COASTAL CONSERVANCY

Staff Recommendation
April 24, 2008

NAPA HISTORICAL ECOLOGY ATLAS PROJECT

File No. 08-002
Project Manager: Betsy Wilson/Carol Arnold

RECOMMENDED ACTION: Authorization to disburse up to $25,000 to the San Francisco Estuary Institute to assist with planning for the restoration, enhancement and protection of habitats within the Napa River Watershed through the development of the Napa Historical Ecology Atlas.

LOCATION: Napa River Watershed, Napa County

PROGRAM CATEGORY: San Francisco Bay Area Conservancy

EXHIBITS

Exhibit 1: Project Location and Site Map

Exhibit 2: Sample pages of proposed Atlas

Exhibit 3: Napa River Watershed Habitat Photos

Exhibit 4: Letters of Support

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31111, and 31161-31165 of the Public Resources Code:

"The State Coastal Conservancy ("Conservancy") hereby authorizes the disbursement of up to twenty-five thousand dollars ($25,000) to the San Francisco Estuary Institute to conduct planning for, and documentation of, the historical ecology of the Napa River Watershed ("Watershed"). Prior to the disbursement of any funds, San Francisco Estuary Institute shall submit for the review and approval of the Executive Officer of the Conservancy, a work program, budget and schedule, and the names and qualifications of any subcontractors that it intends to employ to carry out the project."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with the Project Selection Criteria and Guidelines, last updated by the Conservancy on September 20, 2007.
2. The proposed project is consistent with the purposes and criteria set forth in Chapter 4.5 (Sections 31160-31165) of Division 21 of the Public Resources Code regarding resource and recreational goals in the San Francisco Bay Area.
3. The San Francisco Estuary Institute is a nonprofit organization existing under Section 501(c)(3) of the U.S. Internal Revenue Code, and whose purposes are consistent with Division 21 of the Public Resources Code."

PROJECT SUMMARY:

The proposed grant of $25,000 to San Francisco Estuary Institute ("SFEI") will result in the preparation and publication of an historical ecological atlas ("Atlas") for the Napa River Watershed (Exhibit 2: Sample pages of proposed Atlas) that will be used to facilitate future habitat preservation and restoration projects. Over the past several years, Friends of the Napa River, the Napa County Resource Conservation District and SFEI have carried out extensive and innovative research to identify the historical ecological characteristics of the Napa River Watershed. In recent months, this investigative study has largely been completed, producing a wealth of baseline information about past and present landscape conditions and potential future restoration scenarios. This project is designed to make this information available and accessible to all interested parties, but particularly to those entities undertaking habitat preservation and restoration projects in the Watershed.

The Atlas will synthesize hundreds of historical data sources into technical information needed for restoration planning and design for the entire Napa River and Valley. Information about the natural characteristics of Napa River and its floodplain habitats is critical for restoration design, but is not currently available. The Atlas will present a diverse range of historical data -- from historical surveys, photographs, and textual evidence -- in a well-documented, reliable form for direct use in restoration planning.

The Atlas will be used to support local restoration and conservation efforts, including the Conservancy funded Napa River Rutherford Reach Restoration Project. The Rutherford Reach Project will restore 4-1/2 miles of Napa River wetland and riparian habitat. Scientists and landowners planning this project will look to the Atlas for information about the nature and location of historical floodplain sloughs, the width of historical riparian corridors, location and extent of historical freshwater wetland habitats, and details about historical channel morphology. This information will help achieve priorities recognized in the original Conservancy grant for the Rutherford Reach Project, including the reestablishment of channel meanders and floodplain connections. This information also will help to ensure that the restoration designs and goals are locally appropriate and based on specific habitats previously present in the area, both of which are critical to planning successful restoration projects.

The Atlas will also be used to address a number of information needs for other important local restoration and recreation projects, including: the Oakville-Oak Knoll Napa River restoration project, the Napa Basin Total Maximum Daily Loads for sediment, the Trancas Crossing Park

and Oxbow Preserve, the Napa River Trail, and the oak management plan of the Napa County Regional Park and Open Space District. Additionally, the project supports the updated Comprehensive Conservation and Management Plan for the Estuary, the interim plan of the Napa County Regional Park and Open Space District, as well as the emerging recovery plan for the Central California Coast Steelhead Endangered Species Unit. Information about native landscape conditions and historical change will be highly beneficial to the development of a watershed management strategy for the Napa River and for selecting indicators for assessing watershed health. Having the same guiding information available for each of these projects will maximize the cumulative benefits to the watershed.

SFEI is a nonprofit research institute whose mission is to foster the development of the scientific understanding needed to protect and enhance the San Francisco Bay. It is governed by a board of directors composed of Bay Area scientists, environmentalists, regulators, and representatives from local governments and industries. SFEI is exceptionally qualified to take on this project, having previously produced a similar publication, the Conservancy-funded Contra Costa County Historical Ecology guide. In developing this project, the organization will utilize its well-established design expertise in producing attractive materials with accessible formats to convey substantive technical content. Illustrated with dozens of rarely seen historical images**,** the Atlas will make watershed habitats and functions comprehensible to a wide audience and will foster greater awareness of Watershed issues and interest in implementing projects to improve the functioning of the Watershed in the area.

Site Description: The Napa River watershed covers an area of approximately 426 square miles and is contained by the ridge tops of the mountains to the north, west, and east. The Watershed is an example of the northwest-southeast trending topography typical of the California Coastal Range. It provides many different habitats for fish and wildlife, including chaparral, riparian, freshwater, brackish and salt water marsh, vernal pool, oak and pine woodland, and grassland communities (Exhibit 3: Napa River Watershed Habitat Photos).

The Napa River flows through the Napa Valley in the center of the Watershed, draining numerous tributaries along a 55-mile run from high in the headwaters of Mt. St. Helena in the Mayacamas Mountain Range, to the San Pablo Bay. The river winds through varied landscapes of forested mountain slopes, vineyards, urban areas, open pasture, industrial zones, grasslands, and marshes. The Napa Valley is perhaps best known for its wine industry. The cities of Napa, St. Helena and Calistoga are all located within the Valley, as are other smaller residential and commercial areas. Since 1800, most streams in the Valley have been greatly altered - directly, indirectly, or both. Development of the Napa Valley has been markedly accelerated in the last 40 years, compared to the previous 100 years.

The Watershed supports a great diversity of fish and wildlife, including a number of rare or threatened species such as the northern spotted owl, California steelhead, California red-legged frog, the California tiger salamander, and the California freshwater shrimp. Historically, large runs of steelhead trout, Chinook salmon, and coho salmon made their way up the Napa River to spawn. Coho salmon are no longer found in the Napa River, and the steelhead population has been greatly reduced. Adult steelhead are still observed spawning in many of the river´s tributaries each year, and juvenile steelhead can be seen in the summer months. Despite reduced

populations, the Watershed is still considered one of the most significant anadromous fish streams within San Francisco Bay, with the exception of the Delta.

Terrestrial wildlife is abundant throughout the Watershed, and the river and its tributaries are important to many birds that feed and nest in the riparian zone along the water's edge. Bird species dependent on the river include mallard, green-winged teals, mergansers, wood ducks, herons, egrets, kingfishers, rails, and grebes. Riparian habitat is used by mink, muskrat, raccoon, deer, gray fox, bobcat, mountain lions, wild turkey, wood rats, snakes, and salamanders.

Project History: Research for the Napa River Watershed Historical Ecology Project was initiated in 1999 at the request of the Friends of the Napa River. Its goal has been to document the historical changes to the Napa River Watershed, with a focus on the heavily altered Napa Valley, as needed to inform environmental restoration and management efforts.

Since that time, major research has been carried out with the support of a diverse range of sponsors, including the Napa Valley Vintners Association and Cal-Fed Watershed Program, as well as environmental foundations. The State Water Resources Control Board has also been a contributor by funding a project focusing on agricultural water quality. Other important participants have been the Napa County Resource Conservation District and the Friends of the Napa River.

The proposed Atlas would carry out the next step of the project – converting raw technical information into a broadly usable product. This project will leverage over $200,000 of prior funding for the research component. Additionally, the project will leverage Conservancy funds related to the Rutherford Reach Restoration project, an effort to restore 4-1/2 miles of riparian and wetland habitat along the Napa River. Approved by the Conservancy in September, 2004, the $279,400 grant is being used for preparation of engineering designs, environmental documents and permit applications, all of which are currently underway. The Atlas will provide much-needed data to establish historical perimeters of floodplain habitat, assuring that future implementation phases will have a much higher degree of success than they otherwise would without this information.

In May, 2007, the Conservancy funded a project similar to the Napa Atlas – the Contra Costa County Historical Ecology Project. That project consisted of both research and the production of maps and documents. As will be the case with the Napa Atlas project, the Contra Costa project has been instrumental in providing historical data necessary for the design and implementation of local habitat restoration projects.

PROJECT FINANCING:

Coastal Conservancy	$ 25,000
Other sources:	
Friends of the Napa River	15,000
Napa River Watershed Info Center & Conservancy	15,000

Napa County Wildlife Conservation Commission	5,000
State Water Resources Control Board	10,000
In Kind (Friends of the Napa River)	20,000
Total Project Cost	**$90,000**

Conservancy funds for this project are expected to derive from the Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002 (Proposition 50) which allocates funding to the Conservancy for "grants for the purpose of protecting coastal watersheds…" for "protection and restoration of land and water resources and associated planning, permitting and administrative costs…" (Water Code Section 79570). Proposition 50 further allocates a portion of Conservancy funds "for the San Francisco Bay Area Conservancy Program for coastal watershed protection pursuant to Chapter 4.5 (commencing Section 31160) of Division 21 of the Public Resources Code" (Water Code Section 79570(b)). The consistency of the proposed project with the Public Resources Code Chapter 4.5 is discussed below in "Consistency with the Conservancy's Enabling Legislation."

"Watershed protection activities" using Proposition 50 funds must be "consistent with the applicable adopted local watershed management plan and the applicable regional water quality control plan adopted by the State Regional Water Quality Control Board" (Water Code Section 79507). The proposed project is consistent with the goals of the Comprehensive Conservation and Management Plan for the Estuary, the interim plan of the Napa County Regional Park and Open Space District, as well as the emerging recovery plan for the Central California Coast Steelhead Endangered Species Unit, all of which incorporate the Napa Bay Watershed, in that the project's aim is to provide substantive historical ecological data that can be used for habitat restoration planning purposes. The proposed project is also consistent with the Basin Plan of the San Francisco Regional Water Quality Control Board, as discussed below in "Consistency with the Water Quality Control Plan for the San Francisco Bay Basin."

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project would be undertaken pursuant to Chapter 4.5 of the Conservancy's enabling legislation, Public Resources Code Sections 31160-31165, to address resource goals in the San Francisco Bay Area. Pursuant to Public Resources Code Section 31162, the Conservancy may award grants in the nine-county San Francisco Bay Area that will help achieve goals of the San Francisco Bay Area Conservancy Program. Consistent with this section, the proposed project is in Napa County within the nine-county Bay Area and will help achieve goals of the Bay Area Conservancy Program by providing information on the historical ecology of the Watershed in order to facilitate the development of restoration projects.

Pursuant to Public Resources Code Section 31162(b), the Conservancy may award grants to enhance natural habitat of regional importance. Consistent with this section, the proposed project is intended to provide detailed historical ecological data necessary to preserve, restore and enhance habitat within the Napa River Watershed. In addition, pursuant to Public Resources Code Section 31111, the Conservancy may fund and undertake plans and may award grants to nonprofit organizations for these purposes. Specific projects that will benefit from this data in

the near future are the Napa River Rutherford Reach restoration project, the Oakville-Oak Knoll Napa River restoration project, the Trancas Crossing Park and Oxbow Preserve, the Napa River Trail, and the oak management plan of the Napa County Regional Park and Open Space District.

This project is appropriate for prioritization under the selection criteria in Section 31163(c) in that (1) it is supported by adopted local or regional plans, as described above; (2) it will include multi-jurisdictional participation by local and state agencies, including the Cities of Napa, St. Helena and Calistoga, the Conservancy, the Department of Fish & Game and the U.S. Fish & Wildlife Service, the latter two of which will provide information related to native habitats, and threatened and endangered species within the Watershed, (3) staff of SFEI, the proposed grantee, are ready to commence work immediately upon award of Conservancy funding; and (4) financing for the proposed project includes $65,000 in other matching funds.

CONSISTENCY WITH CONSERVANCY'S STRATEGIC PLAN GOAL(S) AND OBJECTIVES(S)

Consistent with **Goal 10, Objective B** of the Conservancy's 2007 Strategic Plan, the proposed project would contribute to the preparation of habitat restoration plans within the Napa River Watershed, including Napa River Rutherford Reach restoration project, the Oakville-Oak Knoll Napa River restoration project, the Trancas Crossing Park and Oxbow Preserve, the Napa River Trail, and the oak management plan of the Napa County Regional Park and Open Space District.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES

The proposed project is consistent with the Project Selection Criteria and Guidelines last updated by the Conservancy on September 20, 2007, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** The project is supported by Senator Patricia Wiggins, Assemblywoman Noreen Evans, the State Regional Water Quality Control Board, the Napa County Resource Conservation District, the Friends of the Napa River, Napa River Watershed Information Center and Conservancy, Napa County Park & Open Space District and the Land Trust of Napa County, among others (Exhibit 4: Letters of Support).
4. **Location:** This project encompasses the Napa River Watershed located within the nine-county San Francisco Bay Area, as defined by Section 31162 of the Public Resources Code.

5. **Need:** The project will not occur without Conservancy funding. The data gathered and published as part of this project will provide the habitat information necessary for the design and implementation of several important restoration projects, including the Napa River Rutherford Reach restoration project, the Oakville-Oak Knoll Napa River restoration project, the Trancas Crossing Park and Oxbow Preserve, the Napa River Trail, and the oak management plan of the Napa County Regional Park and Open Space District.

6. **Greater-than-local-interest**: In creating the San Francisco Bay Area Conservancy Program, the legislature identified San Francisco Bay as the central feature in an interconnected open-space system of watersheds, natural habitats, scenic areas, agricultural lands and regional trails of statewide importance. As one of the nine San Francisco Bay Area counties, Napa County is an important element of this regional program. This Atlas will provide the historical ecological data necessary for the successful planning and implementation of habitat preservation and restoration projects within the Napa River Watershed.

Additional Criteria

7. **Urgency:** It is important that the Atlas be developed now in order to provide information necessary for the successful planning and implementation of habitat restoration projects in the Napa River Watershed, including the Napa River Rutherford Reach, the Oakville-Oak Knoll Napa River project, the Trancas Crossing Park and Oxbow Preserve, and the oak management plan for the Napa County Regional Park and Open Space District.

8. **Resolution of more than one issue:** The Atlas will provide data that will be useful in addressing many issues, including natural resource needs, public access, agriculture, flood control and other types of development.

9. **Leverage:** See the "Project Financing" section above.

10. **Conflict resolution:** The project will help to resolve conflicts between natural resource needs and development by identifying habitat areas of most importance, both historic and current.

11. **Innovation:** Historical Ecology is a relatively new field and is becoming a valuable tool for conservation efforts. By providing information on the actual habitats, species assemblages and hydrologic regimes that existed historically, this project will support the development of restoration projects with more locally appropriate configurations.

12. **Readiness:** In cooperation with other agencies and nonprofit organizations, SFEI has completed much of the necessary research on the historical ecology of the Napa region. It is now ready to move ahead with the design and publication of the Atlas.

13. **Realization of prior Conservancy Goals**: the project will advance the Napa River Rutherford Reach restoration project by providing necessary information to ensure that

the restoration designs and goals are locally appropriate and based on specific habitats historically present in the area.

14. **Cooperation:** From its inception, the Napa Historical Ecology project has depended on the cooperation of many agencies and organizations, including those named in "Support of the Public" above.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/ STATE WATER QUALITY CONTROL PLAN:

The project is consistent with the Regional Water Quality Control Board's San Francisco Bay Basin Plan in that it will provide extensive data outlining historical ecological changes in the Napa River Watershed, which will be useful in the implementation of the Total Maximum Daily Load ("TMDL") program for this watershed. The purpose of the Napa River TMDL program is to monitor the total volume of sediment deposition released into the river and to design measures to lower sediment loads. To this end, during the research phase of Napa Historical Ecology project, the State Water Resources Control Board provided a Proposition 40 Agricultural Water Quality Program grant to SFEI.

COMPLIANCE WITH CEQA:

The proposed project is statutorily exempt from review under the California Environmental Quality Act pursuant to 14 California Code of Regulations Section 15262, in that it would involve only planning studies and feasibility analyses for possible future action not yet adopted by the Conservancy. Preparation of an historical ecology atlas does not legally bind the Conservancy to future implementation of protection, restoration or enhancement projects that are designed using the Atlas. The project is also categorically exempt under Section 15306, which exempts basic data collection and resource evaluation activities leading to an action which the Conservancy has not yet approved, adopted or funded. Upon approval, staff will file a Notice of Exemption for this project.