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January 17, 2002

Mr. Harry M. Schueller
Chief, Water Rights Division
State Water Resources Control Board
901 P Street, 3rd Floor
P.O. Box 2000
Sacramento, California 95812-2000

Dear Mr. Schueller:

Please find enclosed an Application to Appropriate Water filed on behalf of the Southern California Water Company ("SCWC") operating as Arden-Cordova Water Services. This Application seeks permission to appropriate water from the Lower American River for use in the Rancho Cordova area near Sacramento. The filing of this Application follows the filing of a Petition for a Limited Revision of the Declaration of Fully Appropriated Stream Status of the Lower American River which was filed on November 8, 2001.

SCWC's Cordova System provides domestic water to over 40,000 people and at least that many employees within the unincorporated community of Rancho Cordova in Sacramento County. The service area is bounded by Hazel Avenue to the east, Mather Air Force Base to the south, Mather Field Road to the west, and the American River to the North. The service area is characterized by a mixture of primarily residential, commercial, and some industrial land use.

Water supplies for the Cordova System include both surface water and groundwater. Surface water is delivered to the Cordova System by way of the Folsom South Canal under an agreement with the Bureau of Reclamation. The remainder of the water supply for the Cordova System comes from groundwater extracted from the South Sacramento County Groundwater Basin.

In recent years, groundwater contamination caused by the Aerojet-General Corporation has polluted some of the Cordova System wells and rendered them unusable. To date nine wells have been closed, and it is anticipated that additional wells will be lost in the future. Such losses have put the Cordova System water supply at risk.

At the same time, Aerojet has been order by the Regional Water Quality Control Board ("RWQCB") to prevent the further spread of the plume of contamination by pumping groundwater and treating it. In Order No. 98-113, the RWQCB authorized Aerojet to discharge up to 3500 gpm of treated groundwater into Buffalo Creek, with the intention that this water would eventually discharge into the Lower American River. Aerojet is currently discharging water into the Lower American River pursuant to this Order.

As a matter of equity, SCWC believes that it has a right to this water. SCWC therefore files this application seeking permission from the SWRCB to divert the water that is discharged by Aerojet.

The diversion of water proposed by this Application will be tied directly to the quantity of water that is discharged by Aerojet. SCWC will divert only as much water as is discharged by Aerojet less any conveyance losses. At the same time, SCWC would like to divert as much water as is discharged by Aerojet. This water is non-native water which is not subject to any prior rights.

There are several available options for the point of diversion of the water. SCWC is willing to explore all of these reasonable options in order to pursue the most appropriate. The options can be grouped into three general categories. The first option is to utilize existing diversion facilities located on the Lower American River and owned by the Carmichael Water District. It may also be desirable to expand the capacity of these facilities or to construct additional similar facilities in the same general area. Regardless, since the diversion through these facilities will be of only that quantity of water that is discharged upriver, there should be no net affect on the Lower American River itself.

The second option involves the removal of the Aerojet water from Buffalo Creek prior to its entry into the Lower American River. This option would involve some minor construction of the facilities necessary to move the water from Buffalo Creek to SCWC's existing distribution system. However, such construction would be minor and is not anticipated to cause more than minimal disturbance.

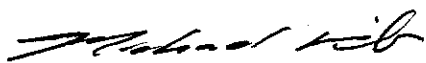
The third option involves the delivery of a quantity of water to SCWC's existing diversion works on the Folsom South Canal. There are different methods for accomplishing this

Harry Schueller, Chief
January 17, 2002
Page 3

delivery. The Application describes such methods in terms of an exchange between the water diverted into the canal and the water discharged by Aerojet into the River, or as an alteration of Aerojet's point of discharge and corresponding diversion of a like quantity of water into the Folsom South Canal. Using either method, the amount of water diverted will result in no net loss of water to the Lower American River and involve no new construction.

The enclosed Application is filed in an effort to secure a reliable water supply for the residents that rely upon SCWC for their daily water needs. The Application is based upon a benign water augmentation plan that simply diverts treated non-native water that is disposed-of in the River and is supported by considerations of equity. Without the SWRCB's approval of this Application, alternative and more expensive water supplies will need to be secured to replace the water that has been lost to Rancho Cordova. We thus urge your prompt consideration of this matter.

Sincerely,



Scott S. Slater
Michael T. Fife
HATCH & PARENT
Attorneys for Southern California Water Company

MXF:bcm

MINIMUM FILING FEE: \$100.00
 FILE ORIGINAL & ONE COPY
 TYPE OR PRINT IN BLACK INK
 (For explanation of entries required, see
 booklet "How to file an Application to
 Appropriate Water in California")

State of California
 State Water Resources Control Board
DIVISION OF WATER RIGHTS
P.O. Box 2000, Sacramento, CA 95812-2000
 Info: (916) 341-5300, FAX: (916) 341-5400, Web: http://www.waterrights.ca.gov

APPLICATION TO APPROPRIATE WATER

APPLICATION No. _____
 (Leave Blank)

1. APPLICANT

Southern California Water Company ("SCWC") (916) 853 3631
(Name of applicant) (Telephone - between 8 a.m. and 5 p.m.)
Arden - Cordova Water Service
11088 Olson Drive Ste. D Rancho Cordova, California 95670
(Mailing address) (City or town) (State) (Zip code)

2. SOURCE

a. The name of the source at the point of diversion is Lower American River
(If unnamed, state that it is an unnamed stream, spring, etc.)
 tributary to Sacramento River

b. In a normal year does the stream dry up at any point downstream from your project? YES NO
 If yes, during what months is it usually dry? From _____ to _____
 What alternate sources are available to your project should a portion of your requested direct diversion season
 be excluded because of a dry stream or nonavailability of water? None

3. POINTS of DIVERSION and REDIVERSION

a. The point(s) of diversion will be in the County of Sacramento
 and within Assessor's Parcel Number (APN #) See Attachment 3.a. & b.

b.

List all points giving coordinate distances from section corner or other tie as allowed by SWRCB regulations i.e. California Coordinate System	Point is within (40-acre subdivision)	Section	Township	Range	Base and Meridian
	¼ of ¼				
See Attachment 3.a. & b.	¼ of ¼				
	¼ of ¼				

c. Does applicant own the land at the point of diversion? YES NO

d. If applicant does not own the land at point of diversion, state name and address of owner and what steps have been taken to obtain right of access: _____

Carmichael Water District
 7220 Fair Oaks Blvd., Ste. C
 Carmichael, California 95608

United States Bureau of Reclamation
 Mid-Pacific Region
 2800 Cottage Way
 Sacramento, California 95825

APP (3-01) Agreements to obtain right of access are under negotiations

4. PURPOSE of USE, AMOUNT and SEASON

a. In the table below, state the purpose(s) for which water is to be appropriated, the quantities of water for each purpose, and the dates between which diversions will be made. Use gallons per day if rate is less than 0.025 cubic foot per second (approximately 16,000 gallons per day).

PURPOSE OF USE (Irrigation, Domestic, etc.)	DIRECT DIVERSION				STORAGE		
	QUANTITY		SEASON OF DIVERSION		AMOUNT		COLLECTION SEASON
	RATE (Cubic feet per second or gallons per day)	AMOUNT (Acre-feet per year)	Beginning Date (Mo. & Day)	Ending Date (Mo. & Day)	Acre-feet per annum	Beginning Date (Mo. & Day)	Ending Date (Mo. & Day)
Municipal	Variable		Jan 1	Dec 31	NA		
		See Attachment		4.a. & b.			

b. Total combined amount taken by direct diversion and storage during any one year will be variable acre-feet.

5. JUSTIFICATION of AMOUNT

See Attachment 4.a. & 4.b

a. IRRIGATION: Maximum area to be irrigated in any one year is NA acres.

CROP	ACRES	METHOD OF IRRIGATION (Sprinklers, flooding, etc.)	ACRE-FEET PER YEAR	NORMAL SEASON	
				Beginning Date	Ending Date

b. DOMESTIC: Number of residences to be served is NA. Separately owned? YES NO
 Total number of people to be served is . Estimated daily use per person is
 Total area of domestic lawns and gardens is square feet. (Gallons per day)
 Incidental domestic uses are
 (Dust control area, number and kind of domestic animals, etc.)

c. STOCKWATERING: Kind of stock NA Maximum number
 Describe type of operation:
 (Feed lot, dairy, range, etc.)

d. RECREATIONAL: NA Type of recreation: Fishing Swimming Boating Other

e. MUNICIPAL: (Estimated projected use)

POPULATION		MAXIMUM MONTH		ANNUAL USE		
5-Year periods until use is completed	POP.	Average daily use (gal. per capita)	Rate of diversion (cfs)	Average daily use (gal. per capita)	Acre-foot (per capita)	Total acre feet
PERIOD 2000						
Present --	39,088					18,100
2005	40,732					19,600
2010	42,656		SEE ATTACHMENT 5.e.			20,800
2015	44,054					21,600
2022 (Buildout)	44,833					22,200

Month of maximum use during year is July or August. Month of minimum use during year is February.

f. HEAT CONTROL: The total area to be heat protected is _____ net acres.
 Type of crop protected is _____
 N/A Rate at which water is applied to use is _____ gpm per acre.
 The heat protection season will begin about _____ and end about _____
 (Date) (Date)

g. FROST PROTECTION: The total area to be frost protected is _____ net acres.
 Type of crop protected is _____
 N/A Rate at which water is applied to use is _____ gpm per acre.
 The frost protection season will begin about _____ and end about _____
 (Date) (Date)

h. INDUSTRIAL: Type of industry is _____ N/A
 Basis for determination of amount of water needed is _____

i. MINING: The name of the claim is _____ Patented Unpatented
 N/A The nature of the mine is _____ Mineral to be mined is _____
 Type of milling or processing is _____
 After use, the water will be discharged into _____
 (Name of stream)
 in _____ ¼ of _____ ¼ of Section _____, T _____, R _____, _____ B. & M.
 (40-acre subdivision)

j. POWER: The total fall to be utilized is _____ feet. The maximum amount of water to be used through the penstock
 is _____ cubic feet per second. The maximum theoretical horsepower capable of being generated
 N/A by the works is _____. Electrical capacity is _____ kilowatts at _____% efficiency.
 (Cubic feet per second x fall + 8.8) (Hp x 0.746 + efficiency)
 After use, the water will be discharged into _____
 (Name of stream)
 in _____ ¼ of _____ ¼ of Section _____, T _____, R _____, _____ B. & M. FERC No. _____
 (40-acre subdivision)

k. FISH AND WILDLIFE PRESERVATION AND/OR ENHANCEMENT: YES NO If yes, list
 specific and habitat type that will be preserved or enhanced in item 10 of Environmental Information
 form APP-ENV.

l. OTHER: Describe use: _____ N/A Basis for determination of amount of water needed
 is _____

6. PLACE OF USE

a. Does applicant own the land where the water will be used? YES NO Is land in joint YES NO
 (All joint owners should include their names as applicants and sign the application.) ownership?

If applicant does not own land where the water will be used, give name and address of owner, and state what
 arrangements have been made with the owner. All Water Use is Within Arden-Cordova Water
 Service's Rancho Cordova System Area.

b. USE IS WITHIN (40-ACRE SUBDIVISION)	SECTION	TOWNSHIP	RANGE	BASE & MERIDIAN	IF IRRIGATED	
					Number of acres	Presently cultivated (Y/N)
¼ of ¼						
¼ of ¼			SEE ATTACHMENT	6. b.		
¼ of ¼						
¼ of ¼						
¼ of ¼						

(If area is unsurveyed, state the location as if lines of the public land survey were projected, or contact the Division of Water Rights. If space does not permit listing all 40-acre tracts, include on another sheet or state sections, townships and ranges, and show detail on map.)

7. DIVERSION WORKS

- a. Diversion will be by gravity by means of N/A
(Dam, pipe in unobstructed channel, pipe through dam, siphon, weir, gate, etc.)
- b. Diversion will be by pumping from N/A Pump discharge rate _____ Horsepower _____
(Depth of the well _____) (Sump, offset well, channel, reservoir, etc.) (cfs or gpd)
- c. Conduit from diversion point to first lateral or to offstream storage reservoir:

CONDUIT (Pipe or channel)	MATERIAL (Type of pipe or channel lining) (Indicate if pipe is buried or not)	CROSS SECTIONAL DIMENSION (Pipe diameter or ditch depth and top and bottom width)	LENGTH (Feet)	TOTAL LIFT OR FALL		CAPACITY (Estimate)
				Feet	+ or -	
	See Attached 7.c.					

- d. Storage reservoirs: (For underground storage, complete Supplement 1 to APP, available upon request.) N/A

Name or number of reservoir, if any	DAM				RESERVOIR		
	Vertical height from downstream toe of slope to spillway level (ft.)	Construction material	Dam length (ft.)	Freeboard Dam height above spillway crest (ft.)	Approximate surface area when full (acres)	Approximate capacity (acre-feet)	Maximum water depth (ft.)

- e. Outlet pipe: (For storage reservoirs having a capacity of 10 acre-feet or more.) N/A

Diameter of outlet pipe (inches)	Length of Outlet pipe (feet)	FALL		HEAD		Estimated storage below outlet pipe entrance (dead storage)
		(Vertical distance between entrance and exit of outlet pipe in feet)	(Vertical distance from spillway to outlet pipe in reservoir in feet)	(Vertical distance between entrance and exit of outlet pipe in feet)	(Vertical distance from spillway to outlet pipe in reservoir in feet)	

N/A f. If water will be stored and the reservoir is not at the point of diversion, the maximum rate of diversion to offstream storage will be _____ cfs. Diversion to offstream storage will be made by: Pumping Gravity

8. COMPLETION SCHEDULE

- a. Year work will start N/A b. Year work will be completed _____
 c. Year water will be used to the full extent intended _____ d. If completed, year of first use _____

9. GENERAL

- a. Name of the post office most used by those living near the proposed point of diversion is Carmichael Main Post Office & Rancho Cordova Main Post Office
 Does any part of the place of use comprise a subdivision on file with the Department of Real Estate? YES NO
 If yes, state name of the subdivision Various Within Service Area
 If no, is subdivision of these lands contemplated? YES NO 2030, Water
 Is it planned to individually meter each service connection? YES NO If yes, when? Forum Agreement
- b. List the names and addresses of diverters of water from the source of supply downstream from the proposed point of diversion: See attached 9.b.
- c. Is the source used for navigation, including use by pleasure boats, for a significant part of each year at the point of diversion, or does the source substantially contribute to a waterway which is used for navigation, including use by pleasure boats? YES NO If yes, explain _____

10. EXISTING WATER RIGHT

Do you claim an existing right for the use of all or part of the water sought by this application? YES NO
 If yes, complete table below:

Nature of Right (riparian, appropriative, groundwater)	Year of First Use	Purpose of use made in recent years including amount, if known	Season of Use	Source	Location of Point of Diversion
See attached 10.					

11. AUTHORIZED AGENT (Optional)

With respect to all matters concerning this water right application those matters designated as follows:

Hatch and Parent Attn: Michael Fife (805) 963-7000
(Name of agent) (Telephone number of agent between 8 a.m. and 5 p.m.)

21 East Carrillo Street Santa Barbara, California 93102
(Mailing address) (City or town) (State) (Zip code)

is authorized to act on my behalf as my agent.

12. SIGNATURE OF APPLICANT

I (we) declare under penalty of perjury that the above is true and correct to the best of my (our) knowledge and belief.

Dated January 17 2002 at Santa Barbara, California

Ms. Mr.
 Miss. Mrs. *Michael Fife*
(Signature of applicant)

(If there is more than one owner of the project,
 please indicate their relationship.)

Ms. Mr.
 Miss. Mrs. _____
(Signature of applicant)

Additional information needed for preparation of this application may be found in the Instruction Booklet entitled "HOW TO FILE AN APPLICATION TO APPROPRIATE WATER IN CALIFORNIA". If there is insufficient space for answers in this form, attach extra sheets. Please cross-reference all remarks to the numbered item of the application to which they may refer. Send original application and one copy to the STATE WATER RESOURCES CONTROL BOARD, DIVISION OF WATER RIGHTS, P.O. Box 2000, Sacramento, CA 95812-2000, with \$100 minimum filing fee.

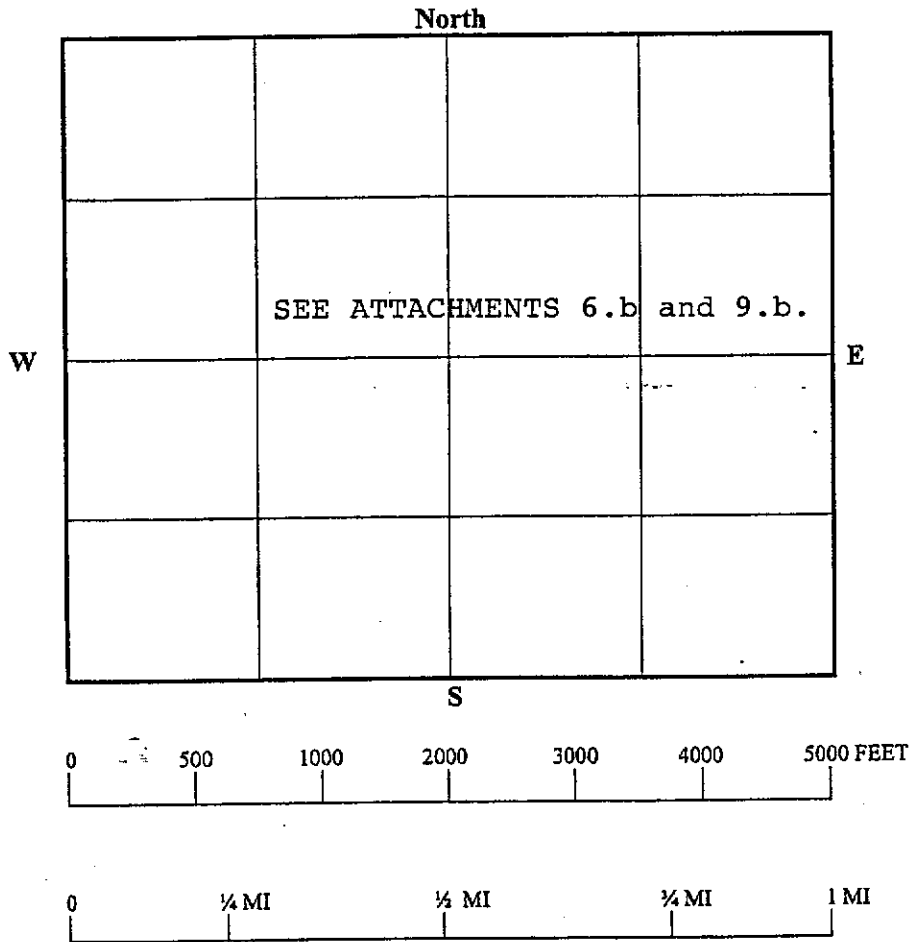
NOTE:

If this application is approved for a permit, a minimum permit fee of \$100 will be required before the permit is issued.

13. MAP

(Please complete legibly, with as much detail as possible, or attach a suitable alternative. See example in instruction booklet.)

SECTION(S) _____ TOWNSHIP _____ RANGE _____, _____ B. & M.



- (1) Show location of the stream or spring, and give name.
- (2) Locate and describe the point of diversion (i.e. the point at which water is to be taken from the stream or spring) in the following way: Begin at the most convenient known corner of the public land survey, such as a section or quarter section corner (if on unsurveyed land more than two miles from a section corner, begin at a mark or some natural object or permanent monument that can be readily found and recognized) and measure directly north or south until opposite the point which it is desired to locate; then measure directly east or west to the desired point. Show these distances in figures on the map as shown in the instructions.
- (3) Show location of the main ditch or pipeline from the point of diversion.
- (4) Indicate clearly the proposed place of use of the water.

14. SUPPLEMENTAL INFORMATION

- a. If you are applying for a permit, Environmental Information form APP-ENV should be completed and attached to this form.
- b. If you are applying for underground storage, supplemental to APP (available upon request) should be completed and attached to this form.

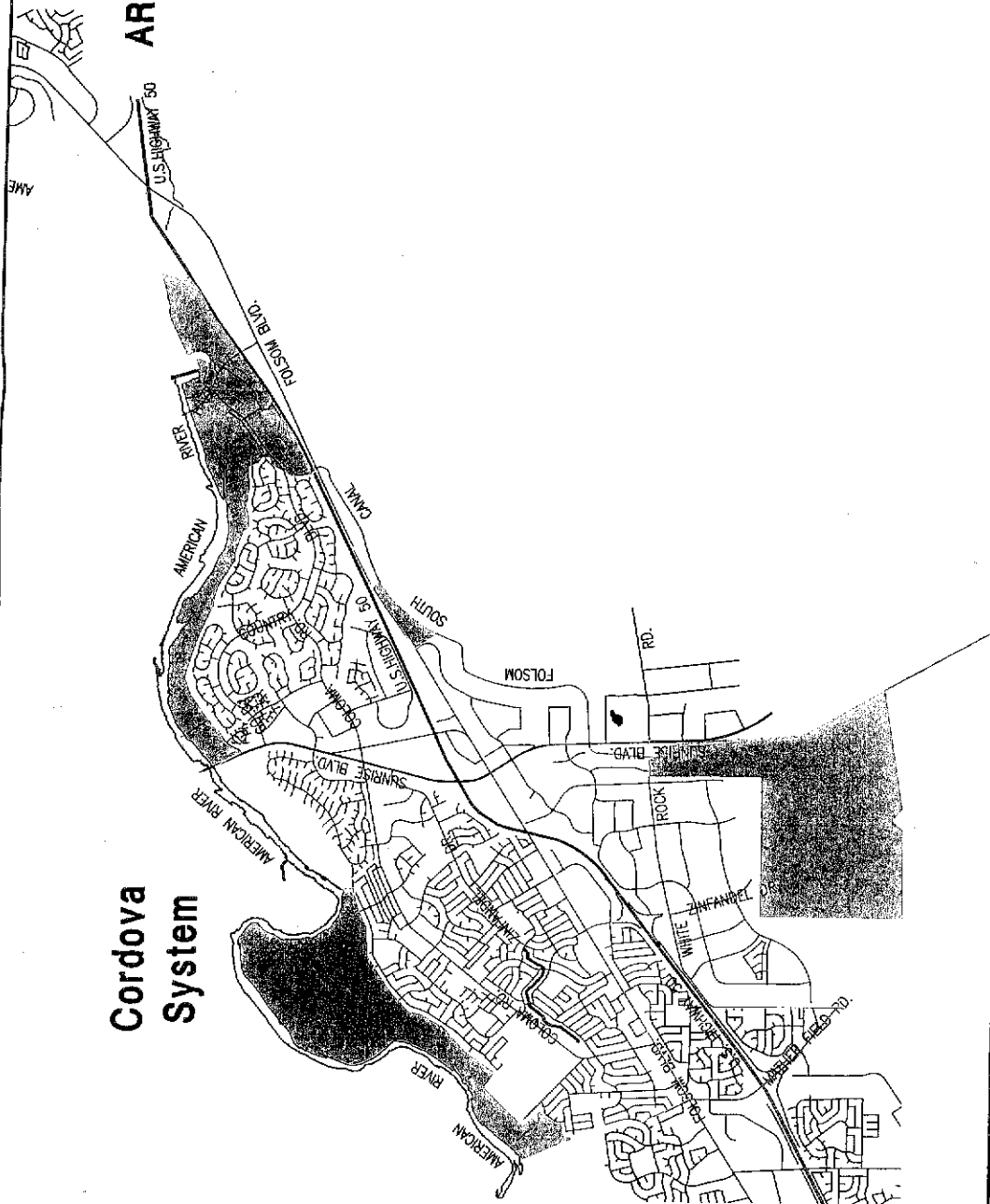
SOUTHERN CALIFORNIA WATER COMPANY
 3140 GOLD CAMP DRIVE, SUITE 30
 RANCHO CORDOVA, CA 95670

Cal. P.U.C. Sheet No. _____
 Cancellling _____
 Cal. P.U.C. Sheet No. _____

Cordova System

ARDEN-CORDOVA SERVICE AREA

Indicates Existing Service Area
 Indicates Service Area Added by the filing of this Map



This map shall not be considered by the Public Utilities Commission of the State of California or any other public body as a final or conclusive determination of establishment of the dedicated area of service, or any portion thereof.

SHOWING TERRITORY WITHIN WHICH DULY ESTABLISHED AND REGULARLY FILED TARIFF SCHEDULES APPLICABLE TO WATER SERVICE ARE IN EFFECT.

ATTACHMENT 3.a. & b.

There are a variety of options regarding the points of diversion for this water.

The first option is to utilize the Rossmoor Park Raney Collectors owned by the Carmichael Water District. The approximate coordinates of the collectors are 38° 37' 29" N, 121° 18' 14" W. They are located at assessor's parcel numbers 0560023-004-000 and 0560023-003-000. This section of Sacramento County has never been surveyed into sections, as it was formerly part of the Rancho Rios De Los Americanos Land Grant. As part of this option it may also be desirable to place additional Raney Collectors in the general vicinity of the existing facilities.

The second possible point of diversion is the point at which Buffalo Creek crosses the Folsom South Canal. The water that is the subject of this application is discharged into Buffalo Creek by Aerojet-General Corporation. The water flows through Buffalo Creek and discharges to the Lower American River. It is possible for SCWC to appropriate this water prior to its entry into the Lower American River at the point where Buffalo Creek crosses the Folsom South Canal. The coordinates for this turnout are 38° 37' 01" N, 121° 14' 47" W. This location is not within a parcel that is identified with an assessor parcel number, but the nearest such parcel is 072-0231-014. This section of Sacramento County has never been surveyed into sections, as it was formerly part of the Rancho Rios De Los Americanos Land Grant. As discussed in Attachment 7.c., if this option is pursued, it may be possible for SCWC to ultimately take this water directly from the Aerojet treatment facility. This option will only be pursued if it is possible to appropriately treat the water to resolve any water quality concerns.

The third option is to use the Folsom South Canal as a delivery point through a simple exchange arrangement. Specifically, water could be diverted from the American River into the Folsom South Canal and then replaced a short distance below this point with the water discharged from Buffalo Creek. Treated water would not itself be discharged into the Folsom South Canal and the quantity of water diverted into the Canal would be tied directly to the quantity of water discharged from Buffalo Creek. There would be no net reduction in the quantity of water in the Lower American River except for a negligible reduction between the point of diversion into the Canal and the point of discharge from Buffalo Creek. Another means of accomplishing this type of option would be to change the point of discharge of the Aerojet water from Buffalo Creek to Alder Creek. This point of discharge would have the advantage of being upriver from SCWC's diversion point. There are no applicable assessor's parcel numbers for this option.

ATTACHMENT 4.a. and 4.b.

This Application seeks authorization to divert water discharged into the Lower American River by the Aerojet-General Corporation. Aerojet is currently pumping non-tributary groundwater, treating and discharging it pursuant to a Cleanup and Abatement Order from the California Regional Water Quality Control Board ("RWQCB"), Central Valley Region. It has a National Pollutant Discharge Elimination System ("NPDES") permit to discharge this water into Buffalo Creek from whence it flows into the Lower American River. The NPDES permit currently authorizes a discharge of up to 3500 gpm year round. SCWC wishes to appropriate whatever water is discharged by Aerojet, and the amount of water this Application seeks authorization to divert is thus a direct function of these discharges.

3,500 GPM ~ 7.81 CFS

ATTACHMENT 5.c.

Service connections within the Rancho Cordova service area are not currently metered, so it is not possible to determine accurately monthly or daily per capita water use averages. Instead, SCWC estimates per capita use by calculating unit water use factors which take into account water use by multifamily residences, single family residents, and commercial/industrial employees. The unit water use factors were established by comparing historical data for numbers of single family and multi-family residential units and number of employees, to total water production for the period between 1975 and 1998. The calculated unit water use factors for the Rancho Cordova service area are:

Classification	Unit water use factor
Residential:	
Single Family	850 gpd /unit
Multi-Family	250 gpd/unit
Commercial/Industrial:	
Employee	150 gpd/Employee

ATTACHMENT 6.b.

The Cordova System serves approximately 12,800 connections within the unincorporated community of Rancho Cordova in Sacramento County. The service area is bounded by Hazel Avenue to the east, Mather Air Force Base to the south, Mather Field Road to the west, and the American River to the North.

A copy of an updated service area map is included here. This map is an update of the Rancho Cordova Service Area Tariff Map on file with the Public Utilities Commission.

ATTACHMENT 7.c.

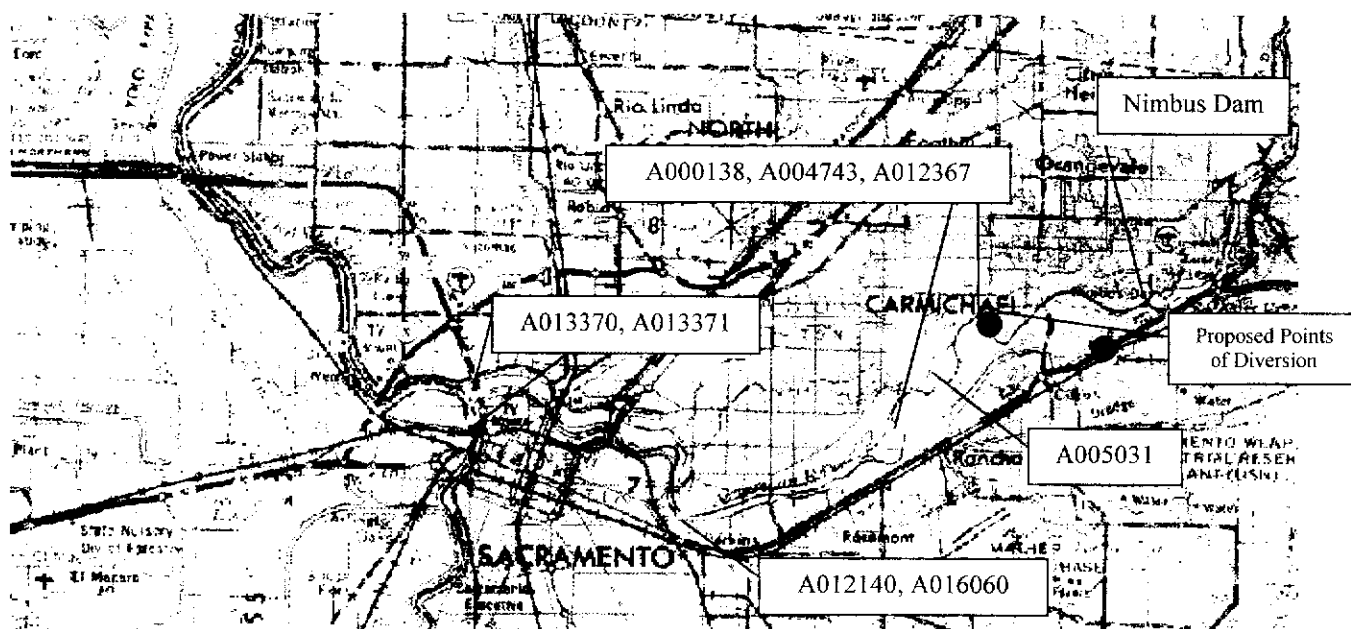
If the Rosmoor Park Raney Collectors are used as the point of diversion, then there are two scenarios for the distribution of this water. The first would be to transport the water through the Carmichael Water District's ("CWD") newly constructed Baumont Way Microfiltration Surface Water Treatment Plant ("Baumont WTP"), treat it, and then pump it back underneath the American River through an existing 33" diameter steel pipeline that CWD is no longer using and convey the water directly into SCWC's distribution system. The second scenario would be to tie into one of the existing collectors and pump the water in a new raw water transmission line to SCWC's Coloma Water Treatment Plant ("Coloma WTP") located at 11200 Coloma Road, Rancho Cordova, CA 95670. The water would then be distributed into SCWC's Cordova System. It may also be desirable expand the capacity of the Raney Collectors or to install additional Raney Collectors. The service area would be the same for both scenarios.

If the point of diversion is the intersection point of Buffalo Creek and the Folsom South Canal, then SCWC would construct a new concrete structure where the current concrete u-shaped weir, that crosses the Folsom South Canal, discharges into the unlined Buffalo Creek. A weir arrangement would be built that would allow "natural" flows to proceed down Buffalo Creek and allow the "Aerojet" flows to flow into an entrance structure to a new 24" reinforced concrete pipe. This concrete pipe would convey the appropriated water by gravity to SCWC's existing Folsom South turnout structure. Four raw water diversion pumps pump water from the Canal on the south side of Highway 50 to the Coloma WTP on the North side of Highway 50 via a 24" pipeline. SCWC would either construct a new concrete junction structure over the existing 42" reinforced concrete pipe that conveys water from the canal into the booster pump sump, or could core directly into the wall of the sump and terminate the 24" reinforced concrete pipe at the sump. Alternatively, it may be desirable to avoid the discharge of the water into Buffalo Creek altogether and to instead pipe the water directly from the Aerojet treatment plant to SCWC's treatment facilities.

If an appropriate exchange agreement can be reached with the U.S. Bureau of Reclamation, then a like quantity of water as is discharged by Aerojet can be diverted into the Folsom South Canal. SCWC would then divert this water using its existing diversion facilities located on the Canal. This quantity of water would then be replaced into the Lower American River by the discharge from Buffalo Creek resulting in no net reduction of water in the river. It would also be possible to utilize the Folsom South Canal without any temporary loss of water to the river if the Aerojet discharges were placed into Alder Creek rather than into Buffalo Creek. This would result in Aerojet's discharge point being located upriver from SCWC's point of diversion.

Attachment 9.b.

Recent events have necessitated that the State Water Resources Control Board limit public access to water rights information. The following information represents SCWC's best efforts to fully identify downstream water rights.



Water Right	Owner
A013370	US Bureau of Reclamation
A013371	US Bureau of Reclamation
A012140	City of Sacramento
A016060	City of Sacramento
A000138	Carmichael Water District
A004743	Carmichael Water District
A012367	Carmichael Water District
A005031	County of Sacramento

Note that the City of Sacramento may have two additional water rights in this vicinity, possibly identified as A12321 and A12622.

ATTACHMENT 10.

Since 1998, Aerojet-General Corporation has been treating and discharging into the Lower American River the water that is sought to be appropriated pursuant to this Application. Aerojet is conducting these activities pursuant to a Cleanup and Abatement Order from the Regional Water Quality Control Board because past practices by Aerojet have resulted in the contamination of the groundwater basin. Since 1997 SCWC has been losing the use of its wells in the Rancho Cordova area due to this contamination. While Aerojet will remain culpable for its past negligence even if this Application is approved by the SWRCB, the circumstances that lead SCWC to file this Application suggest that SCWC has an existing equitable right to appropriate this water.



State of California
State Water Resources Control Board
DIVISION OF WATER RIGHTS
P.O. Box 2000, Sacramento, CA 95812-2000
Info: (916) 341-5300, FAX: (916) 341-5400, Web: <http://www.waterrights.ca.gov>

**APPLICATION TO APPROPRIATE WATER BY PERMIT
ENVIRONMENTAL INFORMATION**

(THIS IS NOT A CEQA DOCUMENT)

APPLICATION NO.

The following information will aid in the environmental review of your application as required by the California Environmental Quality Act (CEQA). IN ORDER FOR YOUR APPLICATION TO BE ACCEPTED AS COMPLETED, ANSWERS TO THE QUESTIONS LISTED BELOW MUST BE COMPLETED TO THE BEST OF YOUR ABILITY. Failure to answer all questions may result in your application being returned to you, causing delays in processing. If you need more space, attach additional sheets. Additional information may be required from you to amplify further or clarify the information requested in this form.

PROJECT DESCRIPTION

1. Provide a description of your project, including but not limited to, type of construction activity, structures existing or to be built, area to be graded or excavated and project operation, including how the water will be used.

See Attachment 1

GOVERNMENTAL REQUIREMENTS

Before a final decision can be made on your water right application, we must consider the information contained in an environmental document prepared in compliance with the requirements of CEQA. If an environmental document has been prepared, a determination must be made as to who is responsible for the preparation of the environmental document for your project. The following questions are designed to aid us in that determination.

2. Contact your county planning or public works department for the following information:

a. Person contacted N/A Date of contact _____
Department _____ Telephone () _____

b. Assessor's Parcel No. (1) 0560023 004 000, 0560023 003 000, (2) 072-0231-014

c. County Zoning Designation (3) NA NA

d. Are any county permits required for your project? No
If yes, check appropriate space below:
_____ Grading Permit, _____ Use Permit, _____ Watercourse
Obstruction Permit, _____ Change of Zoning, _____ General Plan
Change, Other (explain):

e. Have you obtained any of the required permits described above? NA
If yes, provide a complete copy of each permit obtained.

3. Are any additional state or federal permits required for your project? Possibly (i.e., from Federal Energy Regulatory Commission, U.S. Forest Service, Bureau of Land Management, Soil Conservation Service, Department of Water Resources (Division of Safety of Dams), Reclamation Board, Coastal Commission, State Lands Commission, etc.) For each agency from which a permit is required provide the following information:

Permit type Additional permits may be required depending on the selected
Person (s) ^{POD} contacted _____ Agency _____
Date of contact _____ Telephone () _____

4. Has any public agency prepared an environmental document for any aspect of your project?
NO

If so, please submit a copy of the latest environmental document (s) prepared, including a copy of the notice of determination adopted by the public agency. If not, explain below whether you expect that a public agency other than the State Water Resources Control Board will be preparing

an environmental document for your application or whether the applicant, if it is a California public agency, will be preparing the environmental document for your project:

Identity of entity to perform CEQA documentation still to
be determined.

Note: When completed, please submit a copy of the final environmental document (including notice of determination) or notice of exemption to the State Water Resources Control Board. Processing of your application cannot proceed until such documents are submitted.

5. Will your project, during construction or operation, generate waste or wastewater containing such things as sewage, industrial chemicals, metals, or agricultural chemicals, or cause erosion, turbidity or sedimentation? NO If so, explain: _____

If yes or you are unsure of your answer, contact your local Regional Water Quality Control Board for the following information (See attachment for address and telephone number):

Will a waste discharge permit be required for your project? NO

Person contacted _____ Date of contact _____

What method of treatment and disposal will be used? _____

6. Have any archeological reports been prepared on this project, or will you be preparing an archeological report to satisfy another public agency? NO

Do you know of any archeological or historic sites located within the general project area?

NO If so, explain: _____

ENVIRONMENTAL SETTING

7. Attach THREE COMPLETE SETS of color photographs, clearly dated and labeled, showing the vegetation currently existing at the following locations:
- a. Along the stream channel immediately downstream from the proposed point(s) of diversion
 - b. Along the stream channel immediately upstream from the proposed point(s) of diversion
 - c. At the place(s) where the water is to be used

Note: It is very important that you submit no less than three complete sets of photographs as required above. If less than three sets are submitted, processing of your application will be delayed until you furnish the remaining sets!

8. From the list given below, mark or circle the general plant community types which best describe those which occur within you project area (Note: See footnote denoted by * under Question 11 below): See Attachment 8

Tree Dominated Communities

Subalpine Conifer
Red Fir
Lodgepole Pine
Mixed Conifer
 Sierran Mixed Conifer
 White Fir
 Klamath Mixed Conifer
Douglas-Fir
Jeffrey Pine
Ponderosa Pine
Eastside Pine
Redwood
Pinyon-Juniper
Juniper
Aspen
Closed-Cone Pine-Cypress
Montane Hardwood-Conifer
Montane Hardwood
Valley Foothill Hardwood
 Blue Oak Woodland
 Valley Oak Woodland
 Coastal Oak Woodland
Valley Foothill Hardwood-Conifer
 Blue Oak-Digger Pine
Eucalyptus
Montane Riparian
Valley Foothill Riparian
Desert Riparian
Palm Oasis
Joshua Tree

Shrub Dominated Communities

Alpine Dwarf-Shrub
Low Sage
Bitterbrush
Sagebrush
Montane Chaparral
Mixed Chaparral
Chamise-Redshank Chaparral
Coastal Scrub
Desert Succulent Shrub
Desert Wash
Desert Scrub
Alkali Desert Scrub

Herbaceous Dominated Communities

Annual Grassland
Perennial Grassland
Wet Meadow
Fresh Emergent Wetland
Saline Emergent Wetland
Pasture

Aquatic Communities

Riverine
Lacustrine
Estuarine
Marine

Developed Communities

Cropland
Orchard-Vineyard
Urban

Literature source: Mayer, K.E., and W.F. Laudenslayer, Jr., (eds). 1988. A Guide to Wildlife Habitats of California. California Department of Forestry and Fire Protection, Sacramento. 166 pp. (Note: You may view a copy of this document at our public counter at the address given at the top of this form or you may purchase a copy by calling the California Department of Fish and Game, Wildlife Habitat Relationships (WHR) Program at (916) 653-7203).

9. Provide below an estimate of the type, number, and size (trunk/stem diameter at chest height) of trees and large shrubs that are planned to be removed or destroyed due to implementation of the proposed changes. Consider all aspects of your application, including changes in diversion structures, water distribution and use facilities, and changes in the place of use due to additional water development.

See attachment 9

FISH AND WILDLIFE CONCERNS

10. Identify the typical species of fish which occur in the source(s) from which you propose to divert water and discuss whether or not any of these fish species or their habitat has been or would be affected by your proposed changes. (Note: See footnote denoted by * under Question 11 below):

See attachment 10

11. Identify the typical species of riparian and terrestrial wildlife in the project area and discuss whether or not any of these species and/or their habitat has been or would be affected by your project through construction of water diversion and distribution works and/or changes in the place of water use. (Note: See footnote denoted by * below):

See attachment 11

*Note: The purposes of Question 10 and 11 are to provide a preliminary assessment of the presence of typical plant and animal species in the area and whether these species might be affected by your project. Detailed site surveys to quantify populations of specific species or determine the presence of rare or endangered species may be required at a later date. It is very important that you answer these questions accurately. If you are unable to obtain appropriate answers from your local California Department of Fish and Game biologists (See attachment for address and telephone number) or you do not have adequate information or expertise to complete your answers, you should hire a fishery consultant and/or a wildlife consultant to review your project and prepare suitable answers for you. For information on available qualified fishery or wildlife consultants near you, consult your local telephone directory yellow pages under Environmental and Ecological Services, or call the California Environmental Protection Agency, Registered Environmental Assessor (REA) Program, at (916) 324-6881 or the University of California, Cooperative Extension Service (See your local telephone directory white pages).

12. Does your proposed project involve any construction or grading-related activity which has significantly altered or would significantly alter the bed or bank of any stream or lake? No

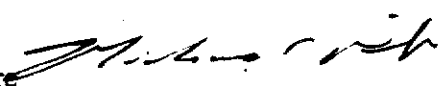
If so, explain:

See attachment 12

CERTIFICATION

I hereby certify that the statements I have furnished above and in the attached exhibits are complete to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge.

Date January 17, 2002

Signature 

ATTACHMENT 1.

This project is a proposed diversion of water through existing facilities. The water to be diverted is non-native water consisting of treated groundwater that has been pumped, treated and then discharged into the Lower American River. The diversion will be tied directly to the amount of water that is so discharged.

This Application identifies three possible scenarios for diversion of this water. The first is to use the existing Rosmoor Park Raney Collectors owned by the Carmichael Water District ("CWD"). The second scenario involves delivery of the water out of Buffalo Creek at the point where the creek crosses the Folsom South Canal. This scenario would involve a minimal amount of construction in order to craft an appropriate connection from Buffalo Creek into SCWC's existing diversion works. It may also be possible under this option to avoid a discharge of the water into Buffalo Creek and instead deliver the water to SCWC directly from Aerojet's treatment facility. The third option is to develop an exchange agreement whereby water could be delivered into the Folsom South Canal and then replaced a short distance downstream by the discharge from Buffalo Creek. This option could also be accomplished by alternating Aerojet's discharge point. This option would likely not involve any construction.

Physical Description:

Scenario One:

CWD's Raney Collectors consist of four cylindrical concrete cassions. Three of the collectors are currently being used, with the fourth collector, located on the north bank of the American River adjacent to the Ancil Hoffman Golf Course, currently mothballed and no longer in use. The following narrative will focus on the three active collectors all located on the south bank of the Lower American River, in the American River Parkway, Rossmoor Bar Area, directly across the river from CWD's newly constructed Baumont Way Microfiltration Surface Water Treatment Plant ("Baumont WTP").

The three active cassions are named with #1 being the most easterly, #2 the central one adjacent to a newly constructed junction structure and #3 the most westerly. Each cassion is 16 feet in diameter with a 1'-6" wall thickness and a 13' interior clearwell diameter. A newly constructed junction structure is similarly constructed but does not have any infiltration galleries. Characteristics unique to each collector are shown in the following table.

Characteristic	Collector		
	1	2	3
Elevation of bottom of sump	28.9	34.8	23.5
Elevation of top of roof slab	74±	72±	53±

Number of 10" diameter infiltration galleries	7	5	7
---	---	---	---

Each collector has a number of 10" diameter perforated pipes that extend radially into the Lower American River and collect surface water flowing down through the riverbed. Once water is collected in the infiltration galleries it flows by gravity to the sump of each collector, and again by gravity to the junction structure and then to the Baumont WTP. At collector #1, water flows from the sump into 30' of 24" diameter pipe, to a sump structure where the pipe transitions in size to a 48" concrete pipe and is conveyed 600' in a southwesterly direction to the junction structure. Collector #2 operates similarly though its flows are conveyed directly to the junction structure by just 30' of 24" pipe. Flows from collector #3 are conveyed first into 25' of 24" pipe then into a sump structure where the pipe size increases to 48" diameter and then northeasterly for 1,000' to the junction structure. The flows from all three collectors leave the junction structure in a 48" micro-tunneled reinforced concrete pipe, that conveys the flows by gravity, approximately 20 feet beneath the bed of the Lower American River in a northwesterly direction for 700' to a reinforced concrete raw water cassion located on the north bank of the Lower American River adjacent to the Baumont WTP.

Capacity:

Capacity of the collectors is influenced by two variables, the minimum river stage elevation and the transmissivity of the riverbed. Typically winter flood flows will clean the riverbed of clogging material and restore the capacity of the collectors. In 1986 and 1987 the Raney Method Western Corporation conducted performance tests on the three active collectors. These results and minimum historical capacities are shown on the following table.

Collector	Minimum Capacity		Maximum Capacity	
	Test Date	Flow (MGD)	Test Date	Flow (MGD)
1	1959	5.9	1986-1987	9.1
2	1986	5.6	1986-1987	5.6
3	1962	6.0	1986-1987	13.3
	Total	17.5	Total	28.0

It should be noted that the test results summarized above do not reflect the recently completed improvements to the collectors that were built as part of the Baumont WTP construction. With the system operating only using gravity flows, head losses have been reduced with the installation of 48" pipe replacing the 24" pipe that previously connected the collectors. This will only increase the available flows from the collector.

It may also be desirable to expand these Raney Collectors or to construct additional Raney Collectors in the same general vicinity.

Scenario Two:

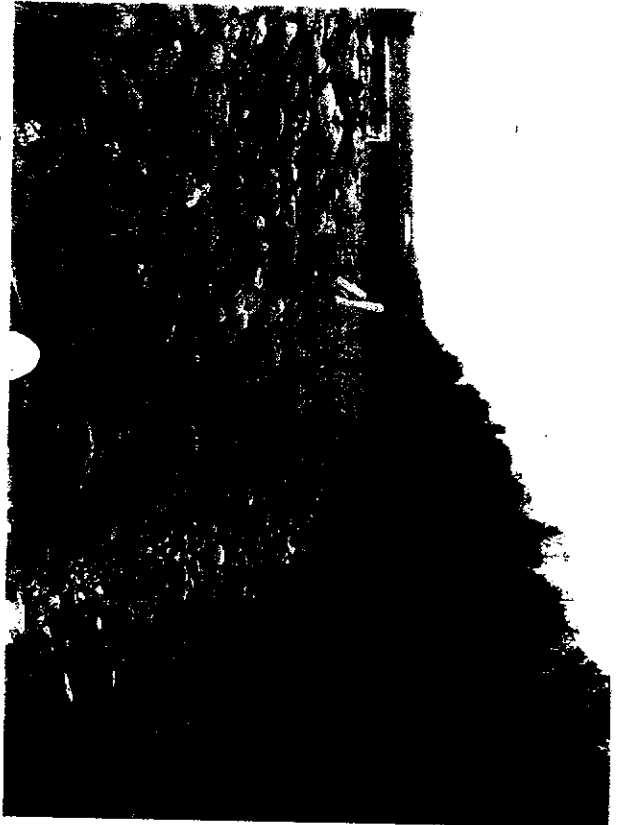
If the point of diversion is the intersection point of Buffalo Creek and the Folsom South Canal, then SCWC would construct a new concrete structure where the current concrete u-shaped weir, that crosses the Folsom South Canal, discharges into the unlined Buffalo Creek. A weir arrangement would be built that would allow "natural" flows to proceed down Buffalo Creek and allow the "Aerojet" flows to flow into an entrance structure to a new 24" reinforced concrete pipe. This concrete pipe would convey the appropriated water by gravity to SCWC's existing Folsom South turnout structure. Four raw water diversion pumps pump water from the Canal on the south side of Highway 50 to the Coloma WTP on the North side of Highway 50 via a 24" pipeline. SCWC would either construct a new concrete junction structure over the existing 42" reinforced concrete pipe that conveys water from the canal into the booster pump sump, or could core directly into the wall of the sump and terminate the 24" reinforced concrete pump at the sump.

Scenario Three:

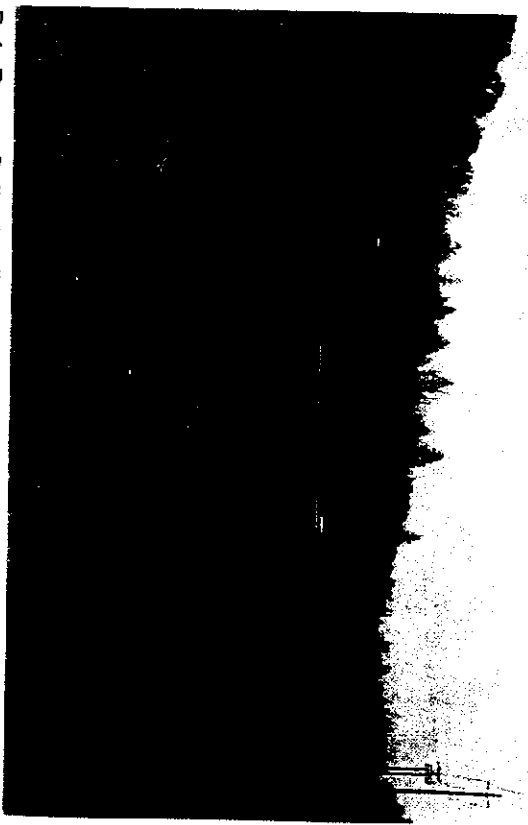
It is possible to deliver additional water into the Folsom South Canal and use the water discharge by Aerojet into Buffalo Creek to replace the diverted water downstream. The water delivered into the Canal would then be diverted by SCWC utilizing its existing diversion works. It would also be possible to accomplish this scenario by altering Aerojet's point of discharge for the water that it has treated. If this water were discharged by way of Alder Creek rather than Buffalo Creek, then the discharge point would be upriver from SCWC's point of diversion. Since this scenario would use only existing facilities, no new construction would be anticipated.

ATTACHMENT 7





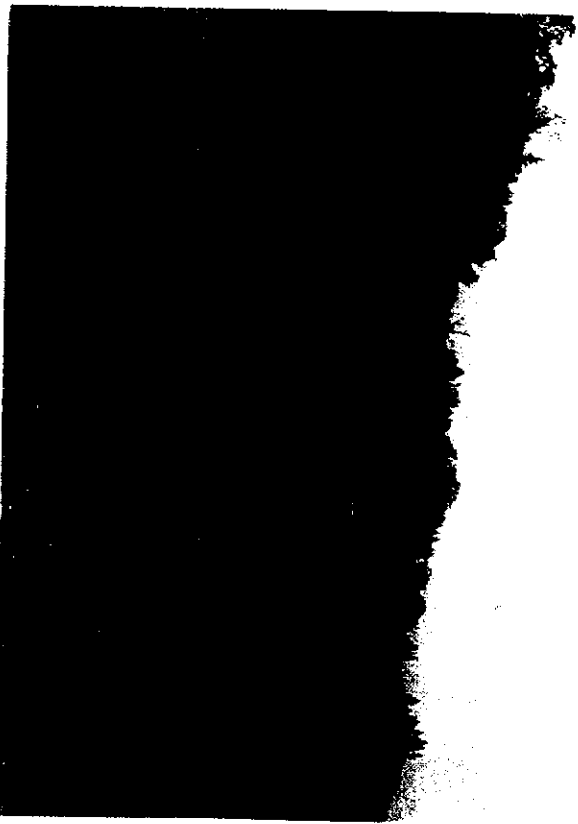
A. Raney Collector #3 - looking downstream.



B-1. Raney Collector #2 and junction structure - looking upstream.



B-2. Raney Collector #2 - looking upstream.



B-3. Raney Collector #3 - looking upstream.

Representative Site Photos - Rossmoor Park Raney Collector



B-1. Buffalo Creek - looking (south) upstream over Folsom South Canal.



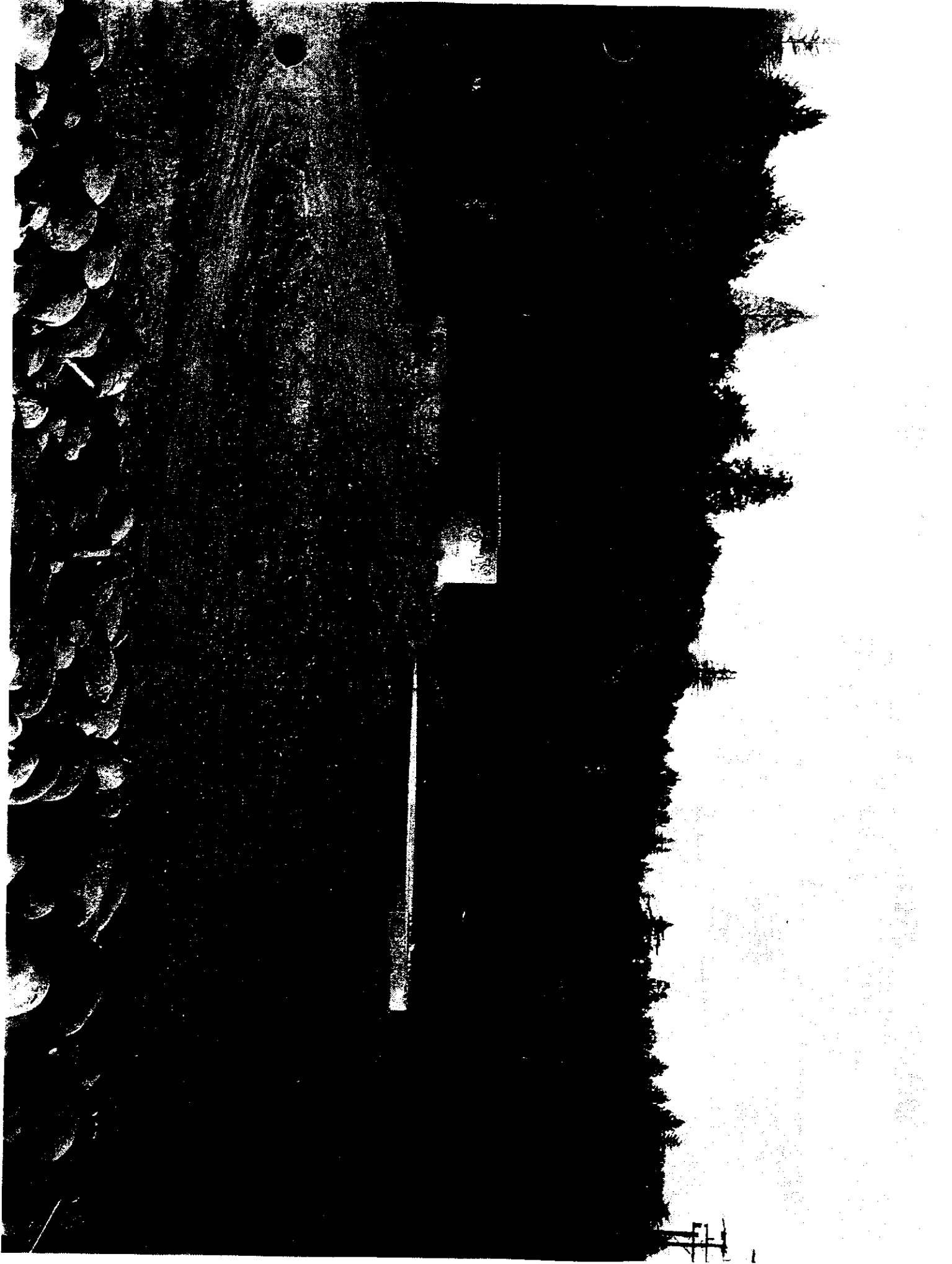
B-2. Upstream of Buffalo Creek (crossing Folsom South Canal).



B-3. Buffalo Creek (proposed point of diversion).

Representative Site Photos - Folsom South Turnout Site







B-1. Buffalo Creek - looking (south) upstream over Folsom South Canal.

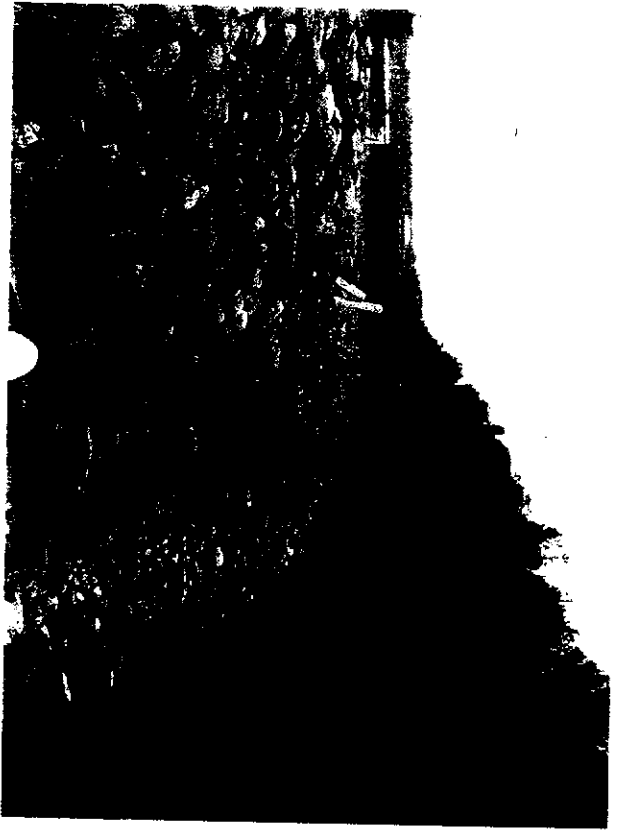


B-2. Upstream of Buffalo Creek (crossing Folsom South Canal).

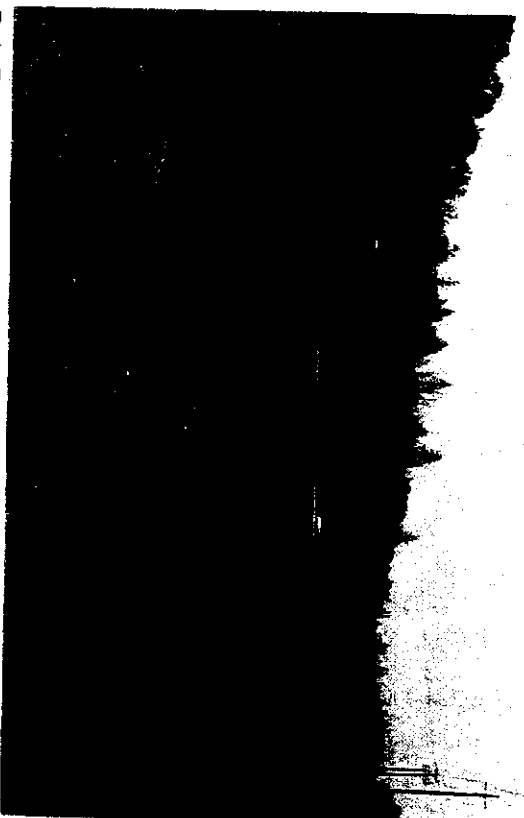


B-3. Buffalo Creek (proposed point of diversion).

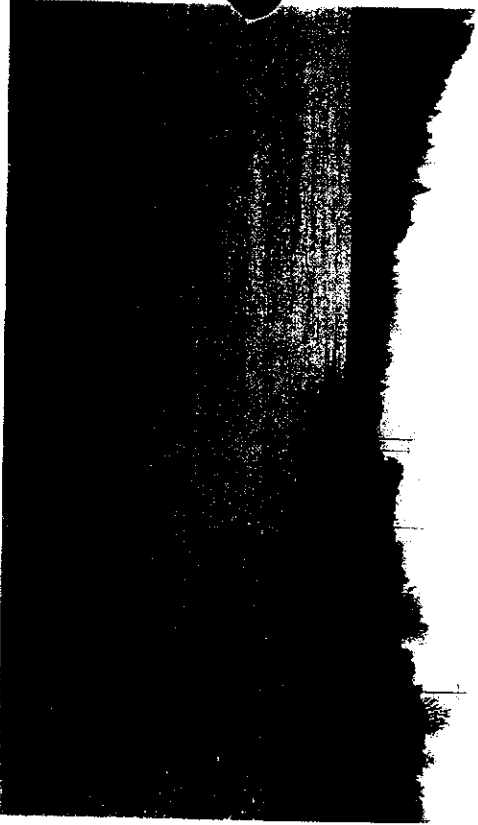
Representative Site Photos - Folsom South Turnout Site



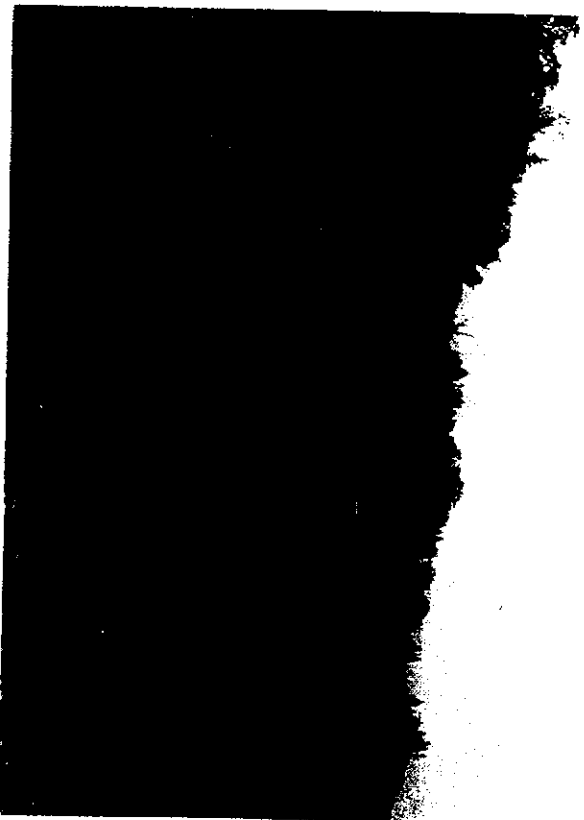
A. Raney Collector #3 - looking downstream.



B-1. Raney Collector #2 and junction structure - looking upstream.

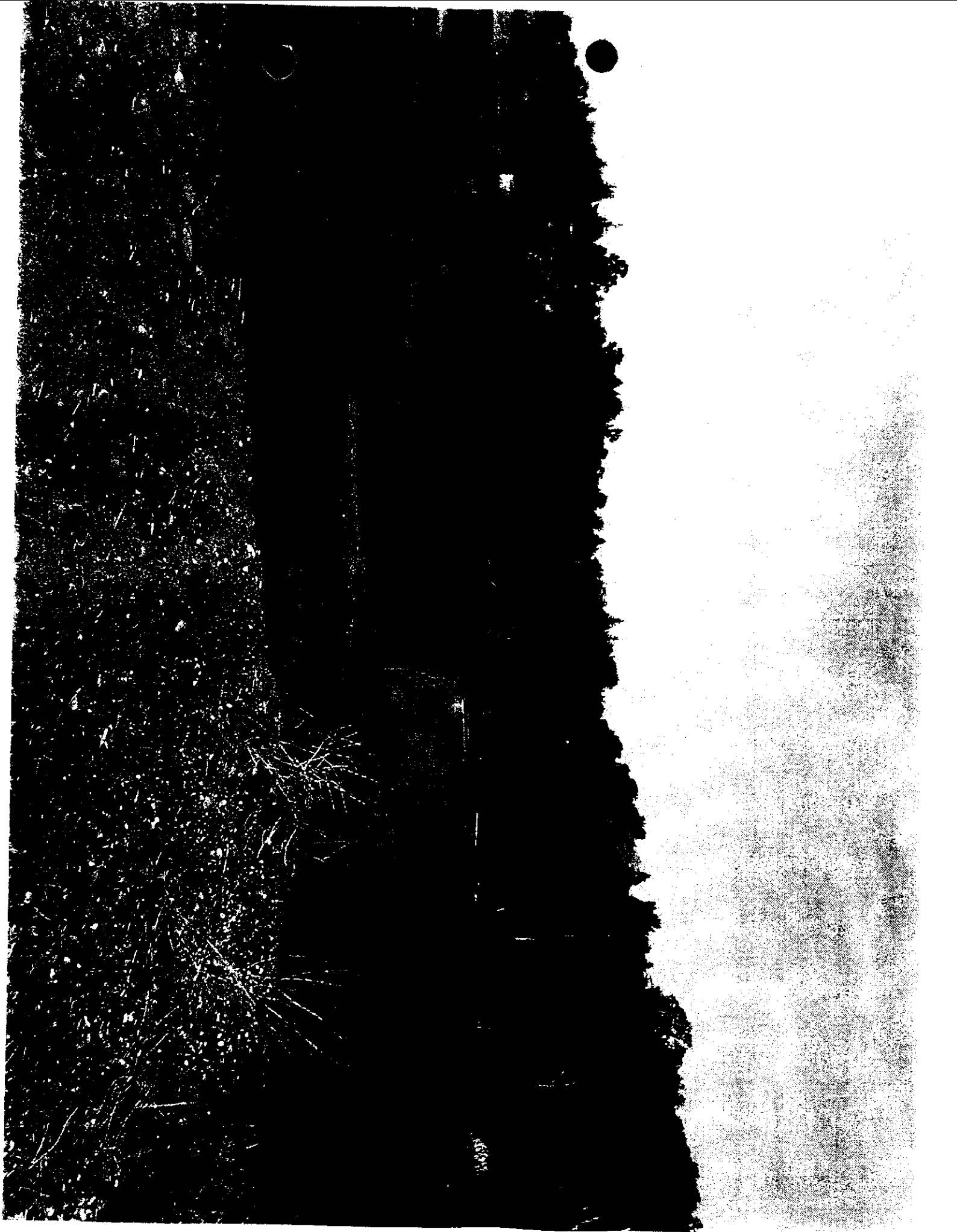


B-2. Raney Collector #2 - looking upstream.

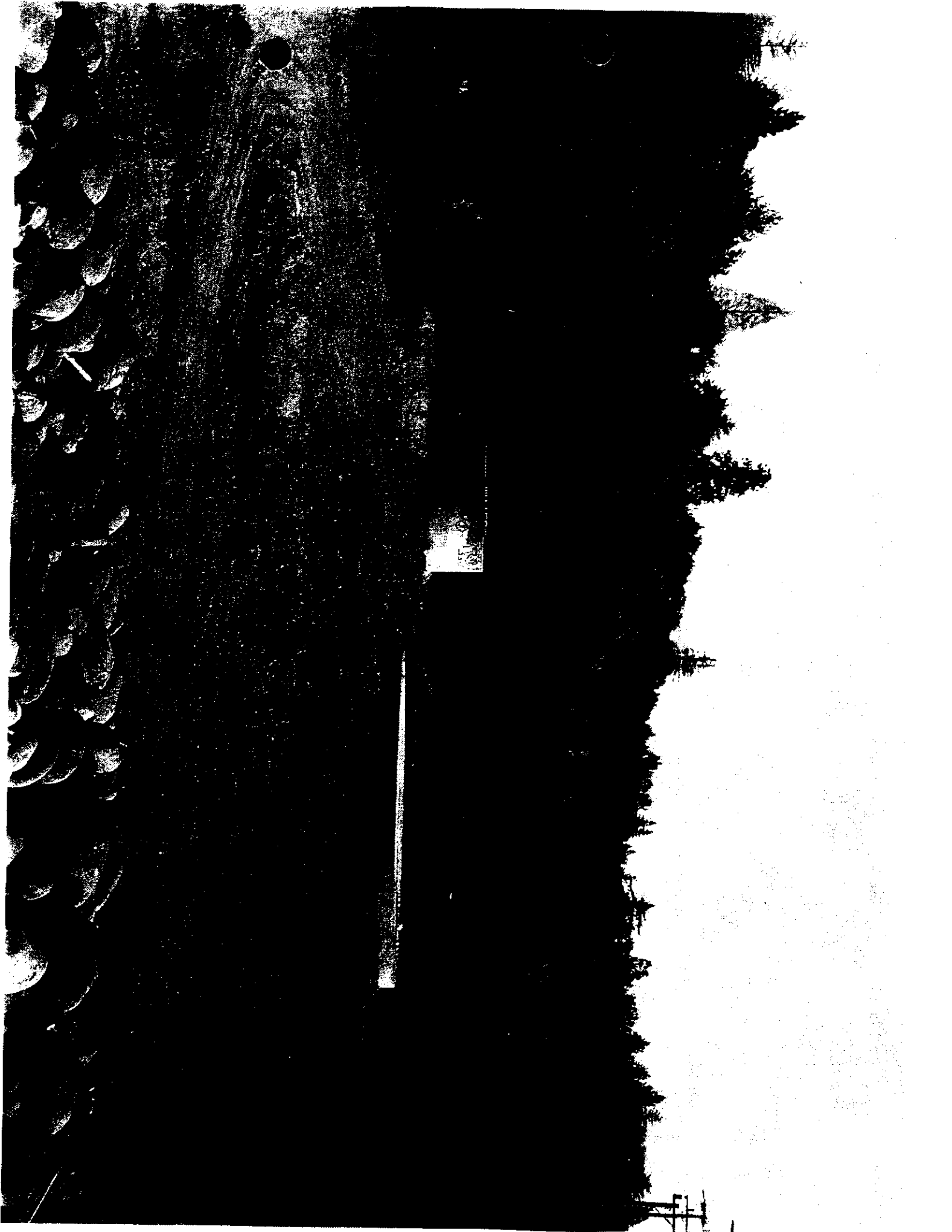


B-3. Raney Collector #3 - looking upstream.

Representative Site Photos - Rossmoor Park Raney Collector









B-1. Buffalo Creek - looking (south) upstream over Folsom South Canal.

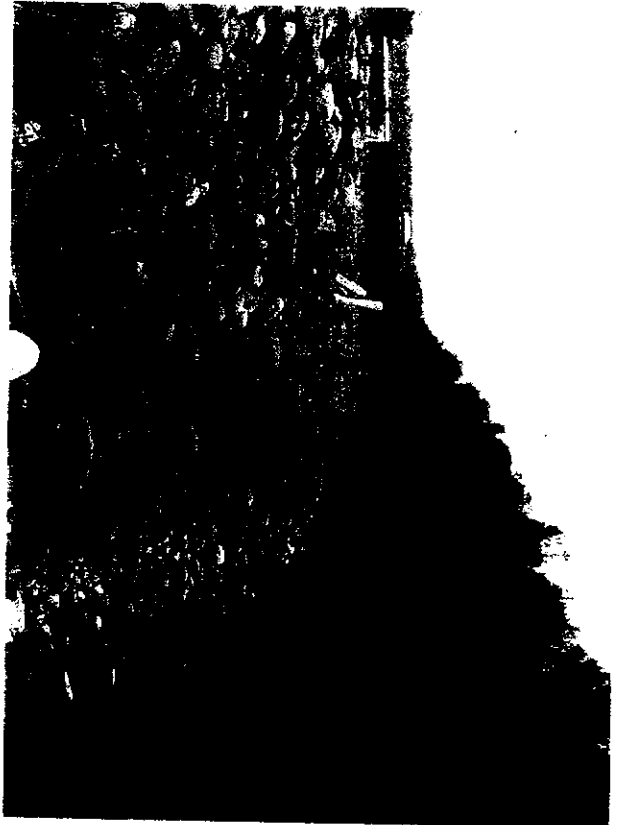


B-2. Upstream of Buffalo Creek (crossing Folsom South Canal).

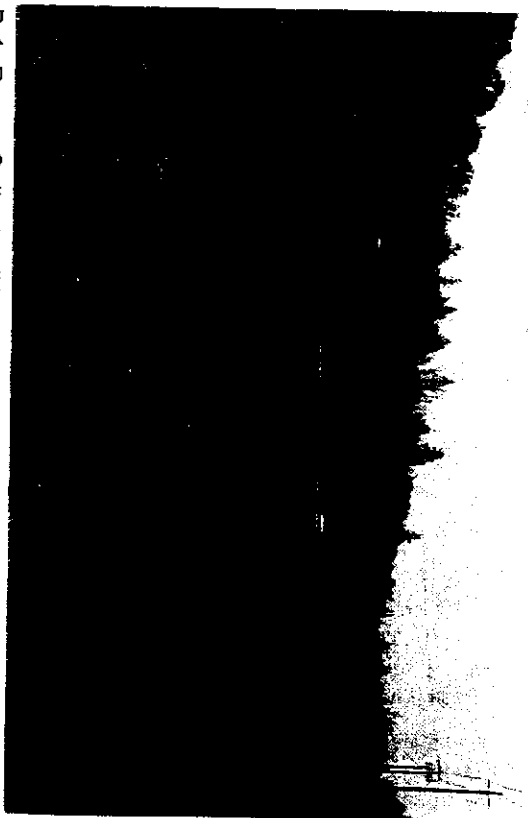


B-3. Buffalo Creek (proposed point of diversion).

Representative Site Photos - Folsom South Turnout Site



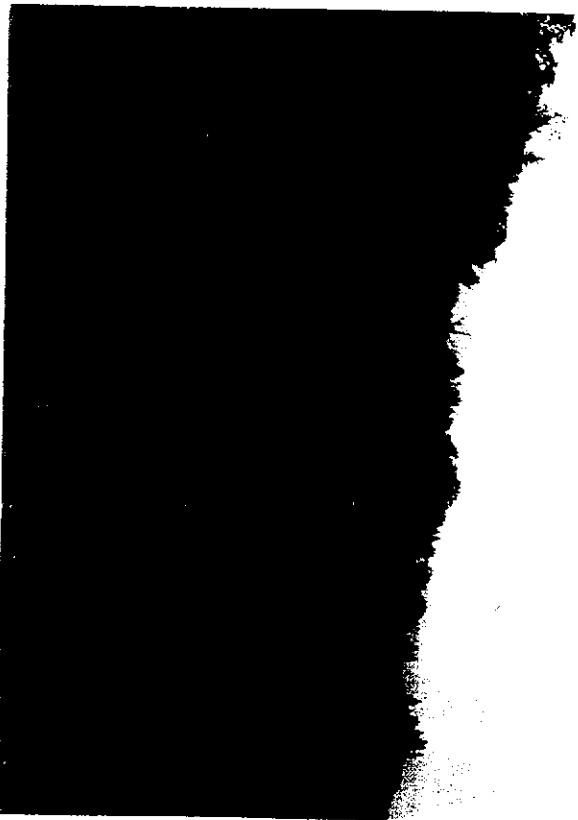
A. Raney Collector #3 - looking downstream.



B-1. Raney Collector #2 and junction structure - looking upstream.

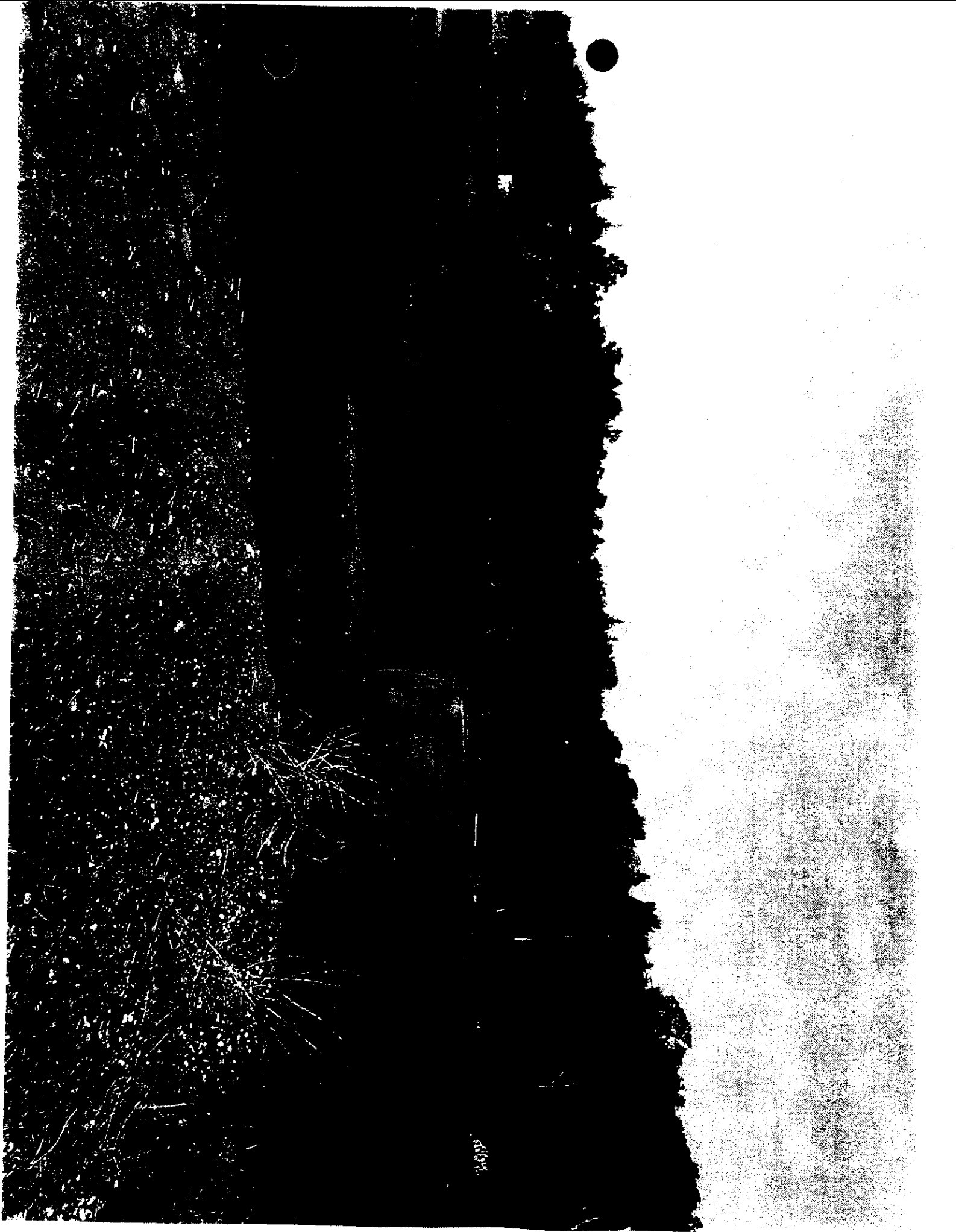


B-2. Raney Collector #2 - looking upstream.

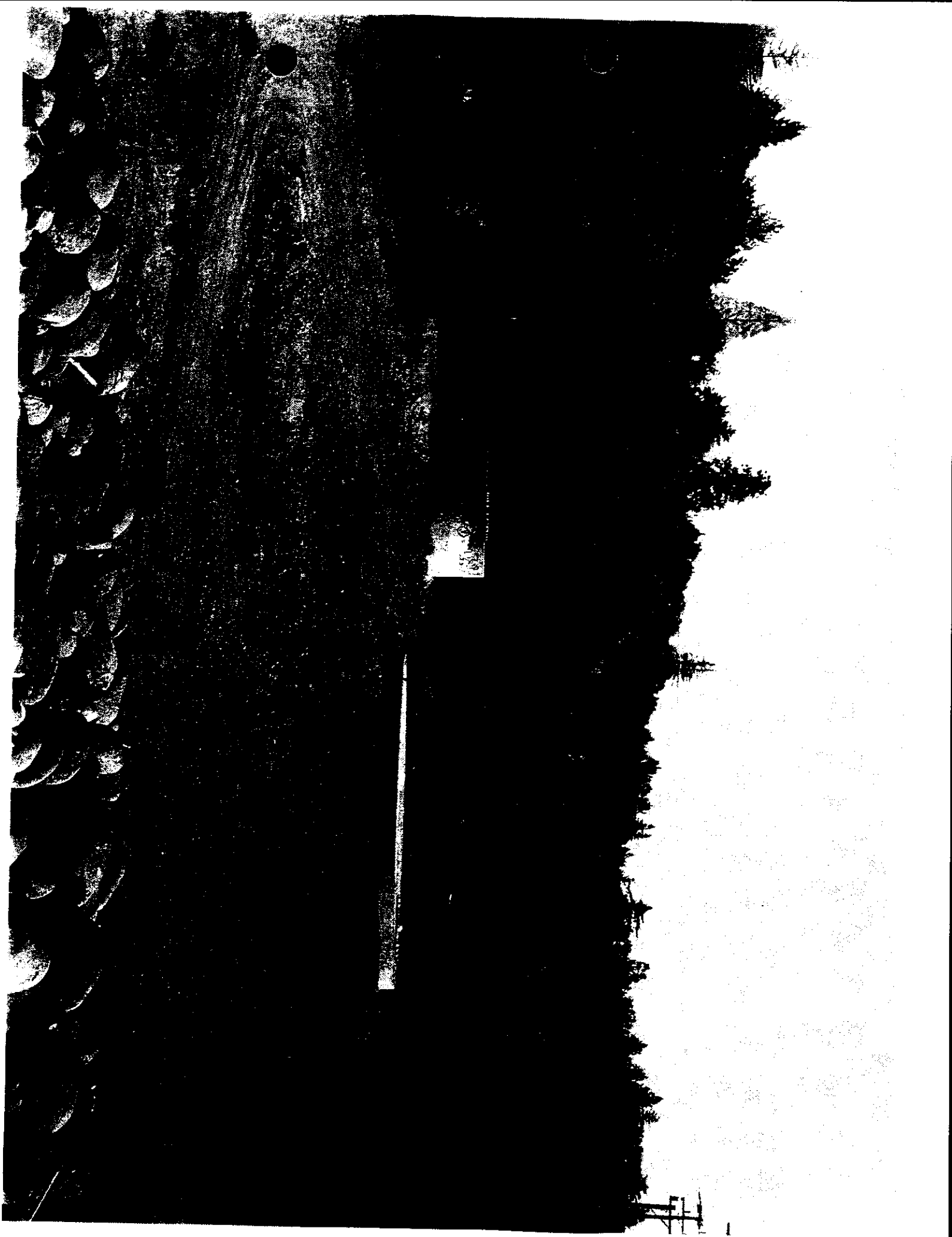


B-3. Raney Collector #3 - looking upstream.

Representative Site Photos - Rossmoor Park Raney Collector







ATTACHMENT 8.

Rossmoor Park Raney Collectors Site:

The general plant community would most closely be described as Valley Foothill Riparian, associated with a Riverine system (the Lower American River). However, the site-specific vegetation is largely composed of non-native annual grasses and various herbaceous and shrubby perennials.

Folsom South Turnout Site:

The general plant community would most closely be described as Valley Foothill Riparian/Annual grassland, associated with an artificial Riverine system (the Folsom South Canal). However, the site is highly disturbed and does not clearly fall within the typical definitions of these communities. Site specific vegetation is largely composed of non-native annual grasses and various herbaceous and shrubby perennial forbs in upland portions and herbaceous hydrophytic plants along and within the open flowing area of Buffalo Creek.

Folsom South Exchange Scenario:

Since this scenario functions as an exchange through existing facilities, there is no discrete site to be described. The general area over which the exchange would take place is the same as for the other POD scenarios. Therefore the plant community types can generally be assumed to be identical.

ATTACHMENT 9.

Rossmoor Park Raney Collectors Site:

The proposed changes in diversion will result in minimal loss of vegetation and will not affect/impact any trees or shrubs. The proposed impact area for the diversion is limited to the area immediately surrounding the junction structure near Collector #2. Vegetation existing within the proposed impact area is mugwort (*Artemisia douglasiana*), black mustard (*Brassica nigra*), yellow starthistle (*Centaurea solstitialis*), Mexican tea (*Chenopodium ambrosioides*), Bermuda grass (*Cynodon dactylon*), filaree (*Erodium botrys*), curly dock (*Rumex crispus*), Johnson grass (*Sorghum halepense*), clover (*Trifolium* species), and other various non-native annual grasses. Vegetation is sparse and the area can easily be returned to its current state following impact activities.

Water diversion will not result in significant water level changes along the Lower American River and thus will not affect any vegetation, outside of the construction disturbance area.

Folsom South Turnout Site:

Vegetation existing within the proposed upland impact area located adjacent to the service road are, coyote bush (*Baccharis pilularis*), black mustard (*Brassica nigra*), yellow starthistle (*Centaurea solstitialis*), turkey-mullein (*Eremocarpus setigerus*), filaree (*Erodium botrys*), vetch (*Vicia* species), and a few other various non-native annual grasses. Dominant vegetative species in the area are starthistle and black mustard, which are both invasive exotic species. A single coyote bush is located very close to the area proposed to be impacted for the diversion project. The native shrub is multi-stemmed (all approximately less than 1") and has a foliage diameter of approximately five feet. Coyote bush can easily be re-established and is typically a fast growing shrub. Thus, the area can easily and quickly be returned to its current state following impact activities.

The point at which the diversion structure will be installed at Buffalo Creek will be an area currently composed of large rocks placed for bank stabilization. Vegetation is minimal and includes tall flat sedge (*Cyperus eragrostis*), water primrose (*Ludwigia peploides* var. *peploides*), black mustard, starthistle, smartweed (*Polygonum punctatum*), and curly dock (*Rumex crispus*).

The water diversion will result in a significant change in water levels flowing within Buffalo Creek. Due to reduced flow levels, the water diversion will likely result in the loss of some hydrophytic bank vegetation, both at the point of diversion and the downstream stretch of Buffalo Creek. However, it should also be noted that much of the hydrophytic bank vegetation has likely been recently established (within the last three or so years), as a result of the increased water released from the Aerojet facility that began in April of 1998.

Folsom South Canal Exchange Scenario:

The project under this scenario will use existing facilities. No new construction is contemplated.

ATTACHMENT 10.

Rossmoor Park Raney Collectors Site:

Species known to potentially-occur within that reach of the Lower American River include fall-run Chinook salmon, steelhead, Delta smelt, Sacramento splittail, American shad, striped bass, Sacramento sucker, and Sacramento pikeminnow. Some of these fish are state and/or federally listed species.

The proposed water diversion changes are not expected to have significant impacts on the above listed species at the point of diversion. Further environmental analysis may be needed to fully comprehend total impacts of the proposed water diversion.

Folsom South Turnout Site:

Species known to potentially-occur within the general region, specifically within the Lower American River, include fall-run Chinook salmon, steelhead, Delta smelt, Sacramento splittail, American shad, striped bass, Sacramento sucker, and Sacramento pikeminnow. Some of these fish are state and/or federally listed species.

Species likely to be found within Buffalo Creek are those species typically found in local warm water habitats, such as centrarchids (e.g., sunfish and bass) and mosquito fish (*Gambusia affinis*). The proposed water diversion changes may have a significant effect on the aquatic species at the point of diversion. Diversion of the proposed water, equal to that amount contributed by treated groundwater from the Aerojet ARGET facility, may significantly decrease the ordinary high water levels within Buffalo Creek, both at the point of diversion and downstream of the diversion, thus hindering use of the tributary by some aquatic species.

Given the increased flows within Buffalo Creek over the last three or so years, species known to generally occur within the Lower American River may now also use Buffalo Creek in high flow situations. It is unknown whether there is sufficient year-round flow or if there are downstream barriers that might hinder advancement up Buffalo Creek. Further environmental analysis may be needed to fully comprehend total impacts of the proposed water diversion.

Folsom South Canal Exchange Scenario:

Species known to potentially-occur within that reach of the Lower American River include fall-run Chinook salmon, steelhead, Delta smelt, Sacramento splittail, American shad, striped bass, Sacramento sucker, and Sacramento pike minnow. Some of these fish are state and/or federally listed species.

Since the net reduction in water in the river between the location of diversion of the water and the location of replacement is expected to be minimal, the proposed water diversion changes are not expected to have significant impacts on the above listed species. If it is possible to change the discharge point for Aerojet's water from Buffalo Creek to Alder Creek, then even these minor impacts will disappear. Further environmental analysis may be needed to fully comprehend total impacts of the proposed water diversion.

ATTACHMENT 11.

Rossmoor Park Raney Collectors Site:

Vegetation of the surrounding area includes western ragweed (*Ambrosia psilostachya*), tall flatsedge (*Cyperus eragrostis*), pampas grass (*Cortaderia jubata*), tree-of-heaven (*Ailanthus altissima*), fennel (*Foeniculum vulgare*), weedy cudweed (*Gnaphalium luteo-album*), dallisgrass (*Paspalum dilatatum*), smartweed (*Polygonum punctatum*), Fremont's cottonwood (*Populus fremontii*), Valley oak (*Quercus lobata*), live oak (*Quercus wislizenii*), willow (*Salix* species), Himalayan blackberry (*Rubus discolor*), moth mullein (*Verbascum blattaria*), common mullein (*Verbascum thapsis*), South American verbain (*Verbena bonariensis*), telegraph weed (*Heterotheca grandiflora*), broom (*Genista* species), Smilo grass (*Piptatherum miliaceum*), and bristle grass (*Setaria* species), in addition to the species listed on Attachment 9 above. The surrounding area is not expected to be impacted by the proposed activities. As stated above, none of the trees or shrubs located in the surrounding areas will be impacted by the activities.

Wildlife potentially found within the vicinity of the proposed project area include deer and various birds such as green heron (*Butorides virescens*), mallard (*Anas platyrhynchos*), great egret (*Ardea alba*), great blue heron (*Ardea herodias*), belted kingfisher (*Ceryle alcyon*), downy woodpecker (*Picoides pubescens*), black phoebe (*Syornis nigricans*), song sparrow (*Melospiza melodia*), American goldfinch (*Carduelis tristis*), red-shouldered hawk (*uteo lineatus*), and white-tailed kite (*Elanus leucurus*). Wildlife use may be temporarily affected during construction activities, but construction will not permanently impact use along the river. Bank swallow, a state threatened species, may nest in the vicinity, but is not expected to be impacted by the proposed project. No direct impact to any wildlife species will result from the proposed project.

Folsom South Turnout Site:

The surrounding area is highly disturbed and includes the concrete, channelized Folsom South Canal to the south, railroad tracks to north and Buffalo Creek, which flows north to the Lower American River, crossing over the Folsom South Canal. Vegetation within the upland area is the same as that within the project area. Downstream of the immediate project area, and prior to its crossing under the railroad tracks, Buffalo Creek has vegetation composed of tall flatsedge, moth mullein (*Verbascum blattaria*), cattail (*Typha* species), South American verbain (*Verbena bonariensis*), dallisgrass (*Paspalum dilatatum*), pennyroyal (*Mentha pulegium*), one coyote bush, and one willow (*Salix* species) sapling, in addition to the species listed on Attachment 9 above. Surrounding areas are not expected to be impacted by the proposed activities. The sapling and shrub located within the surrounding area will not be impacted by the activities.

Wildlife potentially found within the vicinity of the proposed project area include deer and various birds such as the American kestrel (*Falco parverius*), California quail (*Callipepla*

californicus), mourning dove (*Zenaida macroura*), western scrub jay (*Aphelocoma californica*), loggerhead shrike (*Lanius ludovicianus*), savannah sparrow (*Passerculus sandwichensis*), red-winged blackbird (*Agelaius phoeniceus*), and house finch (*Carpodacus mexicanus*). Wildlife use may be temporarily affected during construction activities, but construction is not expected to permanently impact use along the river. No direct impact to any wildlife species will result from the proposed project.

Folsom South Canal Exchange Scenario:

Vegetation of the surrounding area includes western ragweed (*Ambrosia psilostachya*), tall flatsedge (*Cyperus eragrostis*), pampas grass (*Cortaderia jubata*), tree-of-heaven (*Ailanthus altissima*), fennel (*Foeniculum vulgare*), weedy cudweed (*Gnaphalium luteo-album*), dallisgrass (*Paspalum dilatatum*), smartweed (*Polygonum punctatum*), Fremont's cottonwood (*Populus fremontii*), Valley oak (*Quercus lobata*), live oak (*Quercus wislizenii*), willow (*Salix* species), Himalayan blackberry (*Rubus discolor*), moth mullein (*Verbascum blattaria*), common mullein (*Verbascum thapsis*), South American verbain (*Verbena bonariensis*), telegraph weed (*Heterotheca grandiflora*), broom (*Genista* species), Smilo grass (*Piptatherum miliaceum*), and bristle grass (*Setaria* species), in addition to the species listed on Attachment 9 above. The surrounding area is not expected to be impacted by the proposed activities. As stated above, none of the trees or shrubs located in the surrounding areas will be impacted by the activities.

Wildlife potentially found within the vicinity of the proposed project area include deer and various birds such as green heron (*Butorides virescens*), mallard (*Anas platyrhynchos*), great egret (*Ardea alba*), great blue heron (*Ardea herodias*), belted kingfisher (*Ceryle alcyon*), downy woodpecker (*Picoides pubescens*), black phoebe (*Syornis nigricans*), song sparrow (*Melospiza melodia*), American goldfinch (*Carduelis tristis*), red-shouldered hawk (*uteo lineatus*), and white-tailed kite (*Elanus leucurus*). Since there will be no construction activities, there will be no direct impact from the project on these species. Bank swallow, a state threatened species, may nest in the vicinity, but is not expected to be impacted by the proposed project. No direct impact to any wildlife species will result from the proposed project.

ATTACHMENT 12.

Rossmoor Park Raney Collectors Site:

The proposed project does not involve any activity that would alter the bed or bank of the Lower American River. Impact activities will take place near the junction structure located adjacent to Raney Collector #2, which is located approximately 30 feet from the ordinary high bank line of the Lower American River.

Folsom South Turnout Site:

Diversion activities would alter the bank of Buffalo Creek. A diversion structure is proposed to be installed along the western bank of Buffalo Creek, directly downstream of its crossing over the Folsom South Canal. As mentioned above, the bank of Buffalo Creek at this location is composed of stabilization rock and sparse vegetation. Therefore, impacts to bank habitat will be minimal. Following construction of the diversion structure, the bank will be stabilized and re-vegetated in order to mitigate any impacts to natural vegetation.

Folsom South Canal Exchange Scenario:

The proposed project does not involve any activity that would alter the bed or bank of the Lower American River.