TAHOE CONSERVANCY BOARD MEMBERS

April, 1991

Activities Report

VI. Evaluation of Stream Environment Zone and Watershed Restoration Program Needs

A. Introduction - The following discussion is intended to provide the board with background information on SEZ and watershed restoration needs in the Lake Tahoe Basin. In addition, this discussion will provide a basis to review projects such as the Wolf Street SEZ Restoration project which is before the board this month for consideration
(see Agenda Item X), and provide a basis for further program and project development.

As the board is aware, the Conservancy possesses the authority to undertake SEZ and watershed restoration activities, pursuant to Government Code Sections 66905 et seq and 66950 et seq. The Conservancy has already implemented a number of activities in this area through many of its programs, which are designed to take advantage of restoration opportunities wherever feasible. Examples of previous projects include: parking lot removal and meadow restoration at Lake Forest Glen through the coverage and management programs; road removal and meadow restoration by El Dorado County through the erosion control grants program; and stream channel and meadow restoration at Lake Christopher through the wildlife program. In addition, the acquisition program's purchase of SEZ parcels provides basic watershed protection and provides an inventory of degraded parcels in need of restoration. Although these programs have contributed to SEZ restoration, their primary focus has been on meeting restoration needs in conjunction with particular resource objectives of the various programs. However, a need exists to address SEZ and watershed restoration in a more systematic and comprehensive manner in order to maximize the resource benefits of this activity. Such an approach would result in expanding both the scope and benefits of the Conservancy's efforts.

In order to meet these needs, the Conservancy has also been appropriated $1 million under the 1990 Budget Act for SEZ, watershed, and other restoration projects. These funds are being made available to fund both acquisition and site improvement activities which are ineligible for Lake Tahoe Acquisitions Bond Act funding. Within the scope of available funding, staff is developing several projects on publicly owned land to address this need. A portion of these funds are being proposed to fund the Wolf Street SEZ Restoration project. As the board is aware, an additional $2 million has been included in the Governor's proposed budget for the 1991-92 fiscal year for expanded program efforts in this area.

B. Background - The term SEZ was developed by TRPA to denote perennial, intermittent and ephemeral streams and drainages, as well as marshes and meadows. SEZs generally possess the following characteristics: riparian or hydric (wet site) vegetation; alluvial, hydric soils; and the presence of surface water or near-surface groundwater at least part of the year.

The preservation and restoration of SEZs are essential since these areas provide multiple resource benefits. The preservation and restoration of SEZs is very important because of their ability to provide natural treatment and conveyance of surface runoff. A TRPA study in 1977 determined that a natural functioning SEZ could reduce sediment and nutrient runoff concentrations by 70-90%. Disturbance and urban encroachment of these areas reduces their ability to convey runoff and to filter sediment and nutrients. As the board is aware, one of the biggest threats to the environmental health and economic well being of Lake Tahoe is the sediment and nutrient load entering the lake. The Conservancy's SEZ and watershed restoration efforts are performing a valuable resource function by reducing these pollutants before they are discharged to the lake.

In addition, SEZs contain highly significant fish and wildlife habitat. The riparian vegetation community contains plants and animals which live and interact together, and which depend upon the community for survival. This community provides critical wildlife habitat, especially the edge effect or ecotone created by the boundary between the riparian and coniferous communities. Past development has significantly reduced these wildlife habitat areas. For example, development has reduced marshes by 75%, meadows by 50% and riparian areas by 35%. While SEZs comprise only 5% of the land area within the Tahoe Basin, they provide key habitat for 84% of the 250 wildlife species found in the basin. Some of the key habitat requirements provided by SEZs include nesting, feeding and cover. The preservation and restoration of SEZ habitat especially benefits wildlife considered to be endangered, threatened, sensitive, or of special interest by the U.S. Fish and Wildlife Service, USFS, California Department of Fish and Game and TRPA. Some of the species within these designations include the bald eagle, peregrine falcon, Lahontan cutthroat trout, red fox, goshawk, kingfisher, osprey, mule deer, and various species of waterfowl.

The protection and restoration of SEZs is also essential for improving and maintaining the environmental amenities of the Lake Tahoe region, as well as achieving TRPA's environmental thresholds for water quality, vegetation preservation and soil conservation. Some of the other benefits that SEZs can provide include dispersed recreation opportunities for a visiting public which spends 7 million visitor days on outdoor recreational activities, scenic open space, flood flow capacity and buffer strips within urbanized areas.

Included within TRPA's 208 Water Quality Management Plan for the Tahoe Basin is a section devoted to SEZ protection and restoration. This section covers in detail the importance, identification and restoration goals of SEZs. As stated in the Water Quality Management Plan, TRPA's environmental threshold goal is to:

"Preserve existing naturally functioning SEZ lands in their natural condition and restore 25% of the SEZ lands that have been identified as disturbed, developed, or subdivided, to attain a 5% total increase in the area of naturally functioning SEZ lands."

According to TRPA and USFS estimates, there are approximately 3,450 acres of SEZ lands that have been disturbed, developed or subdivided on the California side of the Lake Tahoe Basin. Therefore, approximately 850 acres need to be restored to attain this 25% goal.

C. Overall Program Parameters - As with other Conservancy programs, the parameters of such an activity should reflect a balance between resource, cost effectiveness and implementation objectives. At this time, staff offers the following objectives of an overall program, which can be implemented if sufficient funding is made available, for discussion and to assist in the evaluation of projects currently being developed for consideration by the Conservancy.

1. Program objectives - Presently, the Conservancy is focusing SEZ restoration activities on publicly owned parcels. The recommended goal of the expanded program is to facilitate the Conservancy's resource management and TRPA's land use planning objectives by incorporating a comprehensive, holistic approach to SEZ and watershed restoration, for the purposes of attaining the 25% SEZ restoration goal. In order to achieve this goal it will be necessary to increase the amount of both public and private lands included within this program.

a. resource objectives - The resource objective of this program is to restore and enhance important SEZ and watershed areas which generate multiple resource benefits including improvement of water quality, soil erosion control, enhancement of wildlife and fisheries habitat, enhancement of vegetation and scenic resources, and provision of public access and interpretive opportunities. It should be noted that these areas could perform an important education/interpretation function. For example, these areas could be used by local schools for environmental education classes which will provide students with a better understanding of the ecology of the area.

b. cost-effectiveness - A cost-effective project involves the achievement of significant resource benefits at the lowest reasonable cost. There are several ways in which a project can be made more cost-effective. For example, project costs can be reduced, where appropriate, with the use of vegetative or biotechnical treatments instead of more expensive structural treatments, or through an agency's commitment of matching funds or in-lieu services.

c. implementation objectives - As with other Conservancy programs, it is important to implement projects in a timely manner. An implementable project is one that can be completed and provides an important public benefit in the least amount of time necessary. Given the need to address the effects of human development activity in the Tahoe Basin,

it is crucial to demonstrate the ability to implement projects in a timely manner and to show a public benefit by restoring SEZ and watershed areas. The implementation objective can be met in several ways. For example, the Conservancy could fund projects that are not dependent upon other funding sources or actions by other entities. This scenario allows for quicker project implementation than a project complicated by multiple unsecured funding sources or multiple agency involvement.

2. Scope of the program - At the present time, staff recommends the funding of projects which meet the previously discussed program objectives and which are located in areas where a substantial public investment has already occurred. Such an approach will take advantage of existing public acquisition and site improvement efforts such as erosion control.

a. funding allocations - Within the Conservancy's jurisdiction, funding should be allocated on a basinwide basis. This reflects both a judgment that the amount of funding for this program cannot, at this time, be broken down by jurisdiction and that the use of limited funds should be based on the highest priority need, regardless of location. Staff believes that high priority needs exist in all areas of the Tahoe Basin, but it does not have a basis to allocate a specific amount of funds for each jurisdiction at this time.

b. type of activities - The program should include acquisition and site improvements on private as well as public land, and on improved as well as unimproved parcels. Potential avenues for performing these tasks on private property could include fee or easement purchase, or lot line adjustment where the Conservancy or another public agency owns the adjoining property. For example, a potential project site could contain a Conservancy parcel and a private parcel with a stream running between them. In this case it would be preferable to obtain control of the entire stream zone to allow for a complete treatment of the project site. Control of the private property, which is necessary for the expenditure of public funds, could be obtained through an easement or fee purchase, or lot line adjustment.

c. approach - If sufficient funds are made available, the Conservancy could consider the adoption of formal guidelines for implementing all components of this program. Within this framework the Conservancy would adopt formal criteria and guidelines outlining the priorities, objectives and eligible activities under this program. This approach would involve coordinated project development with other entities which either have jurisdiction over the project, special expertise, or other interest in a proposed project. Coordinating efforts with these agencies allows for the consolidation of SEZ and watershed restoration expertise. This multi-agency expertise could be provided through a technical advisory group, which could assist with the review and development of proposed projects.

The guidelines approach will permit the Conservancy to continue to use a two-pronged strategy in implementing projects as it does in its other programs. The two-pronged strategy involves either direct implementation of projects by the Conservancy, or the provision of funding to other implementing agencies through grants. The dual approach

gives the Conservancy the flexibility to undertake projects either directly, through grants, or to combine the two techniques to ultimately develop an overall project. It would also assist in the development of projects by other agencies. This strategy fosters a cooperative and coordinated effort among the agencies involved, which would lead to a more cost-effective and timely implementation of the program.

i. Conservancy projects - The Conservancy would continue to directly undertake restoration activities. It could assess and undertake projects providing SEZ and watershed restoration opportunities on lands it owns and continues to acquire through its various programs. In addition, the Conservancy could enter into arrangements with the USFS or other entities to utilize key parcels of adjoining land for restoration or resource purposes.

ii. Conservancy grants - The adoption of a guidelines approach would result in expanding the program by adding a voluntary application grants component. Under such a program, grants could be awarded for eligible projects according to provisions similar to those already incorporated in other Conservancy programs. Grants would be awarded for both acquisitions and site improvements.

Staff recommends that all public agencies and nonprofit organizations eligible under the Conservancy's enabling legislation be eligible grantees under this program. State, Federal and local agencies would be included in this pool of eligible grant applicants, since significant SEZ and watershed restoration needs exist on properties currently owned by these entities.

D. Proposed Future Actions - Due to limited funding, the Conservancy is only in the position to develop and evaluate individual projects at this time. If sufficient funding is made available through the State budget process, then staff will bring program guidelines before the board for its consideration. At this time, staff is soliciting comments and direction from the board regarding the parameters of the program to help us develop the overall program and to develop and evaluate individual projects.