3.0 Description of Restoration Alternatives

3.1 Development of Restoration Alternatives

The Consent Decree provides guidance for restoration projects along the Santa Clara River. It is stated in the Consent Decree that restoration funds shall be used "for habitat rehabilitation, revegetation, and/or protection of areas within the Santa Clara River watershed, and wildlife projects which will benefit the least Bell's vireo and other threatened or endangered species or species of special concern in and along the Santa Clara River." Since the signing of the Consent Decree, the Trustee Council has held numerous meetings regarding the restoration planning for the Santa Clara River. These meetings have included sessions with biological experts, planners, and managers from both public and private agencies and groups, to assist the Trustee Council in the development of goals, objectives, evaluation criteria, and restoration projects.

In order to involve the public earlier on in the restoration planning process, a public informational/scoping meeting was held in October 1998 to receive ideas and suggestions from the public on restoration alternatives. The public provided general recommendations and some specific suggestions for restoration projects to be considered in the Restoration Plan. Some of the more general recommendations include the use of matching funds, partnering with other groups, coordinating efforts with existing community plans, consideration of the natural hydrological regime of the river, establishing endowments, developing long-term and watershed-wide improvements, and recognizing wildlife corridors and public access in our restoration efforts. The more specific suggestions for restoration projects include an invasive non-native species control program, research for natural methods of Arundo control, bank stabilization measures to reduce erosion, an educational guidebook about the river and its natural resources, fund the completion of the Santa Clara River Enhancement and Management Plan (SCREMP), incentive programs to subsidize private landowners efforts, an oil spill prevention program, research studies of the river, and the acquisition and protection of lands throughout the watershed including the tributaries, the lower reaches, wetlands near Santa Paula and lands along the spill area.

All of the more general recommendations and the specific suggestions for restoration projects that were submitted during and subsequent to the scoping meeting were considered by the Trustee Council in developing the proposed restoration alternatives. Those suggested restoration projects resulting from the scoping meeting that were not selected for further consideration and inclusion as proposed restoration alternatives are as follows:

* Funding the completion of SCREMP - The Trustee Council has the obligation to allocate restoration funds into actual restoration projects. The Council does recognize that there may be the opportunity in the future to fund restoration projects resulting from SCREMP. Such opportunities could be included under one of the proposed restoration alternatives in this plan, e.g., Watershed Evaluation and Monitoring.

* Oil spill prevention program - An oil spill prevention program could include such activities as monitoring and maintenance of pipelines and wells. The Trustee Council cannot approve

funding for any project or effort that would be required or authorized under any other applicable laws or regulations. However, there could be an opportunity under the proposed Information and Education restoration alternative for promoting oil spill awareness and prevention, but not under the auspices of an established program such as currently funded by California's Office of Spill Prevention and Response.

Since the oil spill in 1994, avian studies have been performed along the Santa Clara River. Initially, the purpose of the studies was to assist the trustees in determining the injuries that occurred to the natural resources as a result of the oil spill. Since the settlement, the focus of the avian studies has shifted to restoration planning. The information that has been gathered is assisting the Council in prioritizing areas for acquisition, protection and restoration.

The Bren School of Environmental Science and Management, University of California, Santa Barbara, has assisted the Council in providing a method for selecting sites for land acquisition and restoration. In a report submitted to the Council, the Bren School recommended sites for acquisition and restoration. The Council is considering these recommendations as the restoration planning and implementation progresses.

The Council has met with the State Coastal Conservancy, The Nature Conservancy, the Trust for Public Land, and the Center for Natural Lands Management to exchange ideas and receive input on restoration projects and land acquisition opportunities. The Council has had discussions and toured the Santa Clara River area with Newhall Land and Farming, Friends of the Santa Clara River, City of Santa Clarita and private landowners in order to better understand different perspectives and interests, and pursue potential partnerships that can be folded into restoration efforts.

The Trustee Council has considered all the ideas and suggestions submitted by others and has developed their own ideas for the restoration of the injured natural resources of the river. These ideas have been defined in terms of the restoration alternatives included in this Restoration Plan.

3.2 Restoration Alternative Evaluation Criteria

The Trustee Council developed evaluation criteria by which to evaluate, prioritize, and select restoration alternatives. The criteria is to be used in a more qualitative sense as opposed to a numerical ranking. The following evaluation criteria are not listed in any order of priority.

* Consistency with the trustees' restoration goals

The restoration alternative must meet the trustees' intent to restore natural resources in the Santa Clara River watershed, in accordance with the Consent Decree, with the goals of contributing to permanent protection of the river's natural ecosystem and of providing lasting value to the public. The more consistent the restoration projects are to the restoration goals, the higher the priority given to the proposed alternative under this criterion.

* Feasibility

This criterion is used to examine the technical, biological, regulatory, and political feasibility of a proposed restoration project. Trustees shall evaluate the soundness of the restoration technique, level of risk or uncertainty in implementing the project, the likelihood of success, and various other factors that influence feasibility of the alternative. Higher priority is given to a more feasible restoration alternative.

* Compliance with laws

The proposed restoration alternative must comply with all applicable laws including those that protect the health and safety of the public. In addition, the restoration alternative cannot serve as required mitigation for another project. Those restoration alternatives that do not comply will be eliminated from consideration.

* Duration of benefits

The mission of the Santa Clara River Trustee Council and the intent of the Consent Decree is to restore and protect the natural resources of the Santa Clara River watershed in perpetuity. Such restored resources would have to be again restored if future events damaged these resources. Those restoration alternatives that do not contribute to restoration and permanent protection of the natural resources will not be considered further.

* Avoidance of future or collateral injuries

The proposed restoration alternative shall avoid or minimize adverse impacts to the environment and the associated natural resources. Unavoidable and temporary adverse impacts may result when implementing the proposed project. The more permanent restoration project benefits will outweigh any temporary unavoidable adverse impacts. Restoration alternatives that provide for a greater avoidance of collateral injuries shall receive more consideration under this criterion.

* Benefits relative to costs

This criterion examines the relationship between expected benefits and expected costs of a restoration alternative. Trustees shall seek projects with the most cost-efficient approach to provide the same resource benefits. The lower the cost of providing the benefits, the higher the priority given to a restoration alternative under this criterion.

* Opportunities for collaboration

The trustees shall consider the possibility of matching funds, in-kind services, or volunteer assistance, as well as coordination with other ongoing or proposed restoration projects. Restoration alternatives that provide opportunities for a collaborative restoration effort shall receive a higher priority for this criterion.

* Endangered/threatened species and sensitive habitat areas

The trustees shall examine the ability of the restoration alternative to enhance and protect endangered and threatened species, and the more sensitive and rare habitat areas. A project that promotes the restoration, enhancement and protection of these species and habitat areas receives a higher priority for this criterion.

3.3 Proposed Restoration Alternatives

The Trustee Council has developed a reasonable number of possible alternatives for the restoration, rehabilitation, replacement, and/or acquisition of the equivalent of the injured natural resources. These proposed restoration alternatives meet the conditions of the Consent Decree, have been evaluated and selected through application of the evaluation criteria, and meet the goals and objectives outlined by the Trustee Council. Six proposed restoration alternatives have been identified by the Council, including a 'no action' alternative, and are defined as follows.

No Action - The 'no action' alternative looks at the ability of the injured natural resources to recover on their own. The 'no action' alternative is not to spend the $7.1 million allocated for natural resource damage restoration. Since the Trustee Council is committed and required under the Consent Decree to spend the allocated money on restoration, the 'no action' alternative will not be considered further as a viable alternative.

Land Acquisition/Conservation Easements - The Santa Clara River is a very dynamic river, with fluctuating flows from season to season. As such, the river needs the space to be the dynamic river that was so typical of southern California rivers in the past. Since the time of the Chumash, various pressures have been exerted upon the Santa Clara River system that have resulted in habitat destruction, decreased water quality, channelization, encroachment into the floodplain and introduction of non-native species. Through the protection and restoration of lands either through fee title/land purchase or through the establishment of permanent conservation easements, protection of the river into perpetuity would be assured and the river would be able to function more naturally. The recovery of endangered species associated with the river, such as the least Bell's vireo and the unarmored threespine stickleback, would be enhanced by the protection and restoration of riparian habitat. The Council proposes to allocate funds to the California State Coastal Conservancy and The Nature Conservancy, a state agency and a private organization, respectively. Both of these groups are actively involved in the acquisition, protection and restoration of lands in the Santa Clara River watershed. Trustee Council funds would be partnered with California State Coastal Conservancy and The Nature Conservancy funds. The Trustee Council shall concur on properties acquired with Council funds and lands would only be purchased from willing sellers. A contract would be agreed upon and signed between the Trustee Council and the Coastal Conservancy or The Nature Conservancy that would define the conditions of the purchase, the management and the restoration of the acquired land. Land values currently range from $500 - $35,000 per acre depending on whether the land is river bottom, riparian, agricultural or upland. The ownership, management and restoration of the acquired lands would be cared for by both Conservancies, and these responsibilities may ultimately be transferred to a land trust, a public natural resource agency, a

resource group or a Joint Powers Authority. Transfer of lands to a land trust, non-profit group or Joint Powers Authority would be subject to the same level of protection that a public natural resource agency would have to provide. While the Trustee Council would concur on the ownership, management and restoration plans for lands that are acquired with Council funds, restoration settlement funds shall not be allocated towards the management or restoration aspects of the lands under this alternative. However, funding for the management and restoration of acquired lands may fall under the invasive non-native plant species control or restoration project grants program alternatives.

Invasive Non-native Plant Species Control - This restoration alternative includes the implementation of programs that will control invasive non-native plant species. The Bureau of Land Management has estimated that 4,600 acres a day in the western United States alone are lost to invasive non-native plants, rendering land biologically impoverished. It is recognized in the recovery plans for the least Bell's vireo and the southwestern willow flycatcher of the importance of invasive exotic species control for the recovery of these species. Realizing that methods for control range from well-established to experimental, some of the monies may be spent on the research of existing or new methods. The majority of the allocated funds, however, would be spent on the actual control of exotic plants. In particular, giant reed, better known as Arundo, has infested the Santa Clara River watershed replacing native riparian vegetation and degrading wildlife habitat (Figure 4). It has been estimated that Arundo is spreading through Ventura County waterways at an average rate of 10% per year. The Trustee Council would partner with other groups who are presently involved with invasive plant species control. These include the Ventura County Resource Conservation District/Ventura County Arundo Task Force, the Angeles National Forest, the Center for Natural Lands Management and private landowners. It is likely that settlement monies would be allocated to an endowment with accrued interest money funding the actual invasive non-native plant species control projects and monitoring efforts. An endowment would assure the availability of funds for long-term management.

Figure 4. Arundo growing along the Santa Clara River.

Restoration Project Grants Program - This restoration alternative provides a grants process to attract and implement restoration projects from the public, preferably from the local Santa Clara River community. These would include a variety of smaller-scale projects that promotes the restoration efforts along the Santa Clara River. Project proposals would be evaluated and selected for funding by the Trustee Council. The Council would have the oversight responsibility for the implementation and monitoring of projects in order to ensure completion and success. This restoration alternative may be coordinated with the Partners for Fish and Wildlife program

and success. This restoration alternative may be coordinated with the Partners for Fish and Wildlife program which is a land stewardship program that is administered by the U.S. Fish and Wildlife Service. The Partners program provides financial and technical assistance to private landowners, local agencies and tribal governments to conduct voluntary habitat restoration projects.

Information and Education - This restoration alternative includes various outreach activities that are related to the other restoration alternatives. Conveying information and educating the public about restoration are critical to the long-term stewardship of the land. Outreach activities may include incorporating restoration programs into school curriculums, providing kiosks and interpretive displays along the river where restoration activities are occurring, developing a volunteer/stewardship program for involvement by landowners and other local groups in the restoration efforts, and promoting oil spill awareness through education.

Watershed Evaluation and Monitoring - This restoration alternative includes various projects that involve watershed evaluation and monitoring efforts. These efforts would assist us to better understand the systems that we will restore and to monitor restoration success. This could include such efforts as funding the continuance of the avian studies, mapping, monitoring of watershed processes or SCREMP implementation activities.