SAINT MARY'S COLLEGE OF CALIFORNIA
P.O. BOX 1130, MORAGA, CALIFORNIA 94575 (415) 376-4411 ATHLETICS

Sept. 27, 1992

To Whom It May Concern:

I am Giancarlo Trevisan, presently coaching Crew at St. Mary's College of Moraga, California, and involved in rowing since 1953. We do row on a drinking water facility and have for many years. I myself have coached at St. Mary's on Briones Reservoir since 1976; however St. Mary's has had access to Briones since the 1960's.

There are now three Universities using the facilities with over 150 rowers on the water daily. We each sign a contract yearly with the East Bay Municipal Utility District, and to my knowledge, there has never been a real problem caused by the rowers using the reservoir.

I am enclosing a copy of our contract so that you can see what is stipulated. The major concern is that there is no body contact with the water; no swimming allowed, no trash thrown into the water, no pesticides used aroung the boathouses, and enclosed modern motors are required. Portable sanitary facilities are required so that no human wastes finds its way into the water supply. These requirements are not difficult to follow nor to enforce , and St. Mary's and the EBMUD have had many years of cooperative association without problems.

Giancarlo Trevisan
Director of Crew

August 20, 1992

To Whom it may Concern:

Giancarlo Trevisan, the rowing coach at St. Mary's College in California, has asked me to comment on the potential impact of rowing activities on drinking water reservoirs. I am an environmental microbiologist and biochemist, and have recently completed a postdoctoral project at Stanford University Medical School. I currently work as an environmental consultant with a San Francisco firm called American EnviroChem.

There are two ways in which human activity might have a negative effect on water quality at a water reservoir: through biological or chemical contamination. I am convinced that an active rowing program would have no measurable impact on the biological or chemical water quality of a drinking water reservoir. In fact, many rowing programs are currently in operation on drinking water reservoirs in the US, and I know of no cases in which any water contamination has occurred.

Rowing is not a water contact sport in the sense that the rowers' bodies never touch the water during normal activity. Hence there is no chance that any bacterial contamination of reservoir water would occur. It is of course important to note that even the cleanest lake water is not biologically sterile. Lake water typically contains 100,000 to 1,000,000 bacteria per milliliter, even under the most pristine conditions. Even if rowers' bodies did contact the water, such as in the event of an accident, this would not result in any measurable impact on water quality. The number of bacteria that might be added to lake water in such an event would be trivial compared to the numbers that are already present.

Chemical contamination of reservoirs through rowing is also essentially impossible. Rowing shells and oars are made of chemically clean, inert materials such as wood, fiberglass or carbon fiber. Even the most sensitive analytical instruments would be unable to detect an effect on water quality as a result of rowing a shell on the water. The use of small motor launches by coaches might introduce trace quantities of petroleum vapor into the water. However, this will tend to evaporate to the atmosphere rather than remain in the water, and in the long run will have about the same impact on water quality that cars passing along a nearby road might have.

In conclusion, I am certain that rowing on a drinking water reservoir would have no measurable effect on water quality. Rowing is a clean, quiet sport that would add nothing to the reservoir, except perhaps a certain charm.

Sincerely,

C. Deane Little

Dr. Deane Little
American EnviroChem
710 Independence Ave
Mountain View, CA 94043

(415) 965-0425

P.S. Please contact me if you have any additional questions.

LAND USE PERMIT AGREEMENT

TO: St. Mary's College
c/o Crew Team
St. Mary's College
Moraga, CA 94575
Attn: Giancarlo Trevisan

Expires:
Prop. No. D50, D 155
Facility: Briones Reservoir

PERMISSION is hereby given to St. Mary's College, to make use of the Briones Reservoir and the adjoining real property shown on the attached map for the sole purpose of rowing crew practice by its men's and women's crew teams and to maintain a temporary boat shelter on the premises for use solely in connection with such crew practice activity. No competitive or spectator attended events shall be permitted hereunder without written permission from the District having first been obtained.

THIS PERMIT shall be for a period of five years commencing and ending unless sooner terminated by the District, and is given subject to all of the terms, conditions and restrictions contained herein. It may be renewed in writing by the District if conditions warrant.

GENERAL PROVISIONS

1. This permit is issued for limited use of certain of the Utility District's real property as hereinbefore described. The East Bay Municipal Utility District is herein called the "District" and St. Mary's College is herein called the "Permittee".

2. This permit can be cancelled at any time, by the District without prejudice, after sixty days written notice to Permittee specifying reasons for cancellations and/or provisions of the permit which have not been complied with, anything herein to the contrary notwithstanding. Upon expiration of the period of such written notice by the District, all rights herein given to the Permittee shall immediately cease and terminate. The District shall not be liable for any damages, costs or claims arising from such cancellation. Upon cancellation, Permittee shall vacate the area and remove all structures and paraphernalia relative to the activity within 60 days of notification. Either party may cancel this permit upon 60 days written notice.

8. General maintenance of the appearance of the entire site used by all the crews will be shared by the various crews in rotation. The Mills College crew will be responsible for site appearance during the months of April, May and June; the University of California crew will be held responsible during the months of January, February and March; the St. Mary's College crew will be held responsible during the months of October, November, and December; for the months of each year covered by this permit.

9. Upon cancellation of this permit, any and all material, property or structures permitted herein belonging to the Permittee will be removed within 60 days following notice to the Permittee of cancellation as hereinbefore provided, and said real property restored to as near its original condition as is possible.

10. The District shall have the right at all times with prior notice to Permittee to enter into the structure, permitted hereby, to inspect the same and determine if said use is to the satisfaction of the District.

11. Nothing herein contained shall in any way affect the right of the District to use all the property covered by this permit in the performance of anything pertaining to the operation of the District with full right of ingress and egress over the same.

12. Permittee will be responsible for any injury to the public and to individuals, including team members or participants, or university employees, arising out of the exercise of the permission granted herein. It expressly agrees to indemnify, defend and hold the District, its directors, officers, and employees free and harmless from and against any and all loss, liability, expense, claims, costs, suits, and damages, including attorneys' fees, arising out of the exercise of the permission granted under this Agreement; except where such loss, liability, expense, claims, costs, suits and damages are caused solely by the negligence or willful misconduct of the District.

13. Permittee will provide evidence of Public Liability Insurance and Worker's Compensation coverage (insurance coverage) on the attached District Insurance Certificate forms and will return the Certificates with the signed permits. Thirty (30) days prior to the beginning of each fiscal year Permittee will provide the District with updated Certificates of insurance coverage. These Certificates must be received and approved by the District prior to the exercise of the permission herein granted.

EAST BAY
MUNICIPAL UTILITY DISTRICT

WATERSHED HEADQUARTERS

August 26, 1992

Mr. Giancarlo Trevisan
15945 Via Cordoba
San Lorenzo, CA 94580

Dear Mr. Trevisan:

Enclosed please find a copy of the current Land Use Master Plan of the East Bay Municipal Utility District. This Master Plan was developed with the cooperative efforts of EBMUD staff and the Land Resources Committee, a group of interested citizens and environmental advisors appointed by EBMUD.

The plan indicates the manner in which EBMUD lands will continue to be preserved as open space and utilized in ways compatible with their primary purpose: water production and distribution. Completed in 1972, the Master Plan was intended to serve as a guide for the future use and management of the lands and water of the District. Recently the District began the process of preparing a new land use plan which is scheduled for completion in 1995.

The information contained in the Master Plan should answer your questions regarding District policy for specific use of District watershed lands for private activities. Please feel free to write me should you require further assistance.

Sincerely,

S. D. Hill

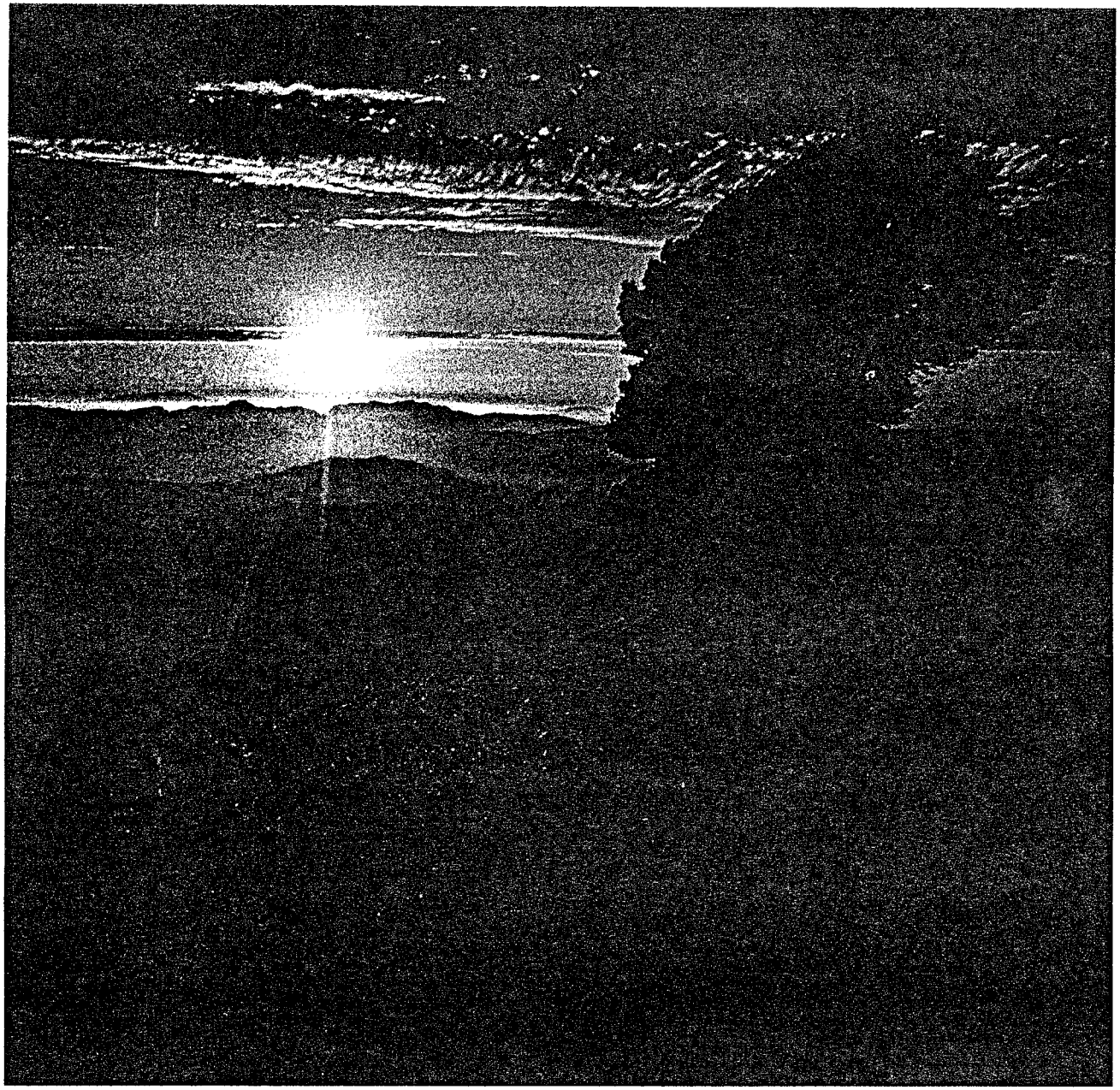
SCOTT D. HILL
LT Superintendent of Watershed

SH:al

Enclosure

500 SAN PABLO DAM ROAD . ORINDA . CA 94563 . (415) 254-3778

the LAND USE MASTER PLAN of the EAST BAY MUNICIPAL UTILITY DISTRICT



Upper San Leandro watershed from Rocky Ridge

Contents

Maps

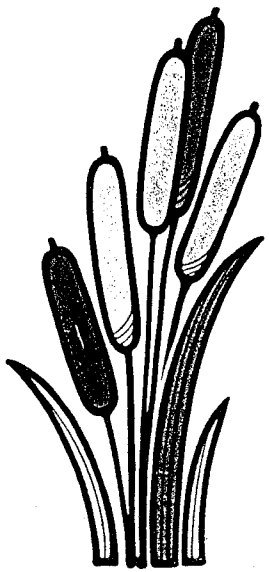
I. Introduction

The East Bay Municipal Utility District's watershed lands and reservoirs in Alameda and Contra Costa counties offer an open space resource without equal in the San Francisco Bay Area. The lands are located adjacent to areas of existing and potential urban and suburban development and help define and separate these areas. The huge, continuous blocks of land contain a wide variety of land and water environments.

The intangible values provided by this open space and associated recreational activity will enhance the quality of life for residents and visitors in the East Bay area for many years to come.

The lands surrounding Pardee and Camanche Reservoirs, although located in an area where the availability of open space is not yet a major concern, provide a recreation resource of considerable importance to the people of Amador, Calaveras and San Joaquin counties.

This Master Plan describes the results of a study of the lands made jointly by the staff of the East Bay Municipal Utility District and the Land Resource Committee, a group of interested citizens and environmental advisors appointed by the District.



The Plan indicates the manner in which EBMUD lands in the East Bay, in the Pardee-Camanche area, and in the aqueduct right-of-way between the two regions will continue to be preserved as open space and be utilized in ways compatible with their primary purpose: water production and distribution.

The Master Plan will serve as a guide for the future use and management of the lands and water of the District for the preservation of their ecological and scenic values, pursuant to Administrative Policy Statement 12.

II. Summary

The East Bay Municipal Utility District began acquiring land for water production and distribution soon after its creation in 1923. Major blocks were acquired in the 1920's in the East Bay as part of the assets of the old East Bay Water Company. In the same years, the District acquired land for Pardee Dam and Reservoir in the Sierra Nevada foothills east of Lodi. In the late 1950's, more land was purchased for the construction of Camanche and Briones dams and reservoirs.

Over the years, as the District bought land it needed, it sold other land it did not. Land sales have amounted to about 25,000 acres, mostly in the East Bay area; roughly half of it went to private parties and the other half went to other government agencies, mostly to the East Bay Regional Park District.

The series of transactions left the District the owner of 54,540 acres, almost equally divided between the Pardee-Camanche watersheds and the watersheds of the five terminal reservoirs in the East Bay hills, including 12,765 acres of water surface.

Public access to the reservoirs and lands was not permitted throughout most of the District's history. However, public demand for recreation access brought the opening of Pardee Reservoir in 1958, Lafayette and Chabot reservoirs in 1966, and Camanche Reservoir in 1967. By 1969 the Board of Directors of the District felt that, if the lands of the EBMUD were to continue to be opened on an orderly basis which took into consideration the varied requirements of the public, a land use master plan was needed. In April, 1969, the Board approved a policy statement setting guidelines for land management and authorized preparation of a master plan and appointment of a citizens advisory committee to assist the staff in preparation of the plan.

The policy statement noted that the primary purpose of the lands was water production and distribution, and that all other uses must be compatible with this primary purpose; stressed the importance of preserving the lands as open space; and indicated preferences for developing public access and funding the developments. Additional operating and legal limitations were considered in preparation of the Master Plan.

Any evaluation of proposed uses must, of course, consider the nature of the lands as well as the principles and limitations summarized above. The East Bay lands, except for two major valleys, tend to be steep with high erosion and land slippage problems. This factor is a lesser problem in Oursan and Pinole Valleys. Another major limitation is the inaccessibility of a large percentage of the area and the consequent lack of availability of the water and sewer services required for certain types of development. The Pardee area also is largely steep and inaccessible and, as in some of the East Bay lands, has some sections covered with solid stands of brush.

Existing uses also had to be considered. About 10,000 acres were already committed to recreation at the four reservoirs; the majority of the remaining lands, if used at all, were used for grazing and other agricultural purposes.

As an initial step in developing the Master Plan, suitable land use categories were defined and potential uses were considered and accepted or rejected in compliance with the guiding principles and limitations. The five use categories include Watershed Management Preserves, for limited-access open space and agricultural purposes; Recreation Management Areas, for both low and high density usage; Educational Use Areas, for a wide range of limited or public access, group or individual study, and site preservation; Public Service Areas, for possible development by various public institutions; and Unclassified Areas, for possible future development, sale or trade.

For planning purposes, District lands were divided into four basic areas; the northern East Bay, including San Pablo and Briones reservoirs and adjacent lands; the southern East Bay, including Upper San Leandro, Lafayette and Chabot reservoirs and surrounding lands; the Pardee-Camanche area; and the aqueduct rights-of-way in the Sierra foothills, the Central Valley, and the East Bay. These areas in turn were divided into smaller management areas.

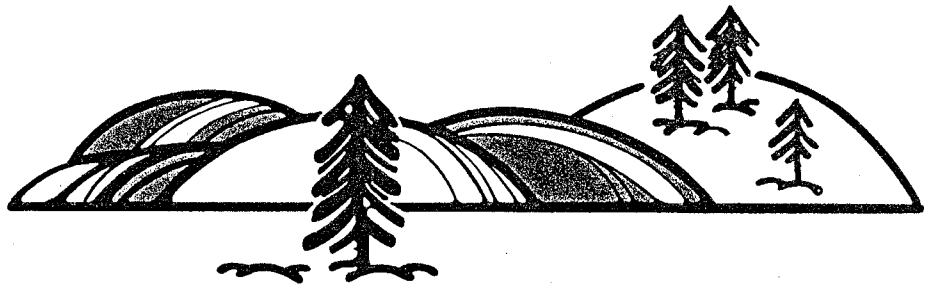
The Master Plan which resulted from the staff and citizens advisory committee study divides the District's lands into 117 parcels — ranging in size from seven to 3,881 acres — with 12 different types of usage in five major categories. The planned uses by major categories are as follows:

Watershed Management Preserves, 33 parcels, 24,815 acres; Recreation Management Areas, 47 parcels, 13,805 acres; Educational Use Areas, 24 parcels, 2,505 acres; Public Service Areas, eight parcels, 225 acres; Unclassified, five parcels, 425 acres.

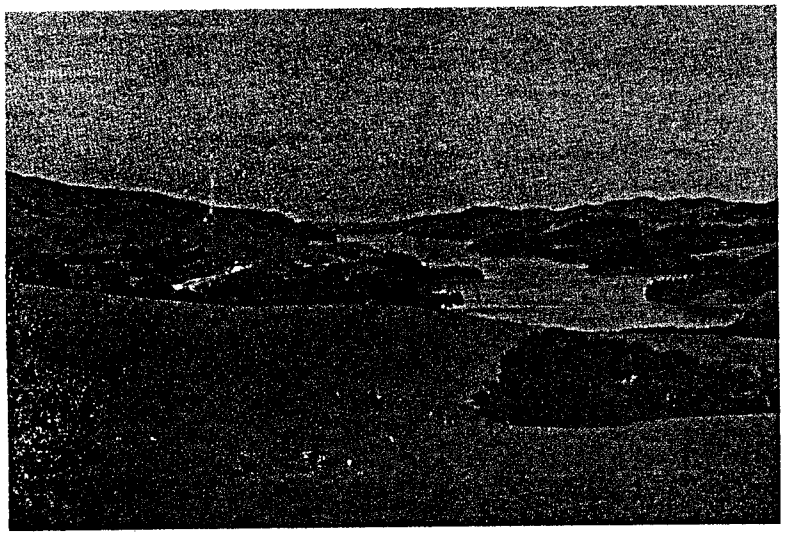
The percentage of District watershed lands in each major category is as follows: Watershed Management Preserve, 59 per cent; Recreation Management Areas, 33 per cent; Educational Use Areas, six per cent; Unclassified, one per cent; Public Service Areas, less than one per cent.

The acreage figures are estimates, and all above figures are approximate. Water surface areas are not included.

Implementation of the Plan will occur as District staff and funding permit. Recreation sites will be developed and educational areas will be made available in accord with timetables and priorities which will be determined in recreation and educational services management plans, which will be prepared by the District staff. Assistance of advisory committees will be sought in connection with compliance with and modification of this Plan.



San Pablo Reservoir



III. The Utility District and its Lands

History of the District

The voters of nine cities in Alameda and Contra Costa counties in 1923 created the East Bay Municipal Utility District to provide water to their 93-square-mile urban area. To accomplish this, the voters a year later approved a $39 million bond issue to finance construction of Pardee Dam and a 94-mile-long aqueduct from Pardee Reservoir to the East Bay. The establishment of the District as a major public water utility was completed in 1928, when funds from a $26 million bond issue approved a year earlier were used to purchase the facilities of the privately owned East Bay Water Company.

Initial diversion rights at Pardee Dam were for 200 million gallons daily. In the late 1950's this was increased to the present 325 million gallons daily.

The Utility District in 1970 was the second largest domestic water utility west of the Mississippi River, providing water for nearly 300,000 metered customers (more than 1.1 million people) in a 277-square-mile service area. Average consumption was 218 million gallons daily and peak consumption was 338 million gallons daily. Expansion of District facilities was financed by a $12 million bond issue in 1949 and a $252 million bond issue in 1958 — at the time, the largest water bond issue ever approved in the United States.

Organizational Structure

The District operates under the provisions of the Municipal Utility District Act of 1921, as amended. The Act gives broad power and full authority to provide a variety of services, including light; water; power; heat; transportation; telephone service or other means of communication; and collection, treatment or disposition of garbage, sewage, or other refuse matter.

The District also has the power, through contract or otherwise, to construct, maintain, improve and operate public recreational facilities appurtenant to any water reservoir owned or operated by the District.

The District has the power of eminent domain and may contract with other governmental agencies for facilities, commodities, or services.

A five-man board of directors governs the District. The directors serve four-year staggered terms and run for election at large, but represent individual wards. The wards, by law, must be approximately equal in number of voters.

Finances

Principal sources of revenue for the District are water sales and property taxes. Smaller amounts of revenue come from annexation and installation charges, recreation and land use fees and rents, and sale of power generated at Pardee Dam.

Water System

The District obtains approximately 15 per cent of its water supply from local runoff on the East Bay watershed lands. The other 85 per cent comes from Pardee Reservoir through three aqueducts located in a 100-foot-wide right-of-way between Pardee and Lafayette.

The District's second Mokelumne reservoir — Camanche — provides flood control capacity and irrigation storage, but is not used for domestic water supply. However, because it does provide storage for other Mokelumne water users, it

enables the District to take its full allotment of up to 325 million gallons daily from Pardee Reservoir.

Water from Pardee is either filtered and put directly into the distribution system, or stored in one of the five terminal reservoirs in Alameda and Contra Costa counties. The terminal reservoirs, in addition to collecting local runoff, provide storage for 51 billion gallons.

The distribution system consists of some 150 reservoirs, 3,100 miles of water mains, and pumping plants and other facilities.

History of the Lands

In 1928, five years after the formation of the East Bay Municipal Utility District, the proceeds of a $26 million bond issue were used to purchase the existing system of the East Bay Water Company. With the facilities came 40,000 acres of land in Alameda and Contra Costa counties.

The District had not been particularly interested in buying the land — much of it was not needed for watershed purposes — but the company had not been willing to sell its facilities without the land. The question immediately arose as to what should be done with it. Several organizations were formed to consider that question and to decide, particularly, how much of the land was suitable for park purposes.

In 1930 a study of Utility District lands was made by the Olmsted Brothers, landscape architects, and Ansel F. Hall of the National Park Service. The main purpose of the study was to determine what parts of the District lands were best adapted to park and recreational use and for what specific park functions they were adaptable. The results of that Study — often called the Olmsted Study — indicated that between 7,000 and 10,000 acres — not including any of the properties necessary for watershed purposes — were suitable for parks and recreation.

However, the young water district did not want to accept the responsibility for parks. Dr. George C. Pardee, president of the District's Board of Directors and a former governor of California, observed that ". . . the East Bay Municipal Utility District cannot go into the non-revenue producing, non-utility business of maintaining and operating parks on District lands purchased with water money."

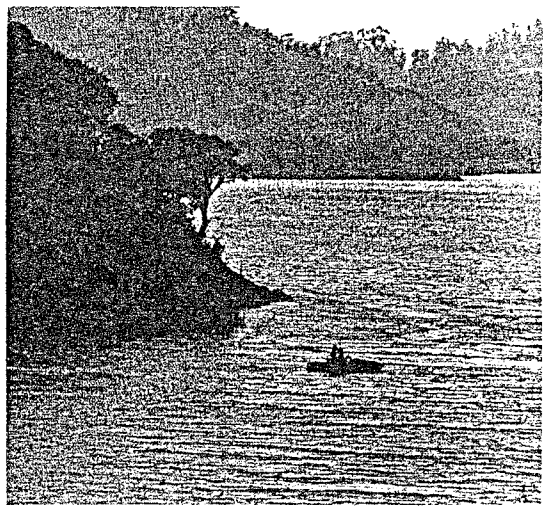
So the voters, in 1934, created the East Bay Regional Park District. The two districts began an extensive debate over amounts of land and money. The Utility District's position — which, with some modifications, is still the District's position — was stated by Dr. Pardee, who said that while the directors favored parks, ". . . they will not sell at sacrifice prices nor be coerced by threats or otherwise into violating the trust under which the Utility District holds the property; namely, to either . . . use for water purposes or to sell . . . for the benefit of the Utility District and use the proceeds to retire existing water-bond indebtedness against the property."

The negotiations ended in agreement in 1936, and 2,162 acres of Wildcat Canyon, Roundtop Peak and Temescal Reservoir properties were sold to the park district for $656,000.

During the years before World War II, the Utility District made a series of sales to private parties. These sales had been planned from the beginning; in fact, some of the land was already subdivided at the time EBMUD acquired title to it. When the District went to the voters for a $26 million bond issue to finance purchase of the old private water company and its land, the bond issue prospectus noted that lands which "promise to become increasingly valuable . . . are not necessary to the watershed." In all, the District sold some 13,000 acres to private individuals, most of it before World War II. After the last private sale in 1959, the District put a moratorium on such sales until the "best possible use . . . in the public interest" could be determined. The moratorium remained in effect until replaced by this Plan.

In addition to the 13,000 acres sold to companies and individuals, the Utility District over the years sold 12,400 acres to public agencies — mostly to the East Bay Regional Park District. However, the District also had to buy additional land for watershed, so despite the sales, it still owns 27,330 acres in the East Bay hills, counting both land and reservoir water surface. The District since its beginning kept the reservoirs closed to fishing and the watersheds closed to public access. In 1936, the same year the District made the first sale of land to the park district for recreation purposes, the request of a sportsmen's group that Lake Chabot be opened

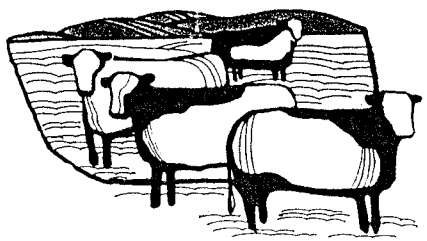
Chabot Reservoir



for fishing was quietly rejected. However, public demand for recreation increased over the years and in 1958, the District opened Pardee Reservoir. In 1959, the Legislature passed a law which made it possible to open terminal reservoirs for recreation uses which did not involve bodily contact activities. In 1966, 32 years after Dr. Pardee had emphatically rejected the idea of East Bay Water being in the park business, the District opened Lafayette Reservoir to the public. A few weeks later Lake Chabot, which had been leased to the East Bay Regional Park District, was also opened. Camanche Reservoir was opened in 1967 under a lease arrangement with the Camanche Regional Park Board.

San Pablo Reservoir was next to be committed for recreation — it is scheduled for opening in 1972 — and the District has considered public use of other reservoirs and watersheds. However, EBMUD's experience at Camanche, Chabot, Lafayette and Pardee and the widely varied use possibilities and public requests made it clear that a master plan was needed.

In early 1969, the District Board of Directors adopted a policy — Administrative Policy Statement 12 — calling for an approach to multiple use of watershed lands which would recognize their importance as open space as second only to their primary purpose in the water system. The Board directed the staff to prepare a land use master plan and authorized the appointment of a citizens advisory committee to assist in the project. Subsequently, the staff was instructed to concurrently prepare a recreation plan in accord with the land use plan, and submit it to the Board of Directors after completion of the land use master plan. An educational area plan is also being prepared with the assistance of an Educational Advisory Committee.



IV. Planning Assumptions, Principles and Limitations

Various assumptions regarding open space needs and District water production developments, and various principles for the planning and management of land uses guided the preparation of this Plan within the framework of certain legal and operational limitations.

Assumptions

■ Public health policy will continue to permit public use of watershed lands, and continue to prohibit use of Pardee and the terminal reservoirs for activities involving bodily contact.

■ Demand for preservation of open space and recreation in the San Francisco Bay area will increase due to increases in population, in public concern for environmental quality, in needs for on-site environmental education, in leisure time, and in mobility of the population.

■ Upper San Leandro Reservoir enlargement will occur about 1980.

■ Pinole Reservoir construction will occur sometime after 1990.

Principles

■ East Bay Municipal Utility District lands included in this Plan will be administered as a public land trust to preserve and protect the open space characteristics of the lands. Uses permitted will be only those which depend on these characteristics for their enhancement. Open space, as used in this Plan, is defined as an area of undeveloped or predominately undeveloped land and/or water.

■ Land use plans will be based on three major considerations as follows:

1. The constraints imposed by water quality requirements. Proposed secondary uses must be evaluated in terms of the water pollution and other hazards involved.
2. The physical and ecological characteristics of the land itself, the carrying capacity of the land, and the compatibility of differing types of uses on the same and adjacent parcels of land. For each site, an optimum use or combination of uses must be determined. In addition, the carrying capacity—level of use—will be established for each site which will prevent physical or biological deterioration, and which will preserve the quality of the human experience of the user. The intensity of use must be kept safely within this carrying capacity.
3. The long range open space, recreational and educational needs of the people of the region. Because the District has sufficient lands and reservoirs for a variety of uses, multiple uses will be planned and coordinated in a manner to minimize conflicts. Recreational uses of the watershed will to the extent possible complement other adjacent park systems.

■ Lands and their uses will be under the continuous control of the District, even if contracted to other public agencies or private concessionaires. All development on District lands will be in conformity with criteria and regulations established by the Board of Directors of the District.

■ Lands which may be acquired hereafter which are related to lands covered by this Plan will be classified in accordance with the principles and

practices of Section IV, V, and VI of this Plan.

Operational Limitations

The necessity of maintaining water quality standards of sanitation and esthetics, and the nature and economics of water production and distribution, place limitations on the use of watershed lands.

■ Watershed and reservoir sanitation requirements to protect public health prohibit any uses which might result in a significant increase in toxic chemicals, pathogenic bacteria or viruses, or other health hazards.

■ Somewhat greater latitude exists in esthetic criteria than in those for public health; however, developments or uses which will contribute to the reduction of the palatability of the water supply cannot be tolerated.

■ Watershed and reservoir usage may create circumstances which reduce filter plant efficiency and cause other operational difficulties. Costs of supplying safe and palatable water to the consumer might increase.

1. Heavy land usage might result in additional erosion which would increase turbidity which, in turn, would reduce the flow of water through filter plants.
2. Additional usage of watersheds and water surfaces tends to increase the need for monitoring water quality.
3. Operating capabilities of the water treatment system must be considered. Pardee water supplied directly to the Orinda, Lafayette and Walnut Creek filter plants without terminal storage is of a quality which does not require pretreatment before filtration. Consequently, these filter plants at present do not have pretreatment facilities, and limitations must be placed on the type and intensity of use at reservoirs supplying them.

■ Operating requirements of the water system can adversely affect the recreational values of the reservoirs.

1. Chemical control of organisms in terminal reservoirs is periodically necessary; while every effort is made to avoid fish kill, water quality has priority over fish life.
2. All reservoirs fluctuate seasonally to some degree. Recreational uses would have to be able to adjust to this fluctuation.

Legal Limitations

Authorization for and limitation of public use of domestic water reservoirs and watersheds is provided in various California statutes.

■ Authorization for public access and use is included in the Municipal Utility District Act, Section 12817, and in the California Health and Safety Code, Sections 4465-4468 and 4471.4.

■ Statutes governing watershed land use include California Health and Safety Code, Sections 4450-4468; and the Fish and Game Code, Sections 10770-10771 and 5650-5651.

■ Permission of the California Department of Public Health is required for usage of domestic water supply reservoirs for other than their primary purpose.

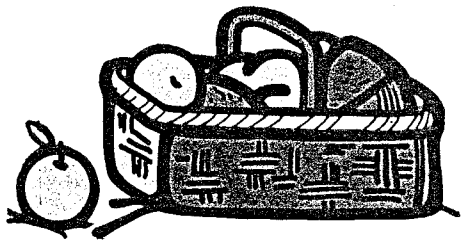
V. Planning Procedures and Categories

Planning Areas

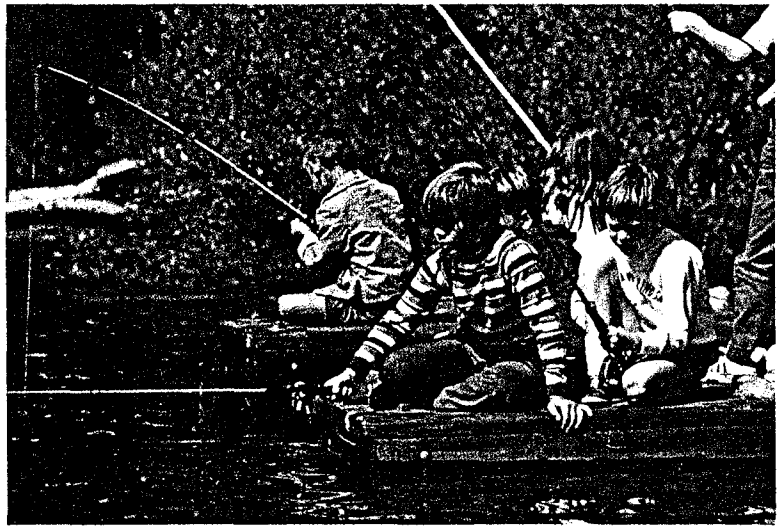
The lands included in this Plan are those shown on the maps which are a part of the Plan, plus those in major aqueduct rights-of-way. These lands were divided into four areas for planning purposes: the northern and southern East Bay watersheds of 24,625 acres of land and 2,705 acres of reservoir water surface in Alameda and Contra Costa counties; the Pardee-Camanche watersheds of 17,150 acres of land and 10,060 of water in Amador, Calaveras and San Joaquin counties; and the major aqueduct rights-of-way of about 1,200 acres. Included in the latter are the 100-foot-wide Mokelumne Aqueduct right-of-way between Pardee and the Lafayette Filter Plant and the 60-foot-wide right-of-way for the future Moraga Aqueduct between Lafayette and a point beyond St. Mary's College. The Moraga Aqueduct right-of-way, portions of which are owned jointly by the District, Central Contra Costa Sanitary District and Pacific Gas and Electric Company, is the former Sacramento-Northern railroad right-of-way.

Planning Processes

In the preparation of this Plan, consideration was given to the present and anticipated recreation, environmental education and open space needs of the people of the East Bay; to the primary function of the lands in the water production and distribution system; to the fact that the lands are now and will remain open space; and to the physical characteristics of the land areas. It was assumed that



Lafayette Reservoir



the public demand for varied activities compatible with the primary purpose of the watershed will increase, as will the need and demand for open space.

A wide variety of specific use requests were studied by the Utility District staff and advisory committee. Typical requests were for fishing and boating on reservoirs, hiking and riding trails, nature study areas, drag-strips and areas for off-the-road vehicles, golf courses, swimming and tennis areas, conference centers, picnic areas, equestrian centers, overnight and day camps and travel trailer-camper parks. All requests were evaluated in terms of the policies and criteria stated earlier in this Plan. Planning staffs of various cities, counties and districts were consulted. All aspects of the preparation of the Plan involved the District Land Resource Committee.

Land Use Categories for the Plan

After study of the lands, public needs, and the various land use criteria and limitations, five land use categories with eight subcategories were established for District lands as follows:

Watershed Management Preserves

Large areas for agricultural, wildlife or watershed uses, including areas not needed for recreational or educational purposes at the present time. Lands in this category are open by permit only, except that public access can be allowed for trails connecting with lands in other use categories or with lands not owned by the District. Watershed management preserves may be considered a holding or transition category in which lands for which there currently is little or no need for general public use can be kept until such need develops. The category includes three specific use subcategories:

Ranching Areas

For livestock grazing. Much of the District properties are grasslands with factors of accessibility or topography which make them best suited for cattle grazing. This use benefits the District by reducing fire hazards, retarding the spread of brush, and producing a limited amount of revenue.

Community Horse Pastures

For grazing and riding horses. The number of pleasure horses in the District area is increasing, but the number of suitable public grazing areas is limited. Consequently, lands which are easily accessible and which otherwise would be designated as ranching areas have been set aside for community horse pastures and can be leased to organized groups with membership open to the public.

Farming Areas

For cultivation or related agricultural uses. In this subcategory are lands which, because of their deep soils, level or gently sloping topography and resulting low erosion hazards, are suitable for a more intensive form of agriculture than other lands in the Watershed Management Preserve category.

Recreation Management Areas

Parcels and sites of various sizes for recreation activities. This category, which is intended to meet the public demand for general access to District lands and reservoirs, includes three subcategories for different types and intensities of recreation:

Developed Recreation Areas

Sites for comparatively intensive use levels, primarily for water-oriented activities. Possible developments include boat docks and other marina facilities, parking areas, picnic and camp sites, conference centers, riding stables, golf courses and other uses.

Undeveloped or Primitive Recreation Areas

Low intensity use areas. General public access would be permitted, but developments would be limited to basic sanitation and other minimum facilities. This subcategory includes the largest land areas assigned to recreation uses by this Plan.

Special Use Areas

Generally small sites whose features indicate a need for a special designation under the recreation category. Included are vista points, historical sites, and the areas to be developed specifically for community parks in contrast to the area-wide nature of other recreation developments.

Educational Use Areas

Disturbed or undisturbed lands with high educational potential for study of the ecology or economy of rural or natural environments. Certain areas will be open to the public, but use will be regulated for low density impact. This category will include, as the need arises, small sites for environmental education field stations and for archaeological and paleontological exploration and study. Permits for paleontological or archaeological activities will be issued only to recognized institutions or organizations; all findings must be placed in public institutions and the District reserves the right to determine which institutions may be recipients.

The Educational Use Area category includes two subcategories — the first of which has three subdivisions — as follows:

Natural Areas

Relatively undisturbed sites with minimum or no development, open to the public or variously restricted, for observation and study of plant and animal life, geology, or environmental associations. Grazing by livestock may not be permitted and fishing from banks of reservoirs will not be permitted; educational uses require environments where natural eco-systems operate with little or no interference.

Changes in the boundaries of Natural Area subdivisions will not require action by the District Board of Directors. Subdivisions of the Natural Area subcategory are as follows:

Nature Study Areas

Sites offering controlled access to several representative natural communities. Open to the public for limited low-density day use and intended to accommodate individuals, small classes, and youth and other groups, this subcategory in some instances serves as a buffer zone between areas of limited and general public access.

Environmental Education Areas

Relatively undisturbed areas containing several natural communities. More restricted than Nature Study areas, lands in this subcategory are open with limited access for group studies under close supervision. Facilities appropriate for extended use are permitted. The sites will be managed to control the impact of periodic high density use.

Natural Reserves

Irreplaceable areas of unique or primitive formations or habitats. These will be protected areas secured by buffer zones of limited or low density use areas. Development will not be allowed and access will be by permit for research only.

Rural Economy Study Sites

Disturbed areas within Watershed Management Preserves available for controlled educational exposure to various rural land use programs such as farming and ranching, reforestation, soil and erosion control, game management, water management engineering and others. This subcategory provides areas, not necessarily fixed, for educational exposure to rural lands managed for economic purposes within a short travel distance of urban schools. They may be temporary sites where a particular program or project is underway. Access will be limited to small escorted groups concerned with a particular feature of the rural environmental economy.

Public Service Areas

Sites suitable for schools, hospitals, Utility District facilities or other institutional uses in the public interest. Parcels in this category are limited in number, are best suited for the above or similar uses or are already in such use, and are not appropriate for other categories.

Unclassified Areas

Areas for which the other land use categories are not appropriate and for which the best use is not known at the present time. Included are lands which may be sold or exchanged without use restrictions. No lands will be added to this category except by action of the Board of Directors following public hearing.

Kaiser Creek Educational Use Area from Upper San Leandro Reservoir

VI. The Lands and Their Existing and Planned Uses

Many factors contributed to the selection and location of the proposed uses in this Plan, but two near-equal considerations were dominant: the clear public necessities of preserving, first, the watershed, and, second, the open space.

The East Bay Municipal Utility District, as a government agency whose primary responsibility is to provide an adequate supply of safe, palatable water, operates under a different public trust and must show a different responsiveness to the public than does any other agency in its area. The District's first concern must be to maintain its lands at an optimum level for the production and distribution of water; only secondarily can it meet public demands for access to its watersheds, and then only to the extent that such access does not diminish the value of the lands to the water system.

Preservation of the open space characteristics of the watersheds is fully compatible with their primary purpose. Properly maintained watersheds are inherently open space; conversely, the limitation of uses to preserve the natural, open space characteristics of the lands will tend to safeguard their value as watersheds.

Consequently, when applying these standards to the selection of suitable uses for the various areas in the District's land holdings, the compatibility of uses and the carrying capacities of each site were carefully considered. Factors such as land gradients and soil characteristics were evaluated; uses which might lead to erosion and destruction of the watershed were eliminated from the list of proposals. Ecological associations were studied to determine which areas required special provision for preservation of unique values and which areas were best suited to meet the East Bay communities' needs for environmental education. In determining recreation locations, primary emphasis was on access to and use of the reservoir surfaces, but again the various site characteristics and limitations were considered.

The emphasis of the District staff and Land Resource Committee work was on determining the highest and best use of each parcel of land, compatible with watershed and open space preservation, for both the present and the future. For the largest portion of the lands access was limited only to the extent necessary to reduce impact to acceptable preservation levels and to provide for reasonable ease of administration; no uses were authorized which would limit access by private membership based on high cost, race, sex or other distinctions.

Although recreation areas designated in this Plan vary in intensity of use, the maximum level of development is not to be beyond that which is necessary to provide reasonable access to and appreciation of the lands and reservoirs of the District. The pleasures of such recreation are to be derived primarily from access to areas that are — and will remain — close to their natural state. Within these limitations, this Plan is intended to meet the needs of the public for recreation activities which depend on the preservation of the watersheds and open space. Authorized recreational uses are intended to provide opportunities which complement adjacent parks, or which are not available elsewhere.

General Characteristics of the Lands

The topography of the Utility District's lands in the East Bay tends to be steep, with many slopes of 30 to 70 per cent. Soils on these hillsides are developed from shales and sandstones, are shallow to moderately deep, and have good drainage. The erosion hazard is high and land slippage is common.

Rainfall in the area ranges from 20 to 35 inches annually. Temperatures occasionally exceed 100 degrees, drop below freezing seven to 10 days each year, and annually average between 58 and 62 degrees.

Vegetation consists of annual grasses and oak in most areas. Steep north slopes are covered with oak, laurel, poison oak and some perennial grasses. Open grasslands characterize the lower rainfall areas; brush species invade the grasslands in zones with more than 20 inches of rain; and groves of redwood stand in Canyon, on the fringes of the coastal fog belt.

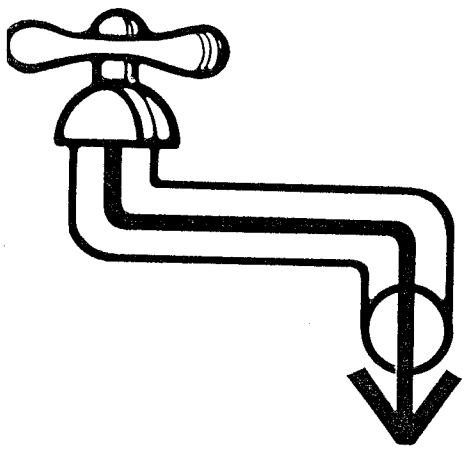
Animal life includes deer, dove and quail — among others — and seasonal populations of ducks and geese.

In the Pardee-Camanche area, vegetation consists of grasslands, grass-oak woodlands and chaparral areas, all with scattered digger pines. There are large blocks of solid chamise and digger pine. Some ponderosa pines occur at higher elevations. Deer, waterfowl, quail, dove, and coyote are among the common animals on the watersheds.

Temperatures are similar but somewhat less moderate than those in the East Bay. Average annual precipitation is 20 inches.

Existing Land Usage

In 1969, the District leased for agricultural purposes approximately 26,000 acres — over half — of its watershed lands, mostly for grazing. Of this, 266 acres, primarily in the Pinole Valley, were farming leases for the production of grains, tomatoes and Christmas trees. Approximately one



million pounds of beef are raised annually on District grazing lands. Thirty leases were in effect in 1969, ranging in size from 20 to 5,000 acres.

Watershed agricultural areas are managed for maximum economic production through fertilization, brush control, water development, cross fencing, reseeding and other practices. Grazing control is exercised through a system of animal unit month allotments. Technical assistance is obtained from the Soil Conservation Service, University of California, Agricultural Conservation Program and other sources. The Soil Conservation Service is currently revising the District's 1942 Watershed Management Plan.

About 15,000 acres of land and water surface are leased for recreation purposes to the East Bay Regional Park District (Chabot Reservoir), the Camanche Regional Park Board, San Joaquin County and the cities of San Leandro and Walnut Creek. Most of this total is in the 14,000-acre Camanche lease. In addition, the District operates recreation facilities at Lafayette Reservoir and has a concessionaire who operates recreation facilities at Pardee Reservoir.

Limited land use permits are issued to public agencies, universities, business firms and individuals who have educational or research projects which would benefit by access to watershed lands. Permits are not issued for recreation or other personal purposes.

Prominent high points such as Roundtop, Grizzly Peak and Rocky Ridge are leased for radio antenna sites. Use of these sites is strictly controlled by the District.

Cypress, pine and eucalyptus are occasionally sold for firewood or piling; cutting is allowed only to improve overcrowded stands, and as such is more a matter of forestry management than use of a resource.

The Lands and Their Planned Uses

Pinole Valley

Four miles from Pinole and two miles from San Pablo Reservoir, this 3,080-acre area is the northernmost of the planning units in the Utility District's watershed lands. About 300 acres are on the flat valley floor; the rest are on slopes of 30 to 70 per cent, rising to elevations as high as 1,000 feet on the north rim. Some of the valley floor soils are deep and fine textured — developed from soft sedimentary rock — and are currently used for grains, tomatoes and grazing. In the rainy season the bottomlands are subject to some ponding due to inadequate drainage. The slope soils are shallow, moderately fertile, and used for grazing.

Erosion hazards in the uplands are moderate; in the bottomlands, slight. Vegetation ranges from grasslands over most of the valley to densely wooded slopes of oak and laurel on the southern rim.

It is anticipated that sometime after 1990, a dam will be constructed which will create a 675-acre terminal reservoir in the valley. The needs of the post-construction period are not presently known, so planning was confined to the interim period.

Until the dam is constructed, Pinole Valley will remain in Watershed Management Preserve — with Farming and Ranching Areas — to protect its open space characteristics. Farming and ranching activities will be intensified. Other allowable uses in this category include community pastures and equestrian centers. Because of the variation in types of agricultural use in the valley and surrounding slopes, the area is suited for educational uses. Rural Economy Study sites may be authorized. Pinole Valley also has potential for an educational field station to study the before-and-after ecological impact of the construction of the proposed Pinole Reservoir.

San Pablo and Briones Watersheds

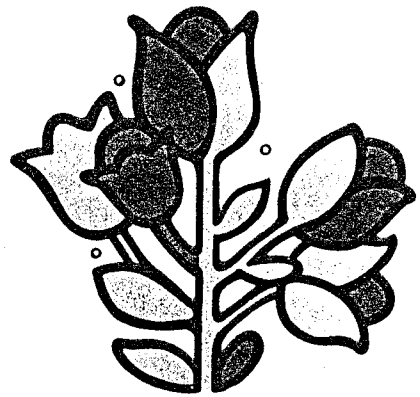
The Briones, San Pablo and Oursan Valley triangle is bounded on the north by Pinole Valley, on the west by the Wildcat and Tilden properties of the East Bay Regional Park District, and on the south near Orinda by Bear Creek Road, Wildcat Canyon Road and El Toyonal Road. It is an area of nearly 9,320 acres, including 1,515 acres of water surface. The lands within and adjacent to the triangle may be considered as an integral planning unit.

The triangle consists of coastal foothills ranging from 300 to 1,500 feet elevation, interspersed with flat to gently rolling valley floors and a few level benches at mid-elevations. Significant benches are at the eucalyptus grove west of San Pablo Dam and in the area downslope from Wildcat Canyon Road. The slope west of San Pablo Reservoir to the crest of the ridge is steep and subject to slides when disturbed. Soils in the triangle range in depth to three feet, are chiefly derived from shales and sandstones, and are generally productive for grazing.

Oursan Valley has slopes of 3 to 30 per cent, with steeper uplands. The deep, well-drained soils developed from soft sedimentary rock. Erosion danger is moderate on the uplands and slight in the lowlands.

Vegetation in the areas subject to marine influence consists primarily of coyote brush, poison oak, laurel and oaks. The interior of the triangle is a mixture of open grassland and steep wooded or brushy slopes. Monterey pines have been planted on portions of the San Pablo Reservoir shoreline.

To maintain grazing revenues and to lessen fire hazard, most of the interior of the Briones-San Pablo-Oursan triangle will be held in Watershed Management Preserve ranching



Briones Reservoir

areas, with future transition to other categories as needed.

The triangle area has adequate amounts of land and water to satisfy a variety of needs, so different usages have been separated. In some cases, buffer zones were provided between areas of high- and low-density usage. The two reservoirs were designated for different types and intensities of usage, partially to avoid possible conflicts between uses and partially out of recognition of water quality considerations.

San Pablo Reservoir and Watershed

Considerable demand for the opening of 775-acre San Pablo Reservoir for recreation — primarily for fishing — has existed for many years.

The southwestern shore of San Pablo Reservoir, between the shoreline and the old San Pablo Dam Road, has been designated as a Developed Recreation Area. Basic facilities for recreation may be located in this area opposite the Scow Canyon arm of the reservoir. Fairly intensive recreational use of this reservoir is possible because full pretreatment facilities exist at the two filter plants — San Pablo and Sobrante — which take water from this source. San Pablo Reservoir usage will be oriented primarily to fishing, with boating a secondary use, to avoid conflicts between boat fishing and sailboating.

Seasonal use of buoys to restrict boating in certain areas of the reservoir will provide resting places for migratory waterfowl and protection for the snowy egret and heron rookeries. Additional sites set aside for Developed Recreation are a eucalyptus grove near the basic facilities site but west of San Pablo Dam Road and a small area below the dam. Level areas within walking distance of the proposed recreational facilities offer potential for various auxiliary uses. Undeveloped or Primitive Recreation Areas are designated along the northerly shore of Scow Canyon, surrounding the eucalyptus grove, adjacent to the Nike site and along most of the east shore south of Scow Canyon. At the top of the ridge west of San Pablo Reservoir adjacent to regional park lands, the Utility District leases 48 acres to the United States for a now inoperative Nike base, designated as a Public Service Area. The termination date of the lease is June 30, 1972. A trail has been proposed to connect Tilden Park at the Nike base to the planned San Pablo Recreation area and the old San Pablo Dam Road.

Approximately 300 acres between Wildcat Canyon and El Toyonal Roads and Tilden Regional Park, including a portion of the Wagner Ranch property, has been designated for Community Horse Pasture, the existing use of a large part of the parcel.

A small Public Service Area has been designated at the south end of the reservoir for District operative purposes. Another Public Service Area, farther south and on the west side of San Pablo Dam Road on the Wagner Ranch property, has also been designated a Public Service Area, possibly for use in conjunction with the Wagner Ranch School across the road.

Nature Study Areas have been provided between San Pablo Dam and the mouth of Scow Canyon, around the east end and southerly from the end of Scow Canyon, around the south end of the reservoir, and on the Wagner Ranch property east of the Wagner Ranch School between the reservoir and Orinda Village. Environmental Education Areas have been designated in Sather Canyon between San Pablo and Briones Reservoirs, and between San Pablo Dam Road and San Pablo Creek adjacent to the Wagner Ranch School. The south shores of Scow Canyon and adjoining lands have been designated as a Natural Reserve.

Additional acreage around San Pablo Reservoir and in the Wagner Ranch area will be in Watershed Management Preserves.

Oursan Valley

This land — a part of the San Pablo watershed — has been designated for Developed Recreation, although such development probably will depend on future availability of water and sewer service at a reasonable cost. The Oursan Valley area covers 1,070 acres.

A feasibility study by a consultant employed by the District recommended Oursan developments which would include golf courses, riding stables, swimming and tennis facilities, and a conference center with overnight accommodations. The contents of the study have been tentatively approved, to the extent that one or two golf courses are considered the best use of the valley. Uses which would require excessive or improper membership limitations are not acceptable; those additional proposed uses which require substantial investment will have to be re-evaluated at such time in the future as development funds become available.

Oursan Valley will have access to San Pablo Reservoir through a small boat landing only on the north shore of the Scow Canyon arm. There will be no marina developments at this site.

Briones Reservoir

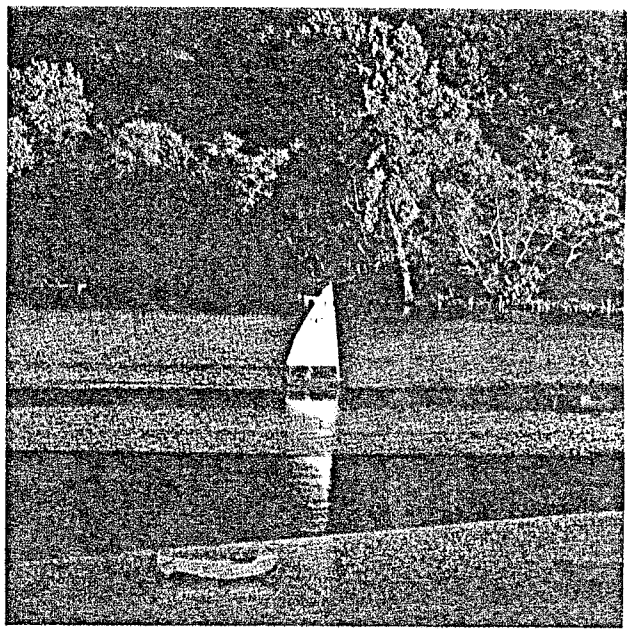
Briones — with 740 acres of water surface — will be used primarily for sail boating and crew racing, and secondarily for fishing. However, development will be limited — probably until the late 1970's — until pretreatment facilities are provided at the Orinda Filter Plant, which obtains some of its water from Briones Reservoir. The southeastern end of the reservoir, near the intersection of Bear Creek and Happy Valley roads, will be a Developed Recreation Area. The site has level areas for a parking lot, marina and boat ramps, an equestrian center and other possible facilities. The proposed recreation site includes 20 acres now under lease for Christmas trees; 100 trees per acre will be left on the site in a configuration to be specified by the District. Two additional Developed Recreation Areas have been located on the north shore, one near the dam and one at the end of Hampton Road.

Hampton Road provides access from Pinole Valley to a Special Use Area — the Hampton grave historic site. A fire trail follows the north shore of Briones from the marina area through a shoreline strip of Undeveloped or Primitive Recreation Area to the Hampton grave. A strip along the southerly shore of Briones Reservoir is designated as a Natural Reserve. An adjoining strip of Undeveloped or Primitive Recreation Area is proposed as the site of a connecting trail between Briones and Tilden Regional parks. A narrow area north of the Hampton grave has been set aside as a Natural Reserve. Other Natural Reserves are located adjacent to the eastern Developed Recreation Area and along an arm of the reservoir north of the dam.

Siesta Valley

The Siesta Valley property, located north of the Highway 24 freeway between between Grizzly Peak Boulevard and Camino Pablo, is an area of slightly more than 1,000 acres. The central section of the property consists of a valley between steep ridges of volcanic strata which dip U-shaped beneath the valley floor and reappear on the opposite ridge. The valley floor has gently sloping benches with a total area of about 40 acres. Soils on the slopes are thin and of limited value for grazing. Valley floor soils are deeper. The valley floor and western slopes have stands of eucalyptus, cypress and pine planted in 1912-15. A good spring which could be developed is located in the upper valley. The instability of the soils make Siesta Valley an area of high erosion hazard and low potential for most uses. However, the valley does have geological significance. It has been used for many years as an outdoor geology laboratory by various colleges and universities. The valley portion of the property, except for a small Public Service area near the freeway, has been designated an Environmental Education Area. The land west and north of the valley is in Watershed Management Preserve. The land east of the valley has been designated a Community Horse Pasture, except for a small area on comparatively level benches above Camino Pablo which has been set aside as a Special Use Area for a possible community park.

Lafayette Reservoir



Gateway Area

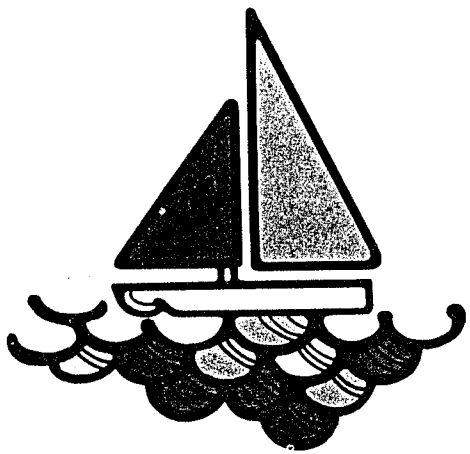
This is an area of 245 acres with moderate slopes rising abruptly to a ridge which is a continuation of the volcanic ridges in Siesta Valley on the north side of the freeway. Level areas exist in two ravines that were filled as a byproduct of Bay Area Rapid Transit District work in the area. The Gateway property is adjacent to an operating quarry. Grasslands cover the lower slopes of the interchange side and the west side of the ridge near the east entrance to the Caldecott Tunnel. Upper slopes are heavily covered with coyote brush, poison oak and laurel.

Much of the level area will be taken for completion of the Gateway interchange. This area and the remaining adjacent level areas have been designated as Unclassified, pending completion of freeway plans. The rest of the property is in Watershed Management Preserve.

Lafayette Watershed

The District opened the Lafayette Reservoir area, which includes 810 acres of land and 115 acres of water surface, to the public in 1966. The existing recreation areas around the dam are designated as Developed Recreation Areas, as is the bowl at the southwest end of the reservoir. A small area at the foot of the dam has been set aside as a Special Use Area pending a decision by the City of Lafayette on its development as a community park. Permitted community park use will be oriented toward open space preservation, with a minimum number of structures and no large ones. The remainder of the watershed has been designated as Primitive or Undeveloped Recreation.

Some potential exists for further development at Lafayette, such as trails on the slopes and a small golf course at the southwest end of the reservoir.



Upper San Leandro Watershed

These lands, ranging from an elevation of 460 to 2,000 feet at the crest of Rocky Ridge, are the most rugged and ecologically the most diverse of the District's holdings. Wildlife is varied and plentiful and vegetation ranges from second-growth redwood in the Canyon area to chamise and chapparal on the western slopes of Rocky Ridge. Included in the Canyon portion — on Flicker Ridge — is a stand of knobcone pine which the University of California believes is unique.

Upper San Leandro Reservoir is a lake of 745 acres, enclosed for the most part in seven narrow, steep-walled canyons. The watershed lands in District ownership amount to 7,640 acres. The area is bounded on the west by Redwood Road and East Bay Regional Park District lands, on the east by Bollinger Canyon and Rocky Ridge, on the north by the Moraga area, and on the south by the Lake Chabot watershed. Two fingers of District ownership extend north from the main block of land: one east of Moraga and one to the west at Canyon.

Most of the acreage is in the Watershed Management Preserve category as Ranching Area, but this category also includes a large Community Horse Pasture between Valle Vista and King Canyon.

Other uses include Developed Recreation Areas at Valle Vista and King Canyon near Moraga, at the end of a peninsula — perhaps the best site for launching ramps and a marina—off Pinehurst Road near Redwood Road, and at the end of the southern arm of the reservoir. Primitive or Undeveloped Recreation Areas are along the shore between Valle Vista and Moraga, on the peninsula, and along the southern shore of the Kaiser Creek Arm.

Educational Use Areas include Nature Study Areas between Canyon and Valle Vista and at the head of the Kaiser Creek arm of the reservoir; Environmental Education Areas where San Leandro Creek enters the reservoir, on the upper reaches of Kaiser Creek below Rocky Ridge, and along the summit of Rocky Ridge; and a Natural Reserve immediately below the summit of Rocky Ridge. Rural Economy Study sites may be located above the end of the Kaiser Arm and near Rocky Ridge.

The Rocky Ridge summit includes a small area — an inoperative Nike site — designated as a Public Service Area, and another small parcel designated as a Special Use Area for a vista point.

The panhandle between Moraga and St. Mary's College is shown as a residential area in the Moraga General Plan of Contra Costa County. However, because development seems remote, and because the Regional Park District may acquire lands between the panhandle and Las Trampas Regional Park, the area is designated as Watershed Management Preserve in this Plan. It has potential for a Moraga community park and could serve as a buffer between subdivisions.

The Canyon area of the watershed is divided into three sections: the west slope and canyon floor, with stands of redwood and eucalyptus; the Flicker Ridge portion of the east rim of the canyon, with its stand of knobcone pine; and miscellaneous lots and parcels in the more populated portion of Canyon. The slopes and canyon floor have been designated as Watershed Management Preserve on an interim basis until they are needed for recreation, for which there is good potential. Flicker Ridge has been placed in the Natural Reserve category and may be sold to an appropriate educational institution for scientific research and preservation. The miscellaneous parcels are Watershed Management Preserve.

Chabot Reservoir

Opened to the public for recreation in 1966, the Chabot property includes 1,150 acres of land and 330 acres of water. Most of the area is leased to the East Bay Regional Park District, except for 143 acres of water system operative property at Chabot Dam and Chabot Filter Plant. The Park District lease on the largest share of the property extends until 1998; on that portion which will be needed for a new dam site — the upstream end of the Willow Park Golf Course — the lease terminates in 1978. Portions of the 143 acres — except the land designated as Public Service Area — will be used for recreation after minimum operative areas are fenced. The rest of the Chabot property is designated as Developed and Primitive or Undeveloped Recreation Areas. Additional acreage between the Chabot Filter Plant and San Leandro Creek is leased to the City of San Leandro for a park.

San Leandro Creek

Bounded on the west by Redwood Road, on the east by the watershed line, on the south by Castro Valley and on the north by Upper San Leandro Reservoir, this area includes 2,835 acres. Most of this land has been designated as Watershed Management Preserve, including cattle grazing, farming, and community horse pasture. A portion of the area east of Redwood Road across from the Willow Park Golf Course has been set aside as a Developed Recreation Area to replace that portion of the existing course which will be inundated by the new dam. Three Educational Use Areas have been designated. One, an Environmental Education Area, extends east from San Leandro Creek midway between Upper San Leandro Dam and Redwood Road. It is an interim use area which will be flooded when the new dam is built in approximately 1980. An Environmental Education Area has been designated on land just outside the watershed along the southeast boundary of the property. This area is separated by a narrow ridge-top corridor from a Natural Reserve Area within the watershed.

Aqueducts

The District owns 1,200 acres in aqueduct rights-of-way, primarily in the 100-foot-wide, 90-mile-long Mokelumne Aqueduct right-of-way. The rights-of-way where the District has surface rights may be used for hiking and horse trails where the land is needed to provide connections with other trails. Community or city park use is also acceptable, where agreements are reached with public agencies to administer such use.

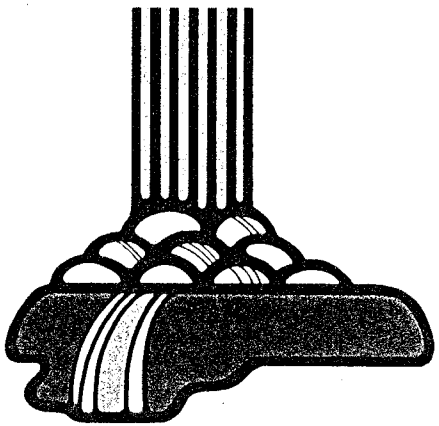
Some areas can be or have been landscaped; however, only ground covers with shallow root systems are permitted over the aqueducts, and trees must be more than five feet from the side of the aqueducts and must not be more than 20 feet high at maturity.

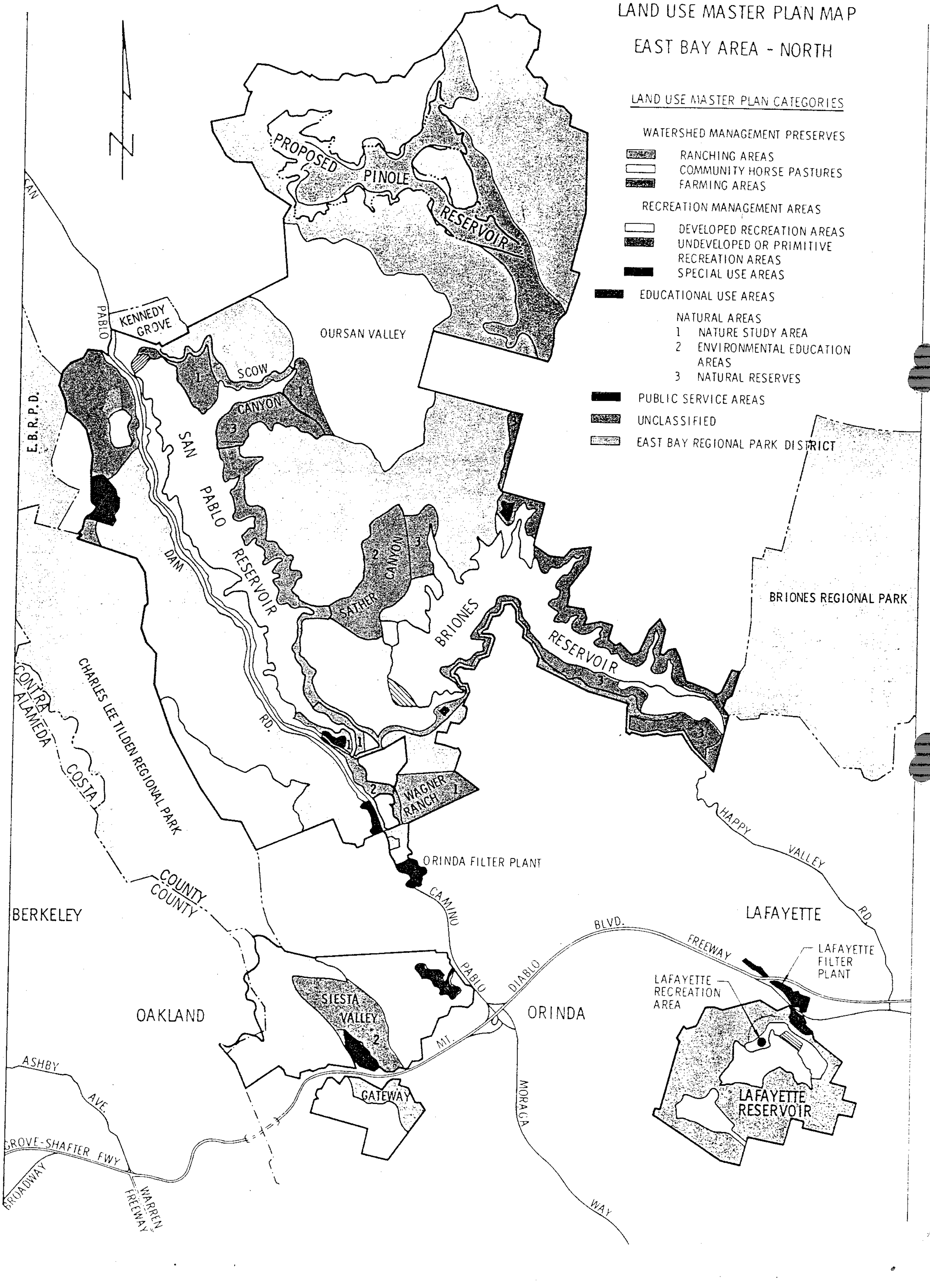
Various additional uses compatible with engineering, operating and administrative standards may be allowed. Private uses will be discouraged and will have a lower priority than public uses.

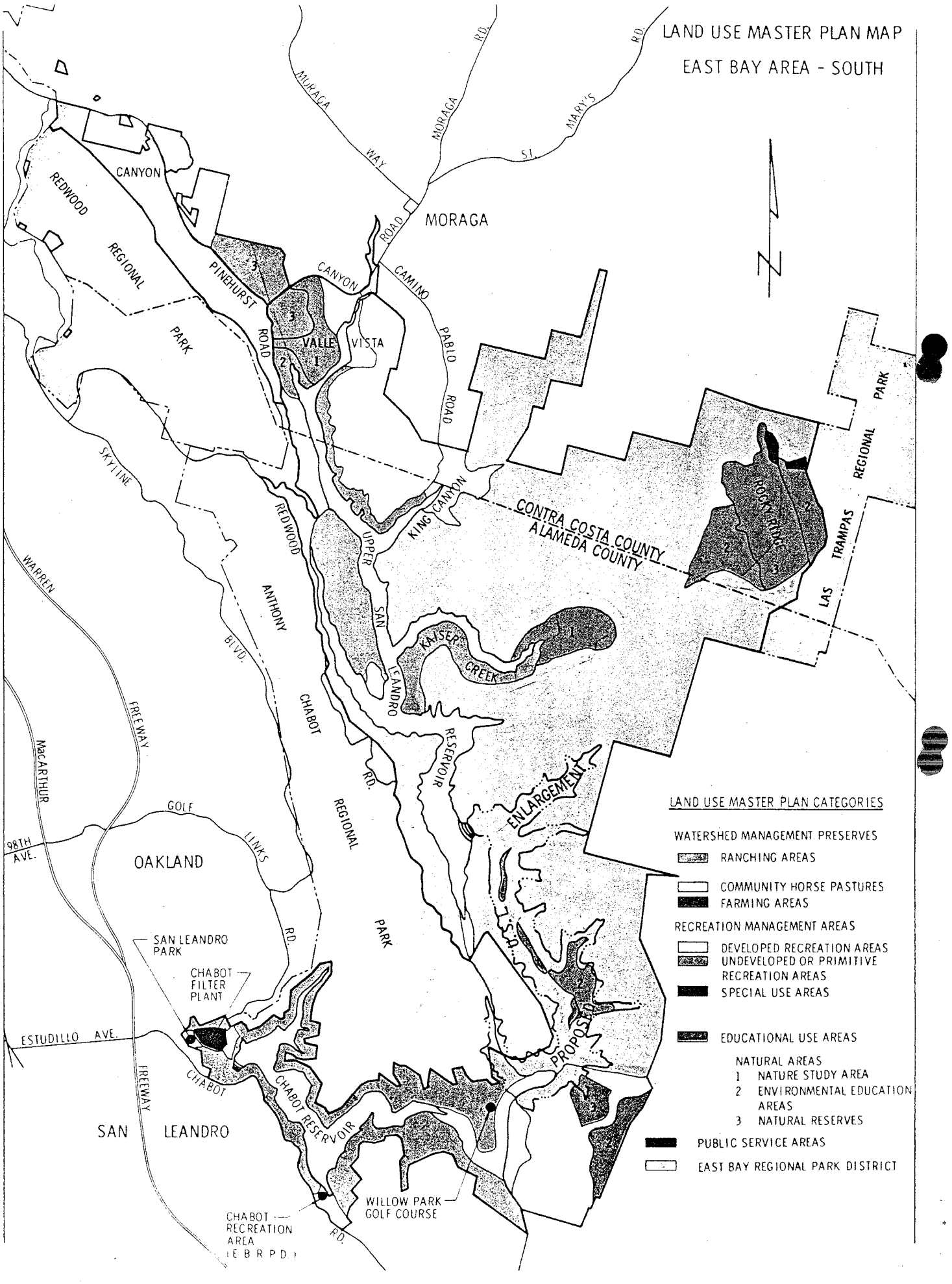
Camanche

Camanche Reservoir is composed of two major portions separated by a narrow strait: the large western area, and the Mokelumne canyon area upstream to Pardee Dam. The land area consists of table-top plateaus, dissected terraces and rolling hills interspersed with small valleys and hummocky flats. Parent materials for the soils are gravelly alluvium from the Sierra Nevada, volcanic debris and sedimentary sand and clay. The soils tend to be shallow, rocky, acid and low in fertility.

The District's Camanche Reservoir area, with a water surface of 7,770 acres and a land area of 6,885 acres,




LAND USE MASTER PLAN MAP
EAST BAY AREA - NORTH
LAND USE MASTER PLAN CATEGORIES
WATERSHED MANAGEMENT PRESERVES
RANCHING AREAS
COMMUNITY HORSE PASTURES
FARMING AREAS
RECREATION MANAGEMENT AREAS
DEVELOPED RECREATION AREAS
UNDEVELOPED OR PRIMITIVE RECREATION AREAS
SPECIAL USE AREAS
EDUCATIONAL USE AREAS
NATURAL AREAS
1 NATURE STUDY AREA
2 ENVIRONMENTAL EDUCATION AREAS
3 NATURAL RESERVES
PUBLIC SERVICE AREAS
UNCLASSIFIED
EAST BAY REGIONAL PARK DISTRICT
N
PROPOSED PINOLE RESERVOIR
KENNEDY GROVE
OURSAN VALLEY
SCOW CANYON
SAN PABLO RESERVOIR
SAN PABLO DAM RD.
E.B.R.P.D.
SATHER CANYON
BRIONES RESERVOIR
BRIONES REGIONAL PARK
WAGNER RANCH
ORINDA FILTER PLANT
CHARLES LEE TILDEN REGIONAL PARK
CONTRA COSTA
ALAMEDA
COUNTY
COUNTY
BERKELEY
OAKLAND
ORINDA
LAFAYETTE
HAPPY VALLEY RD.
CAMINO PABLO
MT. DIABLO BLVD.
FREEWAY
LAFAYETTE FILTER PLANT
LAFAYETTE RECREATION AREA
LAFAYETTE RESERVOIR
SIESTA VALLEY
GATEWAY
ASHBY AVE.
GROVE-SHAFTER FWY
BROADWAY
WARREN FREEWAY
MORAGA WAY


LAND USE MASTER PLAN MAP
EAST BAY AREA - SOUTH
MORAGA WAY
MORAGA RD.
ST. MARY'S RD.
MORAGA
CANYON ROAD
REDWOOD REGIONAL PARK
PINEHURST ROAD
CANYON
CAMINO PABLO ROAD
VALLE VISTA
SKYLINE
REDWOOD
ANTHONY CHABOT REGIONAL PARK
UPPER SAN LEANDRO
KING CANYON
CONTRA COSTA COUNTY
ALAMEDA COUNTY
ROCKY RIDGE
LAS TRAMPAS REGIONAL PARK
KAISER CREEK
CHABOT RESERVOIR
ENLARGEMENT
PROPOSED
WARREN FREEWAY
MacARTHUR FREEWAY
98TH AVE.
GOLF LINKS RD.
OAKLAND
SAN LEANDRO PARK
CHABOT FILTER PLANT
ESTUDILLO AVE.
CHABOT RESERVOIR
SAN LEANDRO
WILLOW PARK GOLF COURSE
CHABOT RECREATION AREA (E B R P D)
LAND USE MASTER PLAN CATEGORIES
WATERSHED MANAGEMENT PRESERVES
RANCHING AREAS
COMMUNITY HORSE PASTURES
FARMING AREAS
RECREATION MANAGEMENT AREAS
DEVELOPED RECREATION AREAS
UNDEVELOPED OR PRIMITIVE RECREATION AREAS
SPECIAL USE AREAS
EDUCATIONAL USE AREAS
NATURAL AREAS
1 NATURE STUDY AREA
2 ENVIRONMENTAL EDUCATION AREAS
3 NATURAL RESERVES
PUBLIC SERVICE AREAS
EAST BAY REGIONAL PARK DISTRICT

is mostly under lease until 2014 to the Camanche Regional Park Board and is designated for Developed Recreation. Withheld areas include the general area of Camanche Dam and dikes — designated as Ranching Area — and land along the Mokelumne River immediately below the dam which includes the state-operated salmon and steelhead hatchery, designated as a Public Service Area. An additional 50 acres on the Mokelumne below the withheld area are leased to San Joaquin County for park purposes, as a Primitive or Undeveloped Recreation Area.

Recreation facilities are operated by two concessionaires — one on the north shore and one on the south — under sub-leases with the Regional Park Board. Existing development consists of a wide variety of facilities for boating, fishing, swimming, camping, riding, bird hunting and other activities. Plans call for increased development of these facilities and addition of golf courses, trailer and camper sites for lease, and group camp areas. It is anticipated that the entire shoreline of Camanche will be developed within a few years. In the meantime, areas not developed for recreation are used for grazing.

Because the reservoir is used for flood control and irrigation storage but not for domestic water supply, the water quality policies and criteria which prohibit bodily contact uses at other reservoirs do not apply at Camanche. However, under the terms of the agreement with Camanche Regional Park Board, the District has strict review control over all developments at the reservoir.

The Mokelumne canyon upstream toward Pardee Dam is designated as a Primitive or Undeveloped Recreation Area.

Pardee

The Pardee watershed lands in District ownership range in elevation from 575 to 1,500 feet. The area is essentially a plateau bisected by the Mokelumne River canyon. Topography for the most part is smooth and rolling, but is steep in the river canyons. Rock outcrops are common.

Soils — derived from metabasic rocks and metasedimentary slate and schist — vary from moderately deep to very shallow. The soils adjacent to the reservoir are of two types: the Exchequer and Auburn series. The Exchequer soils are shallow. They are characterized by large brush fields, are of limited use for grazing, but have some value for watershed and for wildlife browse production. The Auburn soils are better and can be managed for increased production through oak and brush control, fertilization and reseeding.

The reservoir has a water surface of 2,290 acres. District ownership of the surrounding lands — some outside the watershed — amount to 10,265 acres. The water surface and a portion of the land area was opened for recreation in 1958 — the first public recreation usage permitted on District land and water.

Two main factors determine the type of usage permitted at Pardee: the water quality standards applied to drinking water reservoirs; and the nearness of three other reservoirs — Amador, Camanche and New Hogan — which are not subject to these standards. The ability to allow such activities as water skiing and swimming tend to make the other three reservoirs more attractive to the public and limit the attendance at Pardee. The principle attractions at Pardee Reservoir are its Kokanee salmon fishing and its comparatively untouched, uncluttered condition.

Consequently, Pardee will remain as an area of less intensive use.

primarily for fishing, boating, limited camping and primitive area activities. Existing recreation areas are listed as Developed Recreation; surrounding land areas for the most part will be in Watershed Management Preserve. Undeveloped or Primitive Recreation Area includes all of the land in the Mokelumne canyon areas west of the Middle Bar Bridge and most of the reservoir shoreline. In addition, the area at the southern end of the reservoir containing the Wildermuth House is designated as a Special Use Area historical site. Funds may be sought for restoration of a secondary structure and the main building, erected by a pioneer stonemason in 1861. Fire gutted the buildings some years ago but the walls, made of stone quarried at the site, remain in good condition.

A small area — Camp Pardee — south of Pardee Dam is designated a Public Service Area for District operative purposes. Hiking and riding trails are designated as extensions of those in the Camanche Area, which is connected to Pardee by a land corridor down the Mokelumne River canyon. Pardee lands designated as Unclassified are outside the watershed and may be used by the District for sale or trade for boundary revision purposes.

VII. Appendix

Administrative Policy Statement 12

District Land Ownership and Utilization

District Lands—General

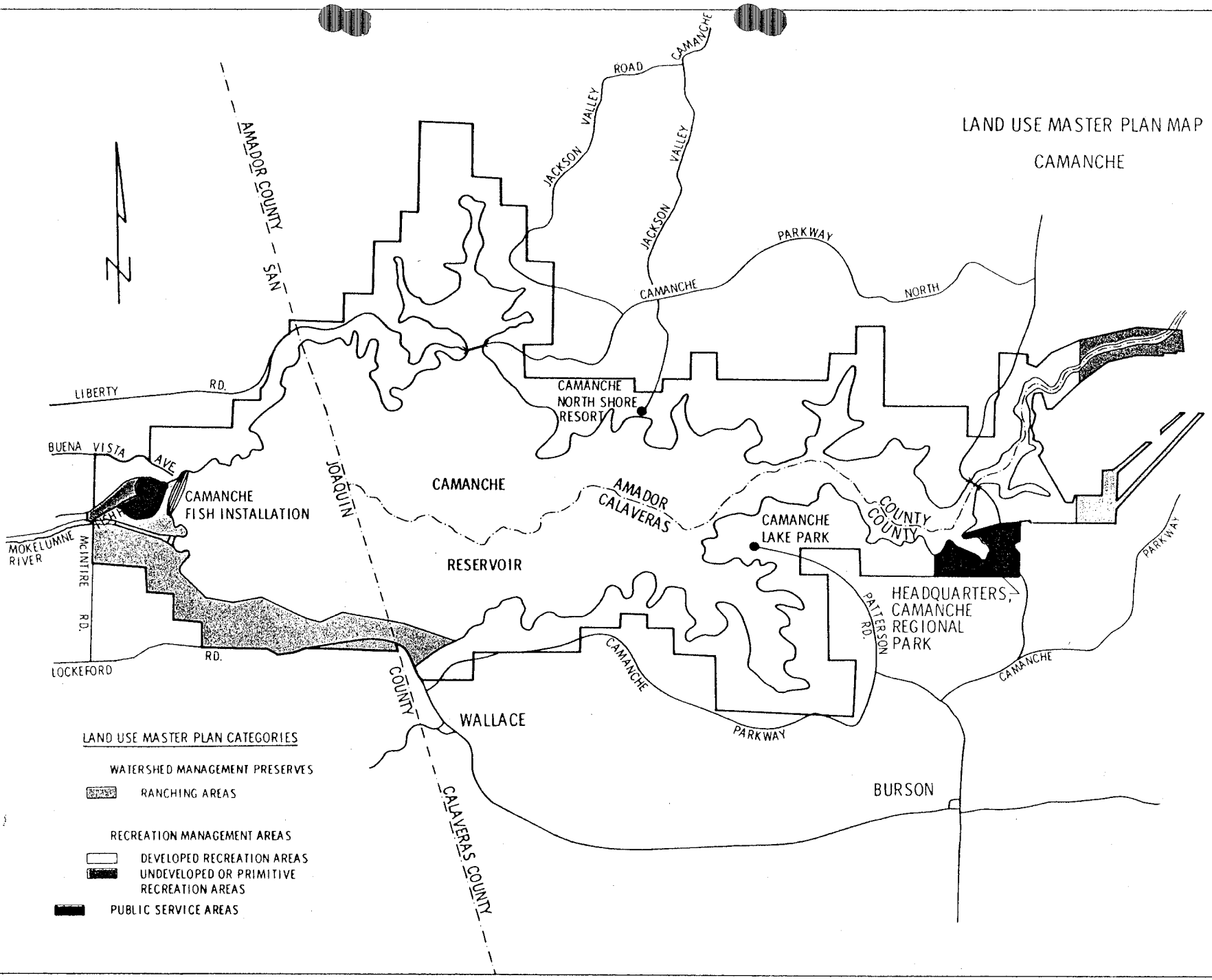
It is the policy of the East Bay Municipal Utility District to:

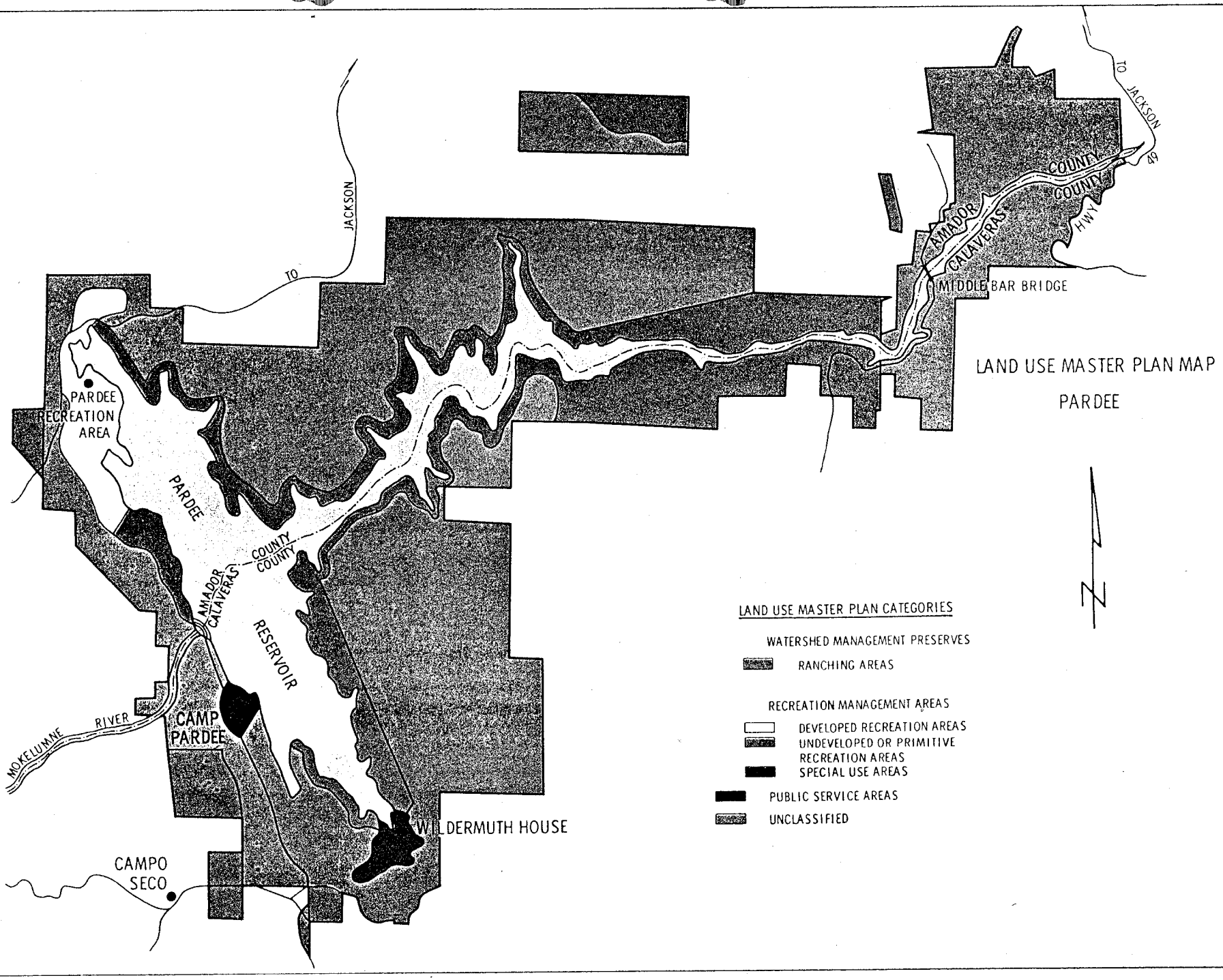
- Implement the Land Use Master Plan adopted by Resolution No. 25418 as policy for those lands described therein.
- Own and maintain sufficient land to effectively perform designated District functions and protect the sources of water supply.
- Anticipate land requirements in connection with necessary expansion of the District operations and services in order to effect economic acquisition of such property.
- Own, maintain, acquire, or dispose of District lands in accordance with environmental management principles consistent with the primary District functions of providing potable water within the service area of the District.

Watershed Lands Protection

It is the policy of the East Bay Municipal Utility District to:

- Maintain a positive program of sanitary control of its watershed lands and cooperate with officials of sanitary districts, federal, state, county and city health departments having jurisdiction over other lands tributary to District storage reservoirs in order to prevent the contamination and pollution of the water supply.
- Maintain adequate and sufficient controls to minimize erosion and fire damage.
- Prohibit unauthorized entry to all District watershed lands.


LAND USE MASTER PLAN MAP
CAMANCHE
AMADOR COUNTY - SAN JOAQUIN COUNTY - CALAVERAS COUNTY
JACKSON VALLEY ROAD
JACKSON VALLEY
CAMANCHE PARKWAY NORTH
CAMANCHE
CAMANCHE NORTH SHORE RESORT
LIBERTY RD.
BUENA VISTA AVE
CAMANCHE FISH INSTALLATION
CAMANCHE RESERVOIR
AMADOR CALAVERAS COUNTY
CAMANCHE LAKE PARK
HEADQUARTERS, CAMANCHE REGIONAL PARK
PATTERSON RD.
CAMANCHE PARKWAY
MOKELUMNE RIVER
McINTIRE RD.
LOCKEFORD
RD.
WALLACE
BURSON
LAND USE MASTER PLAN CATEGORIES
WATERSHED MANAGEMENT PRESERVES
RANCHING AREAS
RECREATION MANAGEMENT AREAS
DEVELOPED RECREATION AREAS
UNDEVELOPED OR PRIMITIVE RECREATION AREAS
PUBLIC SERVICE AREAS


TO JACKSON
TO JACKSON
49
AMADOR COUNTY
CALAVERAS COUNTY
HWY
MIDDLE BAR BRIDGE
PARDEE RECREATION AREA
PARDEE
AMADOR COUNTY
CALAVERAS COUNTY
RESERVOIR
MOKELUMNE RIVER
CAMP PARDEE
WILDERMUTH HOUSE
CAMPO SECO
LAND USE MASTER PLAN MAP
PARDEE
N
LAND USE MASTER PLAN CATEGORIES
WATERSHED MANAGEMENT PRESERVES
RANCHING AREAS
RECREATION MANAGEMENT AREAS
DEVELOPED RECREATION AREAS
UNDEVELOPED OR PRIMITIVE RECREATION AREAS
SPECIAL USE AREAS
PUBLIC SERVICE AREAS
UNCLASSIFIED

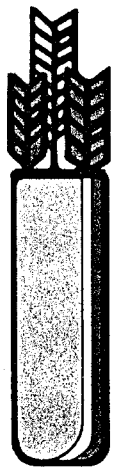
■ Prohibit use of lands not provided with adequate and approved facilities for removal of sewage from the watershed.

Multiple Public Utilization of Watershed Lands

It is the policy of the East Bay Municipal Utility District, within the constraints of providing a potable water supply, to:

■ Recognize the benefit to the public of multiple use of District lands, giving prime consideration to those uses which will protect and preserve the open space characteristics of the land.

■ Recognize that comprehensive land use planning, together with systematic review of such planning, is essential to achieve continuing optimum public benefits from multiple use of District lands. Authority is granted to invite citizen participation in the land use planning process. Such participation may include, but is not limited to, advisory committees, surveys or other means of appropriate public involvement.



■ Coordinate District land use planning with federal, state, and local agencies as required.

■ Cooperate with other agencies or public utilities seeking interest in or acquisition of District lands, insofar as such uses are consistent with the Land Use Master Plan and the policies stated herein. Proposed uses which do not comply with the Master Plan and policies, or which would result in deterioration of environmental quality, shall be aggressively resisted by the District with all means and methods provided by law, including the utilization of such protection as may be provided by Code of Civil Procedure, Section 1241.7.

In furtherance the District:

■ Shall retain fee title to and direct control over all lands and reservoirs essential to the security or operation of the utility system and directly perform necessary patrolling of these lands and reservoirs.

■ May, when it is determined that a public need exists, open reservoir or watershed areas for public recreation, public fishing and educational use in accordance with the applicable provisions of law, provided that the opening and use is consistent with the District's primary purpose and is in accordance with the District's Land Use Master Plan. If the District determines to develop and/or operate public recreation and public fishing, the financing shall be in accordance with appropriate financial policies and procedures adopted by the District.

■ Where it is determined by the Board that District development and operation of recreation and fishing is not in the best interests of the District, recreational development and/or management by qualified public agencies or private concessionaires will be encouraged. Overall supervision and patrolling to protect water quality and sanitation shall be under control of the District at all times.

Non-District development and/or management of recreation areas must conform to the Land Use Master Plan and meet criteria which will provide optimum public benefit in the multiple use of said lands and must be in accord with the policies stated herein. Such criteria shall include, but not be limited to, specific plans and schedules for development and operation; evidence of financial ability and competence; evidence of successful experience in such development and/or management of recreation areas, and demonstrated evidence of satisfactory regard for environmental quality.

- May permit educational organizations approved by the District to enter into agreements with the District for limited entrance to District lands for the pursuance of educational objectives, including limited development at the expense of the organization, and as approved by District, in accordance with District's Land Use Master Plan.
- Shall authorize only uses which are in accord with the Land Use Master Plan. Modifications of this Plan, including additions of land to the unclassified category, shall be made only by appropriate action of the Board of Directors following public notification and hearing. However, the Board may at any time make such modifications as may be necessary to meet the requirements for the primary purpose of the lands — water production. Lands designated as Unclassified may be sold or leased, offering them first to other public or quasi-public bodies when suitable for their use or where required by law with sale prices or lease terms to be negotiated and based upon the market value of such lands.

Procedural
Authority and Responsibility

Administrative Department
Land Division

Prepare recreation and fishing management and education services plans to guide recreation and educational development on District lands.

Be responsible for all District operated recreation and fishing programs.

Recommend and set mandatory standards for and monitor all District land uses operated by other agencies, public and private.

Acquire or dispose of lands in accordance with aforesaid policies.

Engineering Department

In cooperation with Manager, Administrative Department, develop and issue whatever procedures are necessary to make this policy effective, taking into consideration other related administrative policies.

Determine necessity to acquire lands related to facility planning and operations.

Provide information to Land Division to permit economical and timely acquisition of properties.

Determine availability of surplus land for disposal in accordance with the Land Use Master Plan.

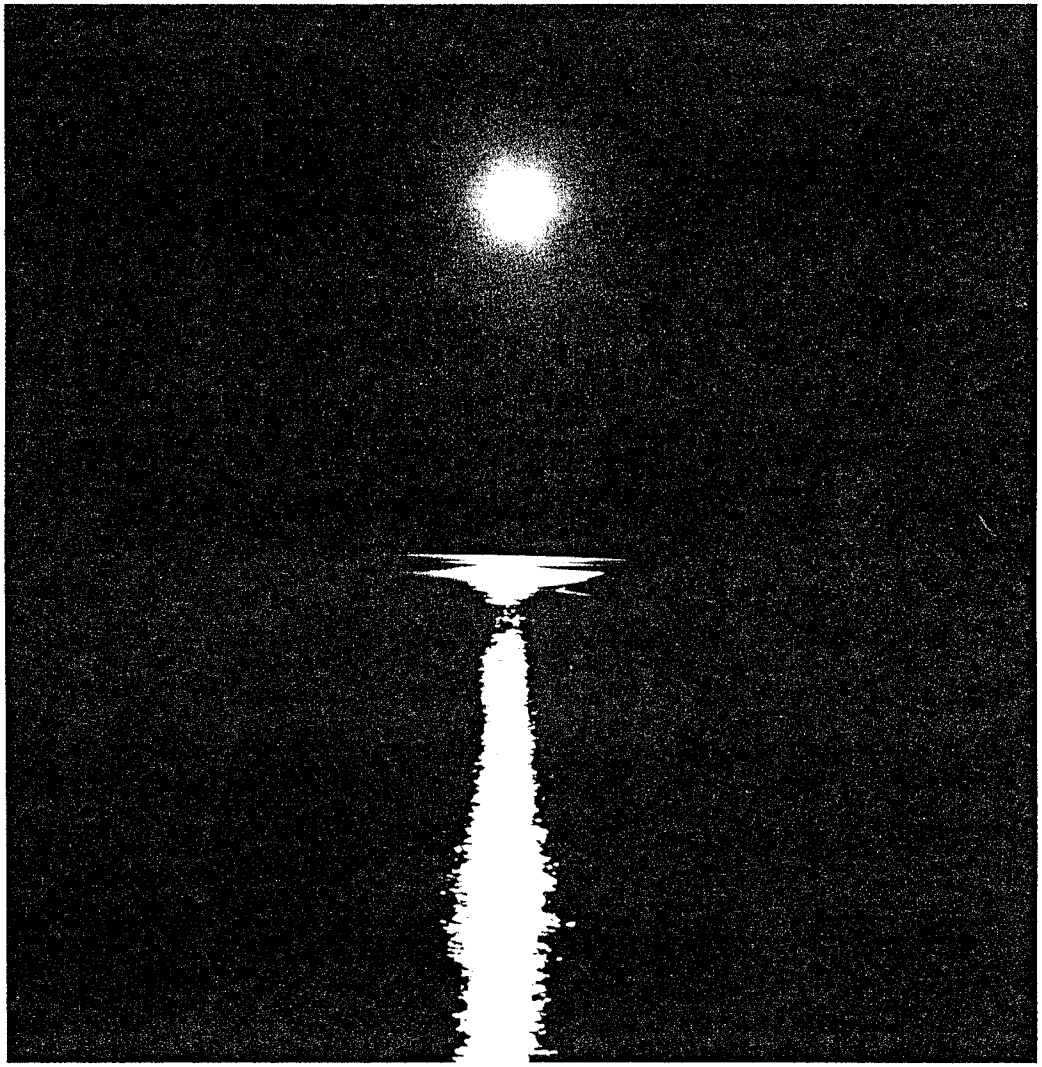
Provide technical information and recommendations related to express uses of land and the effect of such uses on planning, design and operation of engineering facilities.

Perform environmental engineering work required to further the provisions of this policy.

Secretary and Public Affairs Department

Publicize proposed amendments to the Land Use Master Plan prior to meetings at which the Board will take action on such amendments.

Effect public information programs to educate the public on the importance of watershed lands and the importance of the proper use of such lands.



San Pablo Reservoir