

CALIFORNIA COASTAL COMMISSION

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ENERGY AND OCEAN RESOURCES UNIT  
Staff: SMH, JLL & SONGS Mitigation  
Program Scientific Team—SF  
Staff Report: October 17, 1997  
Hearing Date: November 5, 1997  
Item Number: 5.a  
Commission Action/Vote:

## 1998 and 1999 Two-Year Work Program and Budget for SONGS Program

### I. STAFF RECOMMENDATION

The staff recommends that the Commission approve a two-year work program and budget for calendar years 1998 and 1999 for a total amount of \$1,039,072 for both years in support of the Commission's monitoring and technical oversight of the San Onofre Nuclear Generating Station (SONGS) Units 2 and 3 marine resource mitigation projects required in Conditions A through C of permit 6-81-330A (formerly 183-73). The Commission's monitoring and oversight program is to be funded by the permittee, Southern California Edison and the other SONGS owners, in accordance with the provisions of Condition D of the permit.

The recommended budget for 1998 and 1999 includes currently anticipated costs for the monitoring and oversight program up to the commencement of independent monitoring of the wetland restoration and kelp reef mitigation projects. Additional funds for the monitoring will be requested after the monitoring plans have been approved.

The recommended budget does *not* contain funds for the costs of permanent staff that spend a portion of their time on this program, direct operating expenses incurred in support of the Commission's permanent staff (such as travel), or indirect operating expenses associated with the program — these costs are continued to be absorbed by the Commission. Should the Commission's State budget be reduced during the two-year period, the staff may request Commission approval for additional funding to cover some of these expenses.

Condition D establishes the administrative structure to fund the independent monitoring and technical oversight of the mitigation projects called for in Conditions A through C. Specifically, Condition D: (1) enables the Commission to retain scientists and technical

staff to assist the Commission in carrying out its oversight and monitoring functions; (2) provides for a scientific advisory panel to advise the Commission on the design, implementation, monitoring, and remediation of the mitigation projects; (3) assigns financial responsibility for the Commission's oversight and monitoring functions to the permittee and sets forth associated administrative guidelines; and (4) provides for periodic public workshops on the performance of the mitigation projects.

Pursuant to this condition, the Commission has operated under approved work programs and budgets since 1993 (see Exhibit 3 for summary of expenditures). The Commission retains a science advisory panel and a small technical oversight team (two scientist positions and administrative support, for a total of three person years, or PYs) under contract to provide the necessary scientific expertise to the Commission. In addition, independent consultants and contractors are called upon when specific expertise, such as hydrology and engineering, is needed for specific tasks.

In the permit amendments approved by the Commission on April 9, 1997, the Commission made no changes to Condition D. In reaffirming the requirements of Condition D, the Commission found that there is continuing importance for the required independent monitoring and Commission technical oversight to ensure full mitigation under this permit.

## **II. MOTION AND RESOLUTION**

Commission approval of the 1998 and 1999 two-year Work Program and Budget requires the following motion:

I hereby move that the Commission approve the 1998 and 1999 two-year SONGS Work Program and Budget of \$1,039,072 as recommended by the staff.

The staff recommends a **"yes"** vote on the foregoing motion, which will result in the adoption by the Commission of the following resolution:

The Commission hereby determines that the 1998 and 1999 two-year Work Program and Budget that is set forth in this staff recommendation, dated October 17, 1997, carries out the intent of Condition D of Permit 6-81-330A (formerly 183-73) by requiring the permittee to provide reasonable and necessary funding for the Commission staff's oversight and monitoring responsibilities pursuant to the mitigation and lost resource compensation conditions (A through C).

### **III. 1998 AND 1999 TWO-YEAR WORK PROGRAM AND BUDGET SONGS MITIGATION MONITORING PROGRAM**

#### **A. STATUS OF MITIGATION PROGRAM**

##### **1. Status of Wetlands Restoration**

The permittee is required to create or substantially restore a minimum of 150 acres of wetlands to mitigate for impacts to fishes caused by the operation of SONGS. In 1992 the Commission accepted the permittee's choice of San Dieguito River as the site for wetland mitigation. In 1996, after conducting preliminary planning and hydrological studies, the permittee concluded that a project large enough to fulfill the 150 acre permit requirement could not be done at San Dieguito Lagoon alone and proposed a second site to make up the additional acreage. The Joint Powers Authority (JPA), owners of most of the property to be restored at San Dieguito, and the Coastal Conservancy subsequently retained consultants Moffatt & Nichol who developed a wetland restoration plan at San Dieguito that appeared large enough to satisfy most if not all of Condition A of the SONGS permit. On April 9, 1997, the Commission reaffirmed its 1992 selection of the San Dieguito River Valley as the site for the wetland restoration project and established October 9, 1997 as the new deadline for submission of a preliminary wetland mitigation plan.

At present, the permittee is developing a preliminary plan for the restoration of San Dieguito Lagoon. The permittee is working with the San Dieguito Wetland Restoration Project Team, which is composed of the JPA, local landowners, the resource agencies and private individuals who have been interested in the restoration of San Dieguito Lagoon. On September 30, 1997, the Commission staff received the permittee's proposed Preliminary Wetland Mitigation Plan. Staff will review the plan and schedule a public hearing before the Commission.

##### **2. Status of Reef Project**

In 1991 the Commission adopted Condition C of the SONGS permit, which required the permittee to construct a 300 acre artificial reef as compensation for a 200 acre loss of the San Onofre kelp forest community caused by the operation of SONGS. The permittee continued to collect data on the size of the San Onofre kelp bed and in 1995 applied for an amendment to its permit that called for a reduction in the size of its artificial reef requirement to 16 acres. In its amendment application the permittee claimed that the new data on kelp indicated that the operation of SONGS had little or no effect on the San Onofre kelp forest community.

After extensive review of the new information on kelp the Commission determined that SONGS impacts on the San Onofre kelp bed were smaller than initially determined, but

nonetheless were still substantial and significant. Therefore, on April 9, 1997, the Commission decided based on scientific evidence to reduce the permittee's kelp forest mitigation requirement to: (1) an artificial reef that will produce 150 acres of medium to high density kelp (defined as  $> 4$  plants per  $100 \text{ m}^2$ ) and associated kelp forest biota; and (2) a payment of \$3.6 million to OREHP (Ocean Resource Enhancement and Hatchery Program) to fund a mariculture/marine fish hatchery (see Section A.4 below).

The artificial reef will consist of two parts: an experimental reef of 17 acres and a "build-out" reef of sufficient size to ensure establishment of 150 acres of medium to high density kelp. The purpose of the experimental reef is to determine what combination of substrate type (quarry rock or concrete) and substrate cover (67%, 34%, or 17%) will best achieve the performance standards specified in the permit. The plans for the build-out reef will be contingent on the results of the experimental reef.

In accordance with specifications of the permit, the permittee submitted a preliminary plan for the experimental reef to the Executive Director. The plan was approved by the Executive Director on June 26, 1997 and submitted, on June 27, 1997, to the relevant state (State Lands Commission, Coastal Conservancy and California Department of Fish and Game) and federal (Army Corps of Engineers) agencies for review and any additional permitting. The permittee also met its June 30, 1997 deadline for submitting a coastal development permit application for the experimental reef project. Commission staff completed its initial review in July, determining that the application was incomplete and could not be filed. Staff requested evidence that the State Lands Commission has granted a lease for the construction of the proposed artificial reef, evidence that the proposed project is consistent with the requirements of the Orange County Air Pollution Control District, and information regarding mitigation to address potential adverse impacts to fishing activities. The State Lands Commission is the lead CEQA agency for the experimental reef and has begun its CEQA assessment.

### **3. Status of Behavioral Barriers**

The permittee is required to "install and maintain behavioral barriers including but not limited to mercury lights and sonic devices at SONGS Units 2 and 3 to reduce midwater fish impingement losses."

In 1994 the staff concurred with the permittee's plan to use small scale experiments to assess the potential efficacy of various behavioral devices prior to installation of the devices at SONGS. In 1995 the permittee retained consultants to conduct experiments on light and sound devices to reduce fish losses. The permittee considered the light experiments to be the more promising and had further experimental testing of lights conducted in 1996 and 1997. The permittee is developing an Installation Plan for lights which is expected to be submitted to the Commission shortly.

#### **4. Status of Hatchery Program**

The permittee has provided funds to the marine fish hatchery program operated by the State of California through the Ocean Resources Enhancement and Hatchery Program (OREHP), which is administered by the Department of Fish and Game (DFG). A ten member panel, the Ocean Resources Enhancement Advisory Panel (OREAP), assists DFG in establishing policy for the program. Although the permittee has partially funded the hatchery program, the permittee does not take part in the hatchery program. Instead the program is overseen by DFG and OREAP. Most of the conditions described in the permit therefore have to be met by DFG and OREAP rather than the permittee.

In 1992 the Commission required the permittee to contribute \$1.2 million towards the construction of an experimental marine fish hatchery and an evaluation program to determine whether the hatchery is effective at increasing the stock of fish. The permittee paid the initial sum, the main hatchery building has been constructed, and the evaluation program has begun.

In 1997 the Commission revised Condition C such that the permittee is required to pay an additional \$3.6 million to OREHP to help fund its mariculture/marine fish hatchery program. In the past, the hatchery oversight was conducted by permanent Commission staff. However, because the hatchery condition is now closely tied to the SONGS kelp mitigation requirement, the oversight will be conducted by both permanent staff and scientific staff hired specifically for the SONGS mitigation project. Consequently, the hatchery project will be described in this, and future, work programs.

The permittee has met the initial step for this condition by establishing an interest-bearing account in the amount of \$3.6 million. A Memorandum of Agreement (MOA) for expenditure of the funds was sent to DFG and OREAP for review in early July and the Commission authorized the execution of the MOA at its September 1997 meeting. On October 2, 1997, the Commission staff transmitted the MOA to DFG and OREAP for signature. Following execution of the MOA by all parties, the Executive Director will direct the permittee to transfer the \$3.6 million, plus accrued interest, to DFG. Upon completion of the transfer of funds, the remainder of the permittee's obligation for this part of the condition will be fulfilled.

#### **B. WORK PROGRAM FOR TECHNICAL OVERSIGHT & MONITORING (1998 AND 1999)**

Condition D requires the permittee to fund scientific and support staff retained by the Commission to oversee the site assessments, project design and implementation, and monitoring activities for the mitigation projects. Scientific expertise is provided to the Commission by a science advisory panel and a small technical oversight team. Current

science advisory panel members include Richard Ambrose, Ph.D., Associate Professor, UCLA, William Murdoch, Ph.D., Professor, UC Santa Barbara, and Peter Raimondi, Ph.D., Assistant Professor, UC Santa Cruz. The technical oversight team members include John Boland, Ph.D., wetlands ecologist, Daniel Reed, Ph.D. (half-time), kelp forest ecologist, and Stephen Schroeter, Ph.D. (half-time), invertebrate ecologist. A half-time administrator and half-time clerical assistant complete the program staff.

In addition to the science advisors, the program staff is assisted by independent consultants and contractors when specific expertise, such as hydrology and engineering, is needed for specific tasks. These consultants are retained only as they are needed. The Commission's permanent staff also spend a portion of their time on this program, but their costs are paid by the Commission and are not included in the SONGS budget.

The following tasks are anticipated for the mitigation projects in 1998 and 1999. Some tasks are expected to be completed before the end of 1997, depending upon the timing of the permittee's submittals and the review process. They are included here for completeness. Exhibit 1 provides a timeline for the work program tasks.

## **1. Wetlands**

### **1.1 Wetland Restoration Planning**

- a. Review the Preliminary Plan. Determine whether the plan meets the permit requirements. Of particular concern is whether: (1) the proposed dredging will produce the desired tidal flows; (2) the anticipated tidal flows are adequate to support the proposed biological habitats; and (3) the proposed project has the potential for degradation of existing wetlands. The staff will need to consult with experts in the fields of hydrology, engineering, and GIS data base management to adequately address these concerns and assist the staff in its evaluation of the Preliminary Plan and associated hydrological reports.
- b. Prepare staff report on the Preliminary Plan with Commission's permanent staff. Present findings and recommendations to the Commission.
- c. Consult with the permittee on preparation of the Final Plan and the CEQA/NEPA documents. Attend frequent meetings to (1) ensure that preparation of the Final Plan is on track, and (2) provide guidance when necessary.
- d. Review the Final Plan. Determine whether the plan meets the permit requirements and evaluate the potential for degradation of existing wetlands and other sensitive habitats. Consult with hydrologists, GIS experts and resource agencies, as needed, on the Final Plan.

- e. Prepare staff report on the Final Plan with Commission's permanent staff. Present findings and recommendations to the Commission.
- f. Assist with staff review of the coastal development permit application for the restoration.
- g. Consult with the permittee on the restoration. Attend frequent meetings to ensure that restoration proceeds according to the Final Plan and in a timely manner.

## **1.2 Develop a Monitoring and Management Plan**

The permit requires the staff to prepare a Monitoring and Management Plan in consultation with the permittee and appropriate wildlife agencies concurrently with the permittee's preparation of the restoration plan. The Monitoring and Management Plan will be developed to address CEQA/NEPA requirements as well as the requirements of the coastal permit.

- a. Select reference sites for post-construction monitoring. The permit requires that the staff evaluate the restored wetland relative to approximately four reference wetlands. The staff will select relatively undisturbed, natural tidal wetlands within the Southern California Bight that would be appropriate reference sites for the constructed wetlands. The staff will consult with the permittee and experts in wetland ecology during this selection process.
- b. Select method to be used for determining the wetland mitigation project's compliance with the performance standards. The permit requires the staff to select the standard of comparison for assessing wetland success. The staff will continue to review the literature, evaluate existing data, and consult with experts in wetland ecology and statistics, as needed, to develop the criteria for assessing similarity between the restored wetland and reference wetlands.
- c. Review existing biological and physical data for San Dieguito and reference wetlands to obtain insight for developing appropriate sampling designs for post-construction monitoring. Preliminary examination of the data collected by the permittee at San Dieguito Lagoon suggests that these data are potentially flawed due to an inability to distinguish between spatial and temporal patterns of variability. Staff will consult with experts on ways to resolve this problem (which will include collecting additional data) so that they can develop a robust sampling design.
- d. Select sampling methodology for post-construction monitoring. Decide on best sampling methods (e.g., beach seines vs. beam trawls), and sampling designs (frequency of sampling in time, and the position of samples in space).

- e. Select sampling sites within San Dieguito Lagoon and the reference wetland habitats for post-construction monitoring.
- f. Consult with permittee, resource agencies and wetland ecology experts on wetland management issues. These issues include dredging for inlet maintenance, dredging for restoration-site maintenance, rebuilding revetment that collapses during flooding, re-vegetating bare areas and removing trash.
- g. Prepare the Monitoring and Management Plan. The plan will contain details of the sampling design (methods, spatial and temporal sampling regimes, reference sites, etc.) and directions for future management of the restoration site.

### **1.3 Conduct Monitoring**

The permit requires the staff to conduct and oversee all monitoring associated with evaluating the success of the wetland mitigation project.

- a. Conduct pre-construction monitoring. This monitoring will provide information needed to develop the most appropriate post-construction sampling design. The staff and independent contractors chosen by the Executive Director will collect data at San Dieguito Lagoon and appropriate reference site(s), as needed. The staff will continue to collect data on water quality at San Dieguito Lagoon as part of this monitoring.
- b. Conduct construction monitoring. Monitoring will be conducted during construction to determine whether: (1) the work is conducted according to plans, and (2) construction causes adverse impacts to sensitive habitats.

## **2. Reef**

### **2.1 Experimental Reef Design and Final Plan**

The objective of the experimental reef is to determine which combinations of substrate type and substrate cover will best meet the performance standards for giant kelp and the associated kelp forest biota (algae, fish, and invertebrates).

- a. Consult with permittee and other agencies to provide guidance during the preparation of the Final Plan for the experimental reef. Attend frequent meetings during this process.
- b. Review the Final Plan for the experimental reef to insure that it meets the permit requirements. Such evaluation may require the services of individuals with expertise in shore processes, hydrology, and engineering. In addition, important parts of the reef plan are contained in GIS databases. The staff will need to consult with experts in hydrology, engineering and GIS data base management to



adequately address these concerns and to assist the staff in evaluating the engineering characteristics of the plan that may affect the performance standards of the permit.

- c. Prepare staff report on the Final Plan. Present findings and recommendations to the Commission.
- d. Assist with staff review of the coastal development permit application for the experimental reef.

## **2.2 Experimental Reef Monitoring**

The permit requires that the Commission scientific staff analyze and interpret the results of the artificial reef experiment, and provide the Executive Director with recommendations for the design of the larger "build out" reef. The staff will conduct the following activities to accomplish this task.

- a. Develop monitoring plan for experimental reef. The monitoring plan for the experimental reef will be designed to determine which combinations of substrate type and substrate cover will best achieve the performance standards for giant kelp and associated kelp forest biota. The monitoring plan will comprise three main areas: (1) sampling design for monitoring physical variables (e.g., sand scour, reef subsidence); (2) sampling design for monitoring biological variables (e.g., abundance, population structure and diversity of algae, fish, and invertebrates); and (3) specification of the statistical analyses used to assess performance of the physical and biological variables of interest.
- b. Assemble team of scientists to conduct post-construction monitoring.
- c. Oversee post-construction monitoring, assimilate information, and analyze the monitoring data to evaluate the results of the experimental reef.

## **3. Behavioral Barriers**

### **3.1 Behavioral Barriers Planning**

- a. Review the Installation Plan for Executive Director's approval. Determine whether the plan meets the permit requirements and evaluate the potential for success of the devices inside SONGS.
- b. Consult with permittee on the Installation Plan. Discuss features of the plan with the permittee.

### **3.2 Effectiveness of Behavioral Barriers**

- a. Review the permittee's report on the results of the installation of the behavioral barrier devices at SONGS. In particular, determine the effectiveness of the installed devices.
- b. Prepare staff report on effectiveness of behavioral devices. Advise the Executive Director on the effectiveness of the installed devices and provide recommendations on the next steps.

## **4. Hatchery**

Up to this point, the hatchery oversight has been conducted by permanent Commission staff. However, because the hatchery condition is now closely tied to the SONGS kelp mitigation requirement, the oversight will be conducted by both permanent staff and scientific staff hired specifically for the SONGS mitigation project. The majority of the work will be done by permanent Commission staff with a very minor amount of time and advice being supplied by the scientists funded through this work program. These tasks add no costs to the overall budget.

### **4.1 Oversight of the hatchery program**

- a. Participate on Joint Panel. A staff member will be a member of the Joint Panel that oversees the evaluation of the hatchery program and the genetic quality assurance program. The panel's tasks include development of Requests for Proposals, recommendation of contractor selections to the Director of DFG, development of contract terms, and oversight and evaluation of contractor performance in carrying out the evaluation and genetic quality assurance programs.
- b. Review reports on environmental degradation. Contractors hired by DFG will monitor the hatchery fish to ensure that they are not causing environmental degradation. Each year the contractors will provide written and verbal reports to the Commission for review. If the Executive Director determines that the hatchery is causing significant degradation of the environment, he/she may order that the hatchery operations be halted.
- c. Review reports on evaluation of success. A contractor hired by DFG will evaluate the success of the hatchery program by: (1) estimating the contribution of hatchery fish to the catch; and (2) estimating the mortality rate of hatchery fish. Each year the contractor will provide written and verbal reports to the Commission for review.

# EXHIBIT 1

## Idealized Timeline for 1998 and 1999, by Quarters

(THE END OF 1997 HAS BEEN INCLUDED FOR COMPLETENESS)

◆ = Events ● = Staff tasks	1997	1998				1999			
	O/N/D	J/F/M	A/M/J	J/A/S	O/N/D	J/F/M	A/M/J	J/A/S	O/N/D
<b>1. WETLANDS</b>									
<b>1.1 Wetland Restoration Planning</b>									
SCE submits Preliminary Plan to CCC .....	◆								
Review Preliminary Plan .....	●								
Coordinate peer-review of SCE's hydrology reports .....	●								
Write staff report on Preliminary Plan .....	●								
Consult with SCE on preparation of Final Plan .....		●				●			
SCE submits Final Plan to the CCC .....						◆			
Review Final Plan .....						●			
Write staff report on Final Plan .....						●			
Assist staff review of construction permit .....							●	●	
Consult with SCE on restoration .....							●		●
Construction begins .....									●
<b>1.2 Monitoring and Management Plan</b>									
Select reference sites .....		●			●				
Select method for assessing wetland success .....		●			●				
Review sampling designs .....		●			●				
Select sampling methodology .....		●			●				
Select sampling sites .....		●			●				
Consult on management issues .....					●				
Write Monitoring and Management Plan .....						●			
<b>1.3 Monitoring</b>									
Conduct pre-construction sampling (as necessary) .....		●						●	
Conduct construction monitoring .....									●

# EXHIBIT 1

## Idealized Timeline for 1998 and 1999, by Quarters

(THE END OF 1997 HAS BEEN INCLUDED FOR COMPLETENESS)

◆ = Events ● = Staff tasks	1997	1998				1999			
	O/N/D	J/F/M	A/M/J	J/A/S	O/N/D	J/F/M	A/M/J	J/A/S	O/N/D
<b>2. REEF</b>									
<b>2.1 Experimental Reef Planning</b>									
SCE submits Final Plan for review.....	◆								
Review Final Plan.....	●								
Write staff report on Final Plan.....	●								
Assist staff review of permit.....		●	●						
Construction begins.....				◆	◆				
<b>2.2 Experimental Reef Monitoring</b>									
Develop monitoring plan.....	●								
Develop management plan.....		●							
Select monitoring team.....			●						
Assist with final pre-installation survey.....				●					
Assist with first post-installation survey.....					●				
Conduct post-construction monitoring.....						●			●
<b>3. BEHAVIORAL BARRIERS</b>									
SCE submits Installation Plan to CCC.....	◆								
Review Installation Plan.....	●								
Consult with SCE on Installation Plan.....		●							
SCE installs devices in SONGS.....		◆							
SCE tests effectiveness of devices in SONGS.....		◆		◆					
SCE submits Results of Installation of Devices.....				◆					
<b>4. HATCHERY</b>									
Joint Panel meetings.....	●								●
Review report on Environmental Degradation.....	●				●				●
Review report on Evaluation of Success.....	●				●				●

### C. Budget

The funding currently estimated to cover the monitoring and oversight program costs for the scientists, science advisory panel, consultants, administrative support, and operating expense during the two-year budget (calendar years 1998 and 1999) is \$1,039,072 (Exhibit 2). Notes explaining each line item are included in Exhibit 2 at the end of the budget table.

Costs for hiring scientists to monitor the experimental reef during 1998 and 1999 and to start construction monitoring of the wetland in late 1999 are *not* included in the budget. These costs will be requested after the monitoring plans have been approved. Supplemental funding for unanticipated costs may also be requested at a later date.

Costs associated with the implementation of the SONGS permit and attributable to permanent Coastal Commission staff work and logistical support (time and expense) as well as indirect operating expenses associated with the monitoring and oversight program are not paid by the permittee and thus are *not* included in this budget. These costs will continue to be absorbed by the Coastal Commission. However, if the Commission's State budget is reduced, the staff may request additional funding to support some of these costs of the program.

As in previous years, the permittee will provide funds periodically throughout the budget period as requested by staff so as to minimize the advance outlay of cash, and any funds unspent at the end of the budget period (i.e., 1998 and 1999) will be returned to the permittee. Exhibit 3 shows the cumulative expenditures of the Commission's monitoring and oversight program from its start-up in 1991 through projected expenditures for 1997.

**EXHIBIT 2**  
**1998 AND 1999 SONGS PROGRAM BUDGET**

	1998	1999
<b>Salaries and Benefits (3 PY) <sup>1</sup></b>		
Salaries	\$ 180,249	\$ 191,190
Benefits	51,747	55,250
<b>Total Salaries and Benefits</b>	<b>\$ 231,996</b>	<b>\$ 246,440</b>
<b>Scientific Advisory Panel <sup>2</sup></b>	<b>\$ 111,260</b>	<b>\$ 112,818</b>
<b>Consultants and Contractors <sup>3</sup></b>		
Task 1: Wetlands		
Evaluate final restoration plan (task 1.1)		25,000
Review monitoring plan and reference site selection (task 1.2)	15,000	
Conduct pre-construction sampling (task 1.3)	25,000	25,000
Continue water quality sampling (task 1.3)	2,000	2,000
Task 2: Reef		
Evaluate final plan for experimental reef (task 2.1)	15,000	
Review monitoring plan (task 2.2)	15,000	
Task 3: Behavioral Barriers (no consultants identified at present)		
Task 4: Hatchery (no consultants identified at present)		
<b>Total Consultants and Contractors</b>	<b>\$ 72,000</b>	<b>\$ 52,000</b>
<b>Operations</b>		
Travel <sup>4</sup>	25,000	25,000
Operating Expense and Equipment		
General expense, printing & communications <sup>5</sup>	17,200	17,200
Contract overhead <sup>6</sup>	11,742	12,164
Office/storage space rental <sup>7</sup>	2,376	2,376
Computer repair/maintenance/technical support <sup>8</sup>	5,000	5,000
Review workshop <sup>9</sup>		2,500
Audit <sup>10</sup>		8,000
Equipment <sup>11</sup>	14,000	5,000
Administrative Services <sup>12</sup>	30,000	30,000
<b>Total Operations</b>	<b>\$ 105,318</b>	<b>\$ 107,240</b>
<b>TOTAL EXPENSE</b>	<b>\$ 520,574</b>	<b>\$ 518,498</b>
(DOES NOT INCLUDE CONSTRUCTION AND POST-CONSTRUCTION MONITORING FIELD WORK)		

**BUDGET NOTES:**

1. Includes salaries, wages, benefits and employer-paid payroll taxes for program staff only. The costs for the Commission's permanent staff that spend a portion of their time on this program are not included here and are paid by the Commission.

2. The SAP is a panel of experts established by the Commission pursuant to the permit conditions to provide scientific and technical advice to the staff. Expenses cover members' time and travel and are limited by the permit to \$100,000 per year adjusted annually in accordance with the consumer price index (CPI) applicable to California. The 1998 budget reflects these increases in the CPI through July 1997 and the 1999 budget estimates a similar increase. Additional adjustments may be required for the 1999 budget year.
3. Includes estimated costs for independent consultants, contractors, and reviewers to provide technical and expert advice on individual tasks of the work program to assist the staff in completing the tasks. The need for additional consultants may be identified during the two year budget. Additional funds will be requested for the monitoring after the monitoring plans have been approved.
4. Covers travel for meetings with the permittee, Commission staff, consultants and contractors, attendance at agency and public workshops and meetings, site visits, and attendance at conferences related to wetland restoration, kelp bed restoration, and management issues. Travel costs are based on necessary travel for program staff only. Travel costs for permanent Commission staff are not included.
5. Based on Commission's operating expense line items for general expense, printing, communications, and postage, calculated at \$4,500/PY for 2 PY, plus operating expense under the UCSB contract.
6. Overhead charges for the UCSB and Ecometrics contracts (under which the Commission has hired key personnel) include: office space and utilities, e-mail and access to other electronic networks, library services, laboratory facilities and equipment, personnel administration (including payroll and benefits administration), informal access to University faculty, and other indirect support for the program, at the nominal state rate of 10% of direct costs.
7. To offset use of office space for the program at the Commission's San Diego offices, it is necessary to rent a small storage space for Commission files and materials. This space currently is rented month-to-month at \$198/month. No provision is made at this time for any rent increases in 1998 or 1999, or for alternative office space should that become necessary.
8. Covers costs for maintaining the computers used by program staff, including regular maintenance, repairs, and technical support needed for troubleshooting problems.
9. Covers costs for conducting an annual review workshop, excluding costs for consultants who may be requested to attend the workshop. The intent of the review workshop is to determine whether performance standards have been met, whether revisions to the standards are necessary, and whether remedial measures are required. It is premature to apply these issues to the mitigation projects while they are still in the planning stages; however, at least one status review of the mitigation projects will be conducted for the Commission and the public during the two year budget.
10. Covers costs of an independent audit of the contract reimbursements and service fees for the SONGS monitoring program. Independent audits have been performed annually since 1994; no deficiencies have been discovered. The audit will now be conducted every second or third year.
11. Covers cost of personal use equipment and needed office furnishings for program staff. Program staff are working in several locations where they are provided use of normal office equipment. Costs for upgrading existing computers to enable the scientists greater ability to use and analyze scientific data are included. If supplemental office equipment is needed during the two year budget, additional funds will be requested.
12. Covers the cost of administrative and financial services provided by Simpson & Simpson Business & Personnel Services.

**EXHIBIT 3: Cumulative Coastal Commission Expenditures-SONGS Monitoring and Oversight Program**

	<b>1991-92</b> <i>(start-up)</i>	<b>1992-93</b> <i>(interim)</i>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b> <i>(projected)</i>	<b>Total</b> <i>(projected)</i>
<b>BUDGET</b>	<b>\$ 57,654</b>	<b>\$ 610,646</b>	<b>\$ 1,173,105</b>	<b>\$ 849,084</b>	<b>\$ 440,139</b>	<b>\$ 423,035</b>	<b>\$ 3,553,663</b>
<b>EXPENDITURES</b>							
<b>Salaries and Benefits</b>	<b>57,035</b>	<b>131,270</b>	<b>159,845</b>	<b>241,309</b>	<b>225,375</b>	<b>225,000</b>	<b>1,039,834</b>
<b>Scientific Advisory Panel</b>	-	<b>90,500</b>	<b>69,208</b>	<b>90,301</b>	<b>50,000</b>	<b>109,000</b>	<b>409,009</b>
Consultants-Wetlands	-	4,294	59,372	42,261	7,670	1,500	115,097
Consultants-Barriers	-	-	-	-	-	-	-
Consultants-Reef	-	-	7,400	-	39,983	-	47,383
Consultants-Fish Hatchery	-	670	-	-	-	-	670
Consultants-Review Workshop	-	-	-	-	-	-	-
Consultants-Miscellaneous	-	741	3,450	2,771	-	-	6,962
<b>Total Consultants</b>	-	<b>5,705</b>	<b>70,222</b>	<b>45,032</b>	<b>47,653</b>	<b>1,500</b>	<b>170,112</b>
Travel	480	3,764	16,704	26,539	17,244	22,000	86,731
Professional development	-	504	1,077	518	-	-	2,099
General expense *	52	7,038	3,156	4,474	4,728	12,600	32,048
Office/storage space	-	-	1,143	2,376	2,720	2,376	8,615
Workshops/meetings	-	-	-	-	-	-	-
Recruiting	-	-	8,954	6,276	-	-	15,230
Staff relocation	-	10,009	-	-	-	-	10,009
Audit	-	-	5,000	5,000	6,000	6,000	22,000
Computer repair/support	-	-	-	-	455	2,200	2,655
Equipment	87	17,316	24,464	22,330	7,434	6,500	78,131
Administrative services	-	55,772	30,000	30,000	30,000	30,000	175,772
<b>Total Operations</b>	<b>619</b>	<b>94,403</b>	<b>90,498</b>	<b>97,513</b>	<b>68,581</b>	<b>81,676</b>	<b>433,290</b>
<b>Condition E Compliance</b>	-	-	-	-	<b>6,010</b>	-	<b>6,010</b>
<b>TOTAL EXPENDITURES</b>	<b>\$ 57,654</b>	<b>\$ 321,878</b>	<b>\$ 389,773</b>	<b>\$ 474,155</b>	<b>\$ 397,619</b>	<b>\$ 417,176</b>	<b>\$ 2,058,255</b>
<b>UNEXENDED BALANCE</b>	<b>\$ -</b>	<b>\$ 288,768</b>	<b>\$ 783,332</b>	<b>\$ 374,929</b>	<b>\$ 42,520</b>	<b>\$ 5,859</b>	<b>\$ 1,495,408</b>

\* 1997 includes general expense under UCSB contract. In previous years, UCSB general expense is included with salaries and benefits.