adopted.

Section 6. Punishment for Violation. Any person violating any of the provisions of this ordinance shall be guilty of a misdemeanor which shall be punishable by imprisonment in the County Jail for not to exceed six (6) months, or by a fine not to exceed Five Hundred Dollars ($500.00) or by both such fine and imprisonment.

Violation of any of the provisions of this Ordinance, shall be ground for revocation of any boat license

or permit, and for the withdrawal of the privilege of using any of the facilities at Lake Berryessa of any person who violates the provisions of this Ordinance.

Section 7. Constitutionality. If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The Board of Supervisors of the County of Napa hereby declares that it would have passed this ordinance irrespective of the invalidity of any one or more sections, subsections, sentences, clauses or phrases thereof, declared unconstitutional or ineffective.

Section 8. Effective Date. It is hereby declared that this Ordinance is necessary to and is required for the immediate preservation of the public peace, health, safety, and general welfare, and shall take effect immediately upon its passage. The declaration of facts constituting such urgency is as follows:

That the Berryessa Lake and Park Area, herein defined, being an area recently acquired by the United States of America for water storage, and including a lake created for such purpose, has been placed in the jurisdiction of the County of Napa for administration; that said area is being visited and used by great numbers of the public; that said area is not equipped with health facilities; that no regulations for the use of said area by the public for recreational purposes have been adopted by any public body; that the unregulated use of said area by the public has created a situation dangerous to health, life and property.

Section 9. Publication. This Ordinance, together with the names of the members of the Board of Supervisors voting for and against the adoption of the same, shall be published once in the Napa County Record, a newspaper of general circulation published in the County of Napa, State of California.

The foregoing Ordinance was duly and regularly passed and adopted at an adjourned regular meeting of the Board of Supervisors of the County of Napa, State of California, held on the 14th day of August, 1958, by the following vote:

AYES: Supervisors: N. D. Clark

A. M. Lauritsen
Howard H. Dickenson
Andrew G. Fagiani

NOES: Supervisors: None

ABSENT: Supervisors: Julius Caiocca, Jr.

N. D. CLARK, Chairman of the
Board of Supervisors of the
County of Napa,
State of California.

ATTEST:

C. S. SHIPPY, County Clerk
of the County of Napa,
State of California,
and ex-officio Clerk of its
Board of Supervisors.

(August 20, 1958)

Public Use Plan
Monticello Reservoir (Lake Berryessa)
Solano Project California
prepared by
National Park Service
October 1959

Amendment Number I

MANAGEMENT AUTHORITY

Legislative Authority: To provide for the protection, use, and enjoyment of the esthetic and recreational values inherent in the Federal lands and waters at Lake Berryessa, Solano Project, California, the Secretary of the Interior was authorized by Public Law 93-493 (88 Stat. 1486) to develo operate, and maintain such short-term recreation facilities as he deems necessary for the safety, health, protection, and outdoor recreational use of the visiting public; to undertake a thorough and detailed review of all existing developments and uses on Federal lands to determine their compatibility with preservation of environmental values and their effectiveness in providing needed public services; to implement corrective procedures when necessary; and to otherwise administer the Federal land and water areas associated with said Lake Berryessa in such a manner that, in his opinion, will best provide for the public recreational use and enjoyment thereof, all to such an extent that said use is not incompatible with other authorized functions of the Solano Project. The legislation also directed the Secretary of the Interior to make such rules and regulations as are necessary to carry out the provisions of this authority.

Delegated Authority: As provided by existing delegation of authority from the Secretary of the Interior to the Commissioner, Bureau of Reclamation the Bureau of Reclamation will develop and adopt a series of amendments to the 1959 Public Use Plan for Lake Berryessa. The 1959 plan and those amendments will set forth the objectives and policies of the Bureau of Reclamation in planning, developing, operating, maintaining, and otherwise administering the Federal land and water areas associated with Lake Berryessa.

This amendment will be effective on July 1, 1975.

APPROVED: B. E. Martin
Regional Director
Mid-Pacific Region

MAY 28 1975
(Date)

Public Use Plan
Monticello Reservoir (Lake Berryessa)
Solano Project California
Prepared by
National Park Service
October 1959

Amendment Number 2

Policies for Recreation Management
Lake Berryessa

Objectives: It is the objective of the Bureau of Reclamation to provide outdoor recreation facilities and services for the visiting public at Lake Berryessa which will accommodate a variety of aquatic-related recreation experience opportunities, to the extent and quality and in such combination that will protect the esthetic and recreational values and assure optimum public short-term recreational use and enjoyment, and social benefit.

Policies

A. General

1. The management objective at Lake Berryessa will be to provide the greatest good for the greatest number of the public at large for the largest period of time.

2. Management decisions will be based upon full analysis and weighing of relevant factors, including environmental, social, and economic effects of various alternatives. Environmental assessments and statements will be prepared and reviewed pursuant to the National Environmental Policy Act of 1969.

3. The 1959 Public Use Plan for Lake Berryessa and its amendments will be the guiding document in providing direction for planning, developing, operating, maintaining, and otherwise administering Lake Berryessa. This plan, as amended, may be revised and amended on a continuing basis and in sufficient detail so as to bring it into conformance with currently prevailing circumstances and to reflect applicable goals, objectives, and policies of the Bureau of Reclamation of the United States Department of the Interior.

B. Facilities

1. All future developments which may be permitted will be designed and maintained so as to conform with the natural environment to the maximum practical extent.

2. Water related outdoor recreation developments to facilitate boating, swimming, fishing, camping, hiking, bicycling, and picnicking and associated uses in a natural environment will be given preference over intensively developed facilities to accommodate more urban-oriented types of outdoor recreation activities such as spectator sports, golf, tennis, playfields, and the like. Facilities for indoor recreation activities, such as bowling, movies, dining, dancing, and the like, may be permitted in resort areas only if such activities are managed so as to be compatible with and complementary to outdoor recreation uses.

3. A variety of facility design standards will be adopted so as to provide different levels of comfort and convenience in response to varying wants, tastes, and values of the public at large.

4. Facilities and areas developed by the Bureau of Reclamation will be supplemental and not competitive with the resorts. While the visitors at the resorts will be provided a socially oriented recreation experience in an extensively modified natural environment, the proposed West Shore use areas will provide a water-oriented recreational experience in a natural environment.

5. Present and future developments made by the Bureau of Reclamation will be managed for moderate to low density so as to assure a reasonable level of separation of users and user groups. The private sector in existing resorts will continue to provide high density, high convenience type of facilities, including laundry facilities, showers, marina facilities, and store concessions.

6. All buildings and facilities which are intended for public use that are built by the Bureau of Reclamation will be designed and constructed to assure accessibility and usability by physically handicapped people.

C. Services

1. Recreation use will be supervised and regulated as may be necessary to (a) protect the environment, (b) protect the public health and safety, (c) avoid activity conflicts between users, and (d) optimize satisfaction of the recreation experience of visitors.

2. The land, water, and all associated natural resources and the facilities

constructed thereon will be timely maintained so as to perpetuate their appearance and value for continuing public use and benefit.

3. In addition to providing services which accommodate basic physical needs of the visitor and to protect existing resources and the health and safety of the public, amenity services will be made available so as to optimize recreation user experience satisfaction. Different levels and kinds of services will be provided in different sites and areas on a planned basis, based upon experience level objectives established for those sites and areas.

4. Level of use will be regulated according to the capacities of the land, water, and installed facilities to accommodate such use.

5. Length of stay limits of recreation visitors will be regulated so as to make the area, the facilities, and the services available to the maximum number of people. Conflicts between short and long-term users for available space, facilities, and services will be reconciled in favor of short-term users.

D. Concessioner Relationships

The Bureau of Reclamation will assume management responsibilities of Lake Berryessa on July 1, 1975. Management decisions will be made by the Bureau in accordance with the Public Use Plan as it may be amended. The Bureau will honor and abide by the individual concession agreements, provided that the agreements are not in violation of existing local, state and federal statutes. As new management directives are formulated, the Bureau representatives will continue, to the extent practicable, to keep the concessioners involved in decisions affecting them and their operations.

This amendment will be effective on July 1, 1975.

Approved: B. E. Martin
Regional Director
Mid-Pacific Region

JUL 7 1975
(Date)

# United States Department of the Interior

BUREAU OF RECLAMATION

MID-PACIFIC REGIONAL OFFICE
2800 COTTAGE WAY
SACRAMENTO, CALIFORNIA 95825


IN REPLY REFER TO: MP-130
715.

MAY 27 1976

TO PERSONS INTERESTED IN LAKE BERRYESSA

Attached is a copy of the finalized Amendment #3 to the Public Use Plan for Lake Berryessa which establishes our policy for long-term uses such as mobile homes and trailers.

Over the past two years, this policy has been subjected to extensive review by a variety of interested parties and groups including tenants, recreationists, resorts, civic organizations, and federal and local agencies. We have received numerous suggestions and recommendations. This final product reflects and responds to that public input to the extent possible.

As you will note, the policy provides for an orderly long-term phase out or conversion of existing long-term uses based upon public need. At the same time, it provides for near-term corrections of substandard conditions in existing mobile home and travel trailer parks. Those trailer sites which conform with applicable standards may continue to be operated by the resorts and used by their tenants at least until the expiration of concession agreements.

Prior to the expiration of those agreements, we must make land use studies and plans to determine how each of the resort areas should be redeveloped and managed in the future. Such plans will help us to make judgments and decisions of public need. In this study and planning effort, we will seek comment and advice from all interested parties, groups and agencies in an effort to find out how the public wishes this lake to be developed and managed. We are committed to managing Lake Berryessa so as to provide the optimum social benefit on a sustained basis over the long-term.

Sincerely yours,

B. E. Martin

B. E. Martin
Regional Director

Enclosure


JOHNNY HORIZON '76

Let's Clean Up America For Our 200th Birthday

Public Use Plan
Monticello Reservoir (Lake Berryessa)
Solano Project California
Prepared by
National Park Service
October 1959

Amendment Number 3

Objectives: It is the objective of the Bureau of Reclamation to allow private long-term uses, including mobile homes, trailers, cabins, or other facilities at Lake Berryessa under the following policies. Such private uses will be permitted until a public need develops with consideration for expiration of concession agreements or until such other time as mutually acceptable to the concessioner and the Bureau of Reclamation. The sites on which these long-term uses are permitted will be converted to short-term use as public needs develop and in accordance with the Public Use Plan (PUP) or to revisions or modifications of this plan that may be adopted by the Bureau of Reclamation.

Policies applicable to all resorts

1. No additional sites or facilities will be developed for long-term use and existing long-term uses (mobile homes and travel trailer sites) will be phased out as public needs develop.

2. Concessioner facilities will be operated, maintained or improved so as to comply with applicable current County, State and Federal health and safety laws, rules and regulations.

3. Those concessioners who fail to bring their facilities and operations into conformance with applicable current County, State and Federal health and safety laws, rules and regulations within a reasonable period of time will be required to remove those structures and facilities that do not conform.

4. As structures or facilities may be removed because of non-conformance with applicable current County, State and Federal health and safety laws, rules and regulations, continued use of the vacated area will be permitted by the concessioner, provided the area is otherwise managed or developed in accordance with the PUP.

5. Mobile home/trailer sites which were developed under proper approval granted in writing by Napa County or jointly with the Bureau of Reclamation, and meet applicable current County, State and Federal health and safety laws, rules and regulations will be permitted to remain in use for the remaining term of the existing concession agreements provided the sites continue to meet the standards.

6. Mobile home/trailer sites which were developed without advanced written approval may be post-approved by the Bureau of Reclamation if they meet applicable current County State and Federal health and safety laws, rules and regulations and generally conform to the provisions of the PUP. Those sites failing to meet these criteria will be vacated and will be restored to as near as possible their original condition or will be converted to an alternate use consistent with the PUP.

7. Concessioners will modify their developments so as to bring their operations into conformance with the PUP as amended. If a concessioner demonstrates to the satisfaction of the Bureau that he is bringing his operations into conformance with the PUP, then a new agreement may be negotiated for execution at or prior to the time the agreement expires. Any new agreement will be negotiated to reflect decisions for continuance or conversion of the long-term use of the sites and areas based upon determinations of public need.

8. If a new agreement cannot be reached at the time the existing agreement expires, then the concessioner will be required to:

   a. Remove his improvements from the site, or
   b. Transfer his interest to a third party qualified and acceptable to the Bureau, who will be willing to adhere to the PUP.

APPROVED B. E. Martin
Regional Director
Mid-Pacific Region

MAY 27 1976
Date