

MEMBER UNITS EXHIBIT NUMBER 25

To: Santa Ynez River Technical Advisory Committee  
From: Scott Engblom, Project Biologist Santa Ynez River TAC  
Re: Minutes from the April 20, 1995 meeting of the TAC

A meeting of the Santa Ynez River Technical Advisory Committee was held April 20, 1995 at the Goleta Sanitary District conference room. A list of the attendees is provided. **The next meeting of the TAC is scheduled for June 6, 1995 at the Goleta Sanitary District conference room from 9:30 am until 12:30 pm.**

#### **1995 MOU Update**

Dept. of Fish and Game, (DFG) and US Fish and Wildlife Service, (USFWS) signed the MOU approximately two weeks ago. The attorneys for US Bureau of Reclamation, (USBR) are looking over the document before it is signed. Other signatories involved have also signed.

The attorneys for Montecito and Goleta have requested the contract and budget from USBR with respect to USFWS involvement. Carl Dealy has said he will get those documents to the interested parties.

#### **Bradbury Dam Seismic Safety Modifications**

The actual modification, the cutoff wall, has not been completed yet. The construction teams are mobilizing on site. Construction teams crossed the river with their equipment last week. Riparian vegetation in the vicinity of the crossing has been surveyed by a riparian team. Additional crossings by heavy equipment is scheduled later this summer. An old ford between the spill basin and long pool is the crossing site.

A more detailed plan for the water that is going to be pumped out of the well field will come out next week. Approximately 10 cfs. will be pumped out of the well field for a one week period. The number of wells in the field is still unknown. Monitoring of the regrowth of riparian vegetation will continue for about three years.

The construction site will probably be demobilized by the first part of August if everything goes well. Carl Dealy will keep the TAC appraised of the dam modification situation.

#### **Fish Trapping Update**

To date in Hilton Creek there have been 52 adult migrants captured, forth-nine were upmigrants, six were downstream migrants, and three of the downstream migrants were not marked.

outline form, will be presented to the Consensus Committee, by a member of the TAC, on May 17, 1995.

SANTA YNEZ RIVER TECHNICAL ADVISORY COMMITTEE  
MEETING AGENDA - GOLETA SANITARY DISTRICT  
June 6, 1995

- 1) Fish trapping update
- 2) 1995 MOU update
- 3) Bradbury Dam seismic safety modifications
- 4) Fish passage study
- 5) Santa Ynez River long-term study plan FROM OFG
- 6) BOUNDARY - PROPERTY

→ A Pump system - TOM K & STEVEN. UPDATE NEXT MEET.  
→ [outletworks. attend pipe & set a mile per hour up?]

NEXT TAC MEETING SEPT 12, 1995

Meeting

Prepare brief monthly reports to bring to TAC attention sign obs + issues.

**SANTA YNEZ RIVER TECHNICAL ADVISORY COMMITTEE  
MEETING ATTENDANCE LIST - GOLETA SANITARY DISTRICT  
June 6, 1995**

<b>NAME</b>	<b>AFFILIATION</b>	<b>PHONE NUMBER</b>
Paul Fenberg	DFG	(916) 654-2578
Charles Hanson	Hanson Env.	510 937 4606
Scott B. ENGBLOM	TAC BIOLOGIST	805-564-5544
Ed Ballard	USFWS	(805) 644-1766
Carl Dealy	USFWS	(805) 487-5139
Joan M. Jurancich	SWRCB	916-657-2055
ROBERT SAPERSTEIN	HATTON FOREST/SYRWCD	963-9231
Kate Rees	Cachuma Project Partnership	805-569-1391
THOMAS M. PETERSEN	SYRWCD ID#1	805 688-6015
Chuck Evans	Montecito W.D. & CCRB	805 969-2271
Craig Fusaro	Interested Public	" 9638819
BRIAN TAUTWEIN	URBAN CAREERS COUNCIL	" 964-3105
Ali Shahroody	SYRWCD	415-457-0701
Bob Pike	City of Santa Barbara	805-584-5328

To: Santa Ynez River Technical Advisory Committee  
From: Scott B. Engblom, Project Biologist, September 6, 1995  
Re: Minutes from the June 6, 1995 Meeting of the Technical Advisory Committee

The next meeting of the Santa Ynez River Technical Advisory Committee will be held on Tuesday September 12, 1995 at 0930 at the Goleta Sanitary District across from the Santa Barbara Airport. An agenda for this meeting a list of attendees from the last meeting is provided.

#### **Pump Siphon in Hilton Creek**

The ultimate goal of the pump siphon is to extend the rearing period of steelhead/rainbow trout in Hilton Creek beyond the rearing period that would happen naturally. Several questions that remain unanswered include: 1) Logistical hydraulics of the siphon, 2) Heating of the pipe from solar radiation to temperatures which are detrimental to steelhead/rainbow trout.

Nothing will be proposed that will interfere with the operation of the dam. Tom Keegans's Management Summary paper will discuss the current status of the pump siphon. The TAC will use this document as the basis for discussion and subsequent decision making.

#### **Fish Trapping Update**

Two upstream/downstream migration traps are currently in operation. One is located on Hilton Creek and the other is located on Salsipuedes Creek. A total of 52 adult steelhead/rainbow trout were captured in the upstream trap in Hilton Creek. A total of 15 adult steelhead/rainbow trout were captured in the downstream migrant trap in Hilton Creek. Ten of the fifteen downstream migrants were unmarked. An additional four upstream migrants were captured in other tributaries. Two from Alisal Creek and two from Salsipuedes Creek. All upstream migrants were administered a fin clip on their right pectoral fin.

Young of the year (YOY) steelhead/rainbow trout in Hilton Creek are continuing to trickle downstream toward the confluence with the Santa Ynez River.

#### **1995 MOU Update**

The May 18, 1995 MOU is the operating document. All parties that signed the MOU last year have signed this year with the exception of National Marine Fisheries Service (NMFS) and the City of Lompoc.

## **Update of Bradbury Dam Seismic Safety Issue**

The trench has been completed and back-filled with the soil/bentonite mixture in an attempt to stop water infiltration under the dam. The two production wells were producing 1900 gallons per minute as of May 31. The wells will remain and one cubic foot per second is the long term production rate. A long term fix is currently in the design phase and will probably be initiated by next year.

## **Fish Passage Study**

In April the river was flown by aircraft and aerial photos taken for the 45 miles from Bradbury Dam to the lagoon. California Department of Fish and Game (DFG) staff conducted analysis and interpretation. In late April-early May TAC staff met with DFG staff to go over information on potential passage problem areas. Eleven transects were placed in four locations at 150 cubic feet per second (cfs). The 150 cfs was the high target flow DFG recommended. Subsequent measurements were made at the same eleven locations at 100, 50, and 35 cfs. A separate report will be completed and distributed after TAC and USFWS Biologists meet with DFG in October to model the results.

## **Long Term Study Plan**

Written comments on DFG draft 3-year study plan to be provided to DFG by June 30, 1995. After comments are received the document will be revised and distributed again for comment. The purpose of the document is to provide for a longer term study effort than currently provided through the year to year MOU study plan.

## **Property Boundary Near Bradbury Dam**

Information on property boundaries is still pending from Denver. Carl Dealy (USBR) will provide information on property boundaries around Hilton Creek and the Long Pool at the next meeting of the TAC.

## **Action Items**

Paul Forsberg to contact members of the Biological Subcommittee to discuss management of the fry in Hilton Creek, a potential marking program on the fry, and use of the Fish Account Water.

Carl Dealy will inquire as to Lake Cachuma water level impact and recovery. Carl will also check into the pump-siphon plan, gather all necessary information, and provide that information to Tom Keegan.

Paul F. to call Art Kidman to send a copy of the MOU to the Urban

Creeks Council and Craig Fusaro.

Paul F. will call Tom Keegan and ask him give an update at the next meeting of the TAC on the feasibility of the pump-siphon in Hilton Creek.

Scott Engblom, Project Biologist will be sending out a proposed agenda (with the minutes from the previous meeting) to all members of the TAC, after each meeting.



SANTA YNEZ RIVER TECHNICAL ADVISORY COMMITTEE  
MEETING AGENDA - GOLETA SANITARY DISTRICT  
September 12, 1995

- 1) Action items  
*Fax all flow & depth data 9-13-95*
- 2) River update: flow/conditions
- 3) Hilton Creek siphon update
- 4) Bradbury Dam seismic safety modification update  
*1) interim fix, 12 walls - 3966 - 22.75' high - 40' diam.  
2) final fix - begin 1997, end 1998  
CALL ME OUT THE WEEK BEFORE NEXT WEEK*
- 5) Fish passage study update  
*GET 10-12 raw data into model*
- 6) Long-term study plan update
- 7) Property boundary update  
*Jim Hurley: the Jim Hurley Co.*
- 8) Next meeting date *Nov 8 1995 8:30*
- 9) STATUS OF UEA STUDY

SANTA YNEZ RIVER TECHNICAL ADVISORY COMMITTEE  
MEETING AGENDA - GOLETA SANITARY DISTRICT  
September 12, 1995

- 1) Action items
- 2) River update: flow/conditions
- 3) Hilton Creek siphon update
- 4) Bradbury Dam seismic safety modification update
- 5) Fish passage study update
- 6) Long-term study plan update
- 7) Property boundary update
- 8) Next meeting date

SANTA YNEZ RIVER TECHNICAL ADVISORY COMMITTEE  
MEETING AGENDA - GOLETA SANITARY DISTRICT  
NOVEMBER 8, 1995

- 1) Action Items
- 2) River update: flow/conditions
- 3) Hilton Creek siphon update
- 4) Bradbury Dam seismic safety modification update
- 5) Fish passage study update
- 6) Long-term study plan update
- 7) Property boundary update
- 8) Next meeting date



To: Santa Ynez River Technical Advisory Committee  
From: Scott Engblom, Project Biologist, October 25, 1995  
Re: Minutes from the September 12, 1995 meeting of the  
Technical Advisory Committee

The meeting of the Santa Ynez River Technical Advisory Committee was held on September 12, 1995 at 0930 at the Goleta Sanitary District across from the Santa Barbara Airport. An agenda for this meeting and a list of attendees is provided.

#### **Action Items**

(1) Management of Fry in Hilton Creek/use of Fish Account Water: Both topics were discussed by the Biological Subcommittee and the recommendations are included in the June 13, July 28, and August 29 Subcommittee minutes.

(2) Carl Dealy - Lake Cachuma water level impact and recovery/pump siphon plan: Water level in Cachuma is to remain at 733.0 feet until further notice. Discussions are to continue concerning the recovery of water above the 733.0 level.

(3) Paul Forsberg called Art Kidman and sent a copy of the MOU to Craig Fusaro.

(4) Paul Forsberg contacted Tom Keegan and asked him to give a talk on the feasibility of the pump-siphon in Hilton Creek. Tom was not able to make the meeting but is close to completing a management summary paper on the pump-siphon.

#### **Property Boundary Update**

Carl Dealy has compiled a stack of documents regarding the property boundary between Bradbury Dam and the Crawford property. The property boundary between the two properties will need to be surveyed and an estimate for the cost of the survey determined.

#### **Hilton Creek Pump-Siphon**

Tom Keegan was unable to make the meeting but will make available to the TAC at a later date the feasibility paper regarding the pump-siphon in Hilton Creek.

#### **Status of Vegetation Study**

Paul Forsberg received a copy of the vegetation study and submitted it to the Region 5 plant biologist. Paul should receive comments on the study within a week.

### **River Update: flow/conditions**

Flows from the Fish Account were initiated on July 11, 1995 and are currently being maintained at 5 cubic feet per second (cfs). At this level of release the Fish Account will last until March 1996.

Temperature unit arrays are deployed in several locations between the Long Pool and the lagoon. Diurnal water quality measurements (dissolved oxygen and temperature) are being made on a monthly basis at five locations from the Long Pool to Lompoc.

Measured temperatures in the morning hours have varied between 18-20 C. Dissolved oxygen measurements during the same time vary between 0.1-3.0 mg/l. Afternoon temperatures vary between 18-24 C. Dissolved oxygen measurements in the afternoon vary between 3 and 12 mg/l. The main cause for the low dissolved oxygen is the abundant algae which removes oxygen from the water during dark hours.

The water flow is contiguous from the dam to near the HWY 154 bridge. From the HWY 154 bridge the water is non-contiguous in several locations downstream to around Buellton. The water again becomes contiguous approximately ten miles above Lompoc to the Lagoon.

### **Bradbury Dam seismic safety modification update**

(1) Interim fix - BOR has gradually increased the number of production wells in the well field to twelve in order to remove the water from the alluvium. The wells have not been as productive as anticipated. Water from the spilling basin is suspected to be leaking back into the well field.

Ongoing considerations with regard to stopping incursion of water into the well field include abruptly dropping the level of the spill basin approximately three feet. The date for this operation is yet to be determined.

(2) Final fix - The BOR is putting together a modification report for final corrective action at the dam. The report entails moving a tremendous amount of aggregate material to the dam site and placing it on the outside slope of the dam to; (1) form a stability berm and (2) form a filtering lens.

The stability berm will need approximately 850,000 cubic yards of material. The borrow area will need to have approximately 1.5 million cubic yards of material. The project may not start until 1997.

### **Fish Passage Study Update**

All of the field data has been collected. On October 10-12, Scott Engblom and Ed Ballard will travel to DFG in Sacramento to input the raw data into the computer, model the numbers, and get started on a report. The report will be submitted for comment to all TAC members prior to official submittal to the Consensus Committee. The report will be a separate document to the Compilation Report.

### **Long-term study plan update**

The last Biological Subcommittee minutes outlined where DFG is in the study plan development. The four year study plan is a strategic approach that will be used to augment and replace the individual annual study plan provided in the MOU. The plan will be reviewed/revised each year to insure completion of each component.

### **Next Meeting**

The next meeting of the Santa Ynez River Technical Advisory Committee will be held on November 8, 1995 at the Goleta Sanitary District meeting room at 0930.

To: Santa Ynez River Technical Advisory Committee  
From: Scott Engblom, Project Biologist  
Re: Update on September fishery monitoring activities and Fish Account Usage

For the month of September field activities have included:

- Completed monthly snorkel surveys of 36 habitat units in the Santa Ynez River
- Completed monthly diurnal water quality measurements at six locations between Bradbury Dam and the lagoon
- Completed water quality profiles in both Lake Cachuma and the Spill Basin
- Completed monthly water quality measurements in the lagoon

Water flow conditions are contiguous between the spill basin and HWY 154 bridge. Water flow becomes non-contiguous in several locations starting a mile below HWY 154 bridge and extending beyond Buellton. Water flow again becomes contiguous approximately ten miles above Lompoc to the lagoon.

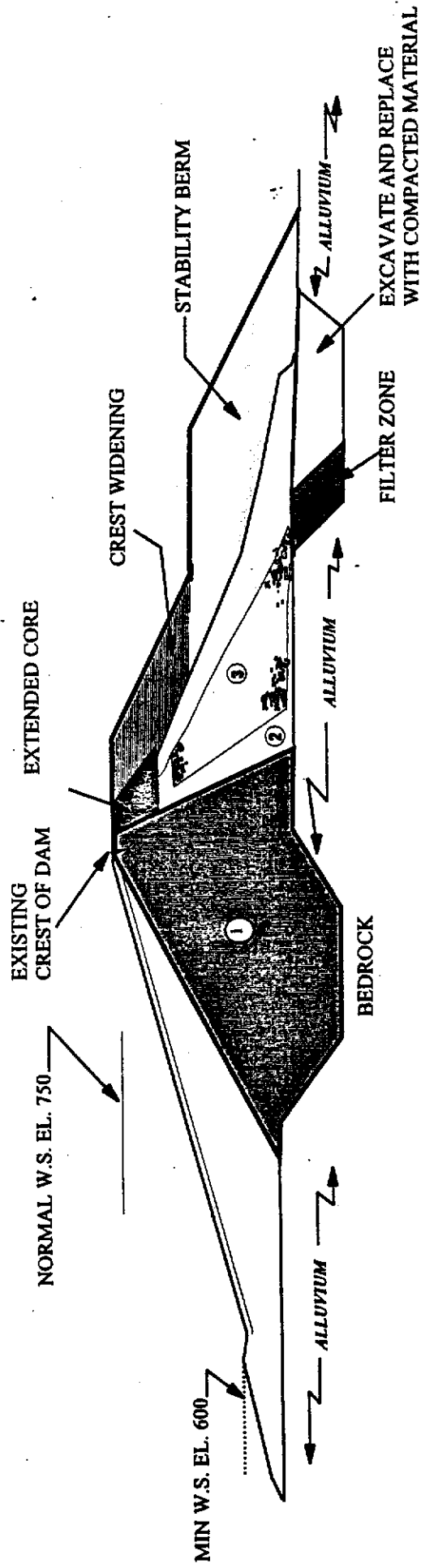
All warm water species observed during snorkel surveys appear to be thriving in the majority of the habitat units surveyed. There has been an approximate 50% reduction in observed steelhead/rainbow trout in three of the four Reaches between the July and September snorkel surveys.

Fish Reserve Account usage continued for the month of September as recommended by the Biological Subcommittee at a rate of 5 cubic feet per second or 10 acre feet per day (af). Total Fish Account usage for the month of September was 302.0 af. Total Account usage to date was 765 af of water which accounts for 38% usage for the months of July, August, and September. Total amount of water remaining in the account was 1235 af (62%).

If you have any questions or comments please call me at (805)-564-5544 or fax me at (805)-564-5467.



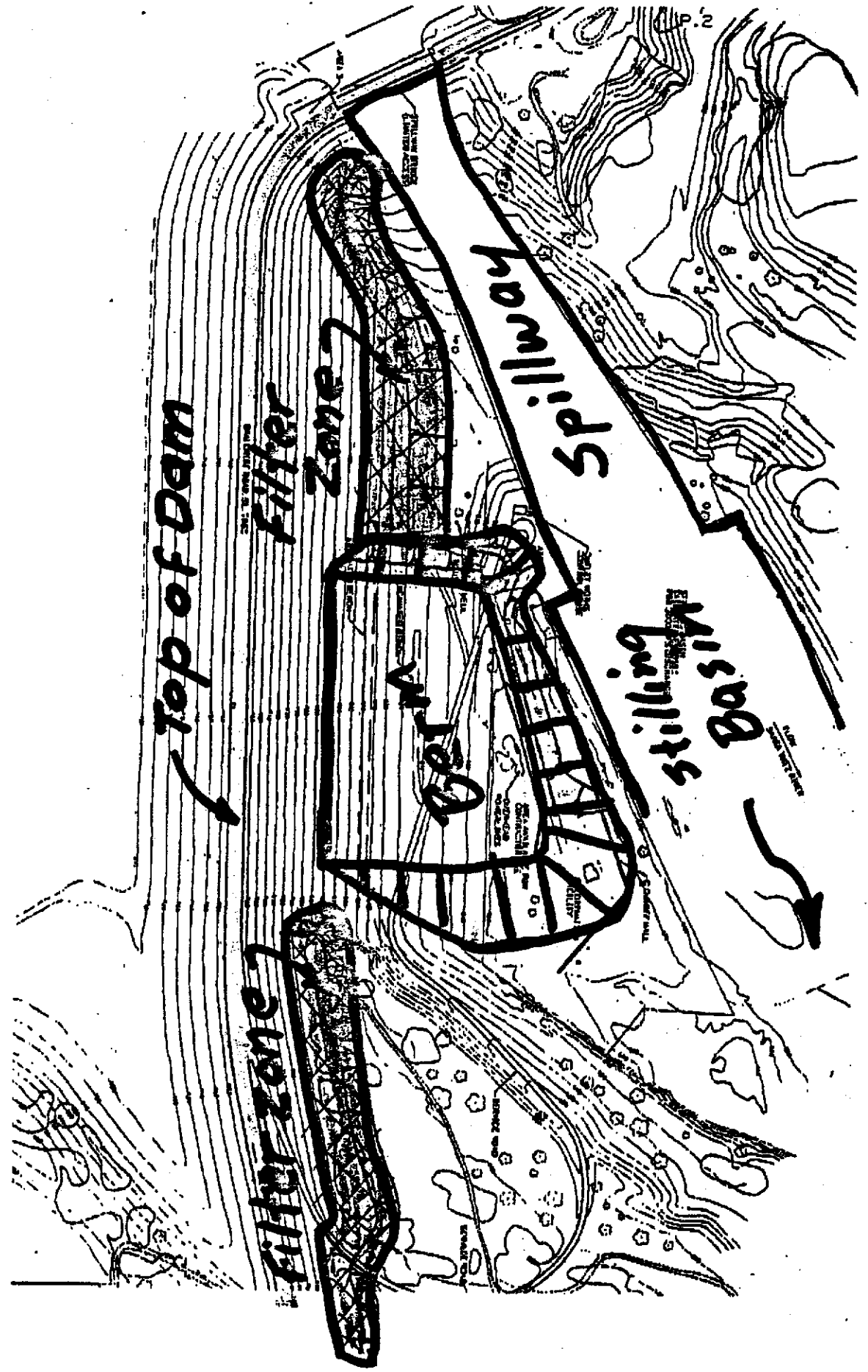
# GEOTECHNICAL MODIFICATION PREFERRED ALTERNATIVE



CROSS SECTION THROUGH CENTER OF DAM

FIGURE 6

# LAKE CACHUMA



To: Santa Ynez River Technical Advisory Committee

From: Scott Engblom, Project Biologist

Re: Minutes from the November 7, 1995 meeting of the TAC

The meeting of the Santa Ynez River Technical Advisory Committee was held on November 7, 1995 at 0930 at the Goleta Sanitary District across from the Santa Barbara Airport. An agenda for this meeting and a list of attendees is provided.

**Action Items from last meeting**

Scott Engblom, Project Biologist, provided Ali Shahroody, Stetson Engineering, 1995 Hilton Creek flow and staff data.

**Action Items from this meeting**

- (1) Scott Engblom will send Hilton Creek trap catch data to Craig Fusaro.
- (2) Paul Forsberg will schedule the next Biological Subcommittee meeting.
- (3) Rob Almy will obtain USGS gauge location information.
- (4) Tom Keegan will distribute "long version" of siphon white paper to all TAC members.
- (5) Carl Dealy will write a letter to Steve Mack approving "Phase 1" of property boundary survey. Carl D. will start USBR procurement process for "Phase 2".

**River update flow/conditions**

Total Fish Account usage as of November 6, 1995 was 1124 acre feet (af). There is 876 af remaining in the Fish Account. The remaining amount of Fish Account water will last for approximately 86 days at the current five cubic feet per second release.

With the onset of Fall and the decrease in agricultural pumping there has been an increase in the amount of water flowing in the Santa Ynez River. This flow increase has been observed within the last few weeks. Several locations within the river that were dry during last months survey now have flow through them. The increased flow and the onset of winter have also contributed to the sloughing off of most of the algae in our survey sites. This has resulted in a 4.8 mg/l increase in dissolved oxygen during the morning hours at some of our study sites.

The lagoon mouth closed sometime around the beginning of

November. Since closing, the lagoon water level has increased approximately three feet.

Trap construction and deployment on the tributaries and main stem will begin late November or early December. Deployment will not begin until the streams begin to flow.

#### **Hilton Creek siphon update**

Tom Keegan was sick and could not make the meeting. He did fax a short version of the siphon white paper to the TAC meeting for review. Paul Forsberg will call Tom K. and ask him to distribute the long version of the siphon feasibility to TAC members for comment. The Biological Subcommittee will discuss the white paper at their November 28 meeting

#### **Property boundary update**

The estimated cost to survey the entire property boundary around the Hilton Creek area will be approximately \$5,000. Initial survey costs will be approximately \$1,000, provided the old monuments are still in place. Funding for the initial survey will come from the Project Budget. The Bureau of Reclamation will begin its payment procurement process in case the larger survey is necessary.

#### **Bradbury Dam seismic safety update**

Four new production well are being added to the well field. The first well will be connected on November 7. Two of the four new wells should be operating within the next two weeks. This will bring the total number of wells to sixteen. The output from the sixteen wells will be manifolded to a larger pipe that will discharge the water in a percolation field below the spill basin. None of the discharge is expected to contribute to surface flow in the river.

#### **Fish passage study update**

Scott Engblom and Ed Ballard spent three days in Sacramento working with the data that was collected during May through July fish passage study. They were not able to run the model due to some unforeseen problems with the program. Another trip to Sacramento will be scheduled within a month to complete the running of the model, and to receive habitat mapping training.

#### **Long term study plan update**

On October 21, 1995 DFG faxed the latest version of the long term study plan to TAC members for comment. This is the fourth revision to the study plan. A "TAC approved" version of the study plan will be distributed to the Consensus Committee by

**SANTA YNEZ RIVER TECHNICAL ADVISORY COMMITTEE MEETING****NOVEMBER 8, 1995****LONG TERM STUDY PLAN UPDATE**

On October 21, 1995, the Department of Fish and Game distributed, via fax, a long term study plan titled *Proposed Investigations to Determine Fish Habitat Management Alternatives for the Lower Santa Ynez River, Santa Barbara County* to Technical Advisory Committee members (see attached TAC contact list). The plan was prepared by the TAC Biology Subcommittee. Comments were requested by November 3, 1995, and were received from the following interested parties:

Party	Date	Regarding
Hanson Environmental	November 1	Introduction
Urban Creeks Council	November 1	Intro/Study Plan
USFWS	November 2	Study Plan
NMFS	November 3	Study Plan
Project Biologist	November 3	Intro/Study Plan
DFG Region 5	November 3	Study Plan
Robert Pike	November 3 and 7	Intro/Study Plan*

\* These comments will be addressed after TAC approved version of the plan is distributed to the Consensus Committee on November 27, 1995.

Any party wishing to discuss their comments may do so during today's meeting. DFG will then incorporate any agreed upon changes into a revised TAC-approved version for distribution to the Consensus Committee on November 27, 1995. DFG will consult with those parties who submitted comments but were unable to attend today's TAC meeting prior to making any revisions.

NOV. 8, 1990 TAC SIGN-UP SHEET

SCOTT ENFELDOM

Ed Ballard

Rob Titus

Ali Shahroody

Paul Forsberg

Carl Dealy

Craig Fuscato

Steve Mack

Robert Almy

Maureen Spencer

BRIAN KRAUTWEIN

MARTY Golden

CHARLES HAMILTON

Chuck Evans

THOMAS M. PETERSEN

HOSSEIN NAZAMI

Russell Ruiz

Chip Willbroad

PROJECT BIOLOGIST

USFWS

DFG

SYRWCD

DFG Sacto

USBR

Public

City of Santa Barbara

S.B. Co. Water Agency

SB Co. Flood Control

UCC

National Marine Fisheries Service

CARPINTERIA W.D.

Montecito W.D.

S.Y.R.W.C.D. I.D.#1

City of Lompoc

Goleta W.D.

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