

COASTAL CONSERVANCY

Staff Recommendation  
September 15, 2004

**NAPA RIVER  
RUTHERFORD REACH RESTORATION**

File No. 04-068  
Project Manager: Abe Doherty/Carol Arnold

**RECOMMENDED ACTION:** Authorization to disburse up to \$279,400 to the Napa County Resource Conservation District to complete detailed engineering designs, environmental review documents, and permit applications for the restoration of the Rutherford Reach of the Napa River.

**LOCATION:** Approximately four and one-half miles of the Napa River, between Oakville Cross Rd. and Zinfandel Lane bridges, approximately twenty miles upstream of the river mouth (Exhibit 1).

**PROGRAM CATEGORY:** San Francisco Bay Area Conservancy

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**EXHIBITS**

- Exhibit 1: Project Location and Site Map
  - Exhibit 2: Proposed Restoration Conceptual Approach
  - Exhibit 3: Letters of Support
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**RESOLUTION AND FINDINGS:**

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31160-31164 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed two hundred eighty thousand dollars (\$279,400) to the Napa County Resource Conservation District (NRCD) for the preparation of engineering designs, environmental documentation and permit applications for restoration of the Rutherford Reach of the Napa River. This authorization is subject to the condition that prior to the disbursement of any funds, the NRCD shall submit for review and approval of the Executive Officer of the Conservancy:

1. A work program, budget, and schedule;

2. The names and qualifications of any contractors or subcontractors that the NRCD intends to employ to implement the project;
3. Evidence that all necessary permits and approvals for the project have been obtained;
4. Evidence that landowners whose properties have been identified as probable project construction sites agree to access by project personnel and to support the project.
5. Evidence that all funds necessary to complete this phase of the project have been secured.”

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 Public Resources Code Sections 31160-31164 regarding the Conservancy’s mandate to address the resource goals of the San Francisco Bay Area;
2. The proposed project is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on January 4, 2001.”

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**PROJECT SUMMARY:**

This authorization would result in 1) the completion of detailed engineering designs, 2) environmental documentation and 3) submittal of permit applications for a project to restore the approximately 4-1/2 mile Rutherford Reach of the Napa River (Exhibit 1). These three components of the restoration project are necessary steps toward restoration of a significant section of the Napa River, which has been impaired by severe channel erosion that has degraded the habitat value of the river to species such as Steelhead trout, a federally listed threatened species and California freshwater shrimp, a federally listed endangered species. The private-public partnership working on implementation of this project provides an innovative model for encouraging other landowners to carry out similar restoration projects.

This project is unusual since the private landowners adjacent to the river have taken the initiative and provided funding to perform work necessary for the implementation of this large restoration project. Over 90% of the landowners, representing over 98% of the land adjacent to the river in this area, are participating in the Rutherford Dust Society, a non-profit association of vintners and growers owning or managing land within the Rutherford wine-growing region of the Napa Valley. As described in the support letters, this restoration project has informed, and is anticipated to continue to educate, private landowners on the factors involved in maintaining valuable riparian habitat and processes, which can provide important benefits for managing healthy and productive agricultural lands. The private landowners in this area are especially motivated to support restoration of the riparian corridor, since non-native and invasive plants currently located adjacent to the Napa River, such as Himalayan blackberry and periwinkle, serve as hosts for the bacterium that causes Pierce’s disease and can significantly affect vineyards.

The Restoration Team of the Rutherford Dust Society initiated the restoration project in May 2002 and funded the development of a *Conceptual Plan for Stabilization and Restoration of the Napa River, Rutherford Reach*, completed in November, 2003. The landowners with river frontage recently agreed to a yearly assessment to contribute to the restoration project. The Conservancy will work with the Rutherford Dust Society to obtain written confirmation of the intentions of the landowners to continue to support implementation of the restoration project.

The detailed design plans will expand upon the preliminary designs presented in the *Conceptual Plan* to address the underlying causes of channel instability on a reach-by-reach basis (Exhibit 2). The restoration approaches presented in the *Conceptual Plan* allow the river enough room to develop a new floodplain outside the entrenched channel cross-section. In some areas, the *Conceptual Plan* calls for extensive modifications of the river banks, including levee setbacks and recreation of river floodplain. In other reaches, site specific bank stabilization is recommended, using bioengineering techniques and fish habitat restoration structures.

Preparation of the detailed engineering designs will include geomorphology and engineering design (including hydraulic modeling and a topographic survey), vegetation and buffer design, and fisheries consultation to improve fisheries habitat. All of these elements will be integrated into a set of site-specific project designs, including grading plans, biotechnical stabilization details, vegetation plans and natural in-stream structure designs. The project will be guided by a technical advisory committee and landowner input.

In addition to completing the detailed design work, the NRCDD will prepare documents necessary for environmental review (including CEQA and NEPA) and project permitting on the basis of the detailed design plans. Completion of the detailed design documents, environmental review and permit applications and consultations with regulators will provide greater detail for planning the costs and schedule for subsequent phases of the restoration project, including the preparation of the construction documents and implementation of the project.

This project will also result in preparation of a maintenance plan for the stability and quality of the river environment after implementation of the initial phases of the restoration project. It is likely that the landowners, working in cooperation with relevant agencies, will maintain the river corridor.

If implemented, this project could significantly improve fish and wildlife habitat within the river corridor, as well as reduce sedimentation at the downstream estuary. It would provide a blueprint for other organizations restoring habitat on private lands. In particular, it could encourage other private agricultural operators to improve water quality and modify their practices to be more compatible with resource needs. Already, landowners upstream and downstream from the Rutherford Reach are interested in restoring their properties, which, combined with this project, could result in 12 miles of improved riverine habitat. Additionally, the project could have educational benefits through a partnership with a local school organization that arranges school group participation in habitat restoration.

The NRCDD is exceptionally qualified to provide the necessary leadership for this project. It has recent experience coordinating and administering multiple consultants, and overseeing complex restoration planning projects in the nearby Sulphur Creek and Carneros Creek watersheds. It has long been involved with Napa River restoration issues, and has an excellent understanding of related agricultural and natural resource matters.

**Site Description:** The Rutherford Reach of the Napa River is approximately 4-1/2 miles long and lies 20 miles upstream of the mouth of the river. As part of the Napa Valley, it is composed of alluvial fan and valley fill deposits that were washed down from the adjacent mountain slopes on the east and west valley sides.

The Napa Valley was converted to grazing and croplands in the 1840's. Until the 1960's, orchards, vineyards, field crops and small-scale urbanization were the primary land uses. Since that time, grape production has rapidly increased, and is currently the predominant land use within the Rutherford Reach and surrounding valley bottom.

Until the 1940's, the mainstem of the river was still well connected to its floodplain and flooded annually. The Napa River and its riparian corridor have been modified in numerous ways due to human uses of adjacent lands. At present, the river flows almost entirely within a single channel, and is disconnected from its former floodplain due to the entrenchment of the river, made more pronounced by the construction of flood levees downstream.

Downcutting on the Napa River have caused banks to become higher and steeper, leading to instability and collapse. Large flood flows that would previously have spread out onto the floodplain, dissipating erosive energy, are now confined and concentrated with a deep narrow channel where they continue to cause accelerated erosion of both the riverbed and banks, causing associated problems for landowners and the environment. The river along the Rutherford Reach suffers from accelerated bank erosion and slumping, resulting in a loss of valuable vineyard land, infrastructure, aquatic habitat and riparian woodland.

As the river bed has incised, it has converted a complex aquatic environment of riffle and pools into a simpler system with lower value to native aquatic wildlife such as Chinook salmon, steelhead trout, a federally listed threatened species and California freshwater shrimp, a federally listed endangered species. At present the steelhead run is believed to be less than a few hundred adults. Other native fish continue to occupy the river, including Pacific lamprey, tule perch, and Sacramento splittail. Although substantially diminished from historic conditions, native fish diversity in the Napa River is unsurpassed in Central Valley and Sierra streams. Because of this, resource agencies consider the river and its watershed a priority for conservation efforts.

**Project History:** The Napa River has long been of concern to the Conservancy. In 1996, the Conservancy funded technical studies for the lower reach (between the City of Napa and the river mouth), which resulted in development of a multi-objective flood management plan. This plan replaced a US Army Corps of Engineers (COE) trapezoidal concrete channel design that regulatory agency staff and others contended would have no benefit to natural resources, and little benefit to the community other than flood control.

The new plan recommended a project that provided flood management, as well as aesthetic, environmental and other benefits to the community. The Conservancy has since funded two property acquisitions to implement flood management and habitat improvements recommended in the plan. A local bond measure was passed by the voters that has funded many of the plan's other recommendations.

The Conservancy has also funded several watershed assessments within the Napa River watershed. Working with the NRCDD, these assessments have led to the identification of projects that could be implemented on private lands to reduce erosion and sedimentation and improve

instream and adjacent habitat. In addition, the Conservancy is involved in large-scale restoration within the Napa marshes at the mouth of the river.

The NRCDC has joined with the Rutherford Dust Society (RDS), an association of landowners in the Rutherford region of the Napa valley, to identify specific projects that could be implemented on their properties in the Rutherford reach of the river. The mission of the RDS is “to work collaboratively with neighbors and agencies to stabilize river banks, reduce the impacts of flooding, protect and enhance fish and wildlife habitat, reduce Pierce’s disease pressure on vineyards, and to provide ongoing education about the river and its watershed.”

The RDS hired a consulting firm to prepare “A Conceptual Plan for the Stabilization and Restoration of the Napa River.” The Department of Fish & Game also contributed funding and expertise to this plan. The NRCDC has enlisted other agencies to help with engineering designs for, and/or implementation of, projects recommended in the conceptual plan, including the Napa County Flood Control District, the Wildlife Conservation Board, and the Department of Fish & Game, as well as private landowners.

**PROJECT FINANCING:**

Coastal Conservancy	\$279,400
Wildlife Conservation Board	\$25,000
Napa County Flood Control District	\$235,700
Department of Fish & Game	\$22,400
Landowners	<u>\$38,000</u>
<b>Total Project Cost</b>	<b>\$601,100</b>

The expected source of funds for this project is the FY 03/04 appropriation to the Conservancy from the “Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002” (Proposition 50). Proposition 50 authorizes the use of funds for projects within the nine-county San Francisco Bay area, as described in section 31162 of the Public Resources Code (Water Code § 79572(c)). Consistent with the requirements of this section, the Rutherford Reach project provides funding for the planning and permitting of the restoration of riparian habitat within the San Francisco Bay planning area.

**CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:**

This project is undertaken pursuant to Chapter 4.5 of the Conservancy’s enabling legislation, Public Resource Code Sections 31160-31164, to address resource goals in the San Francisco Bay Area.

Section 31162 of the Public Resources Code authorizes the Conservancy to undertake projects and award grants in the nine-county San Francisco Bay Area, including Napa County. All of the proposed project area is within Napa County.

Under Section 31162(b), the Conservancy may act to protect, restore, and enhance natural habitats and connecting corridors, watersheds, scenic areas, and other open-space resources of

regional significance. Completion of the design, environmental review and permit application phases is necessary before implementing the Napa River, Rutherford Reach restoration project to protect, restore and enhance approximately 4-1/2 miles of river corridor, which is of regional importance.

Consistent with Section 31162(c), the Napa River, Rutherford Reach project implements the policies and programs of the adopted plans of the local government, as described in greater detail in the “Consistency with the Local Government Plans” section of this staff recommendation, below.

Consistent with Section 31163(c), the Napa River, Rutherford Reach engineering design project is:

- (1) supported by the adopted Napa County General Plan and associated ordinances,
- (2) serves a regional constituency, in that the project is designed to improve water quality, riparian habitat, including for endangered and threatened species, and supports an important agricultural commodity of the state,
- (3) can be implemented in a timely manner as funding for this phase of the project is currently assembled, and
- (4) capitalizes on the momentum developed by the project partners in developing the conceptual plan; and
- (5) includes matching funds from other state agencies, NRCDF and private sources of funding.

**CONSISTENCY WITH CONSERVANCY'S  
STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 10 Objective B**, the proposed project will result in detailed engineering plans to restore approximately 4-1/2 miles of riparian habitat.

**CONSISTENCY WITH CONSERVANCY'S  
PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines adopted January 24, 2001, 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 has widespread public support, including that of Assemblywoman Patricia Wiggins, Senator Wesley Chesbro, the Rutherford Dust Society (non-profit of landowners along this portion of the Napa River), the Regional Water Quality Control Board, the Department of Fish & Game, the Land Trust of Napa County, Napa

County Flood Control and Water Conservation District, the Natural Resources Conservation Service and Acorn Soupe (provides environmental education for youth). Letters of Support are attached as Exhibit 3.

4. **Location:** The Rutherford Reach of the Napa River lies within the nine-county San Francisco Bay Area, consistent with Sections 31161 and 31162 of the Public Resources Code.
5. **Need:** Detailed engineering designs, environmental documents and permits are essential for the Napa River, Rutherford Ranch project to move forward, and to attract implementation funds. Without Conservancy funds, the NRCDC cannot move forward to the detailed design/environmental review/permitting phase.
6. **Greater-than-local interest:** The Napa River is an important agricultural area, as well as a destination for fisherman, birders, and boaters from throughout the Bay Area. Although project work will occur on private lands, enhancing the Rutherford Reach of the Napa River will provide a benefit that extends beyond the project area, especially since it will likely enhance the habitat of California freshwater shrimp, a federally listed endangered species and Steelhead trout, a Federally-listed threatened species that is present in the river. Implementation of the restoration project will also protect the adjacent, regionally-significant agricultural lands (vineyards). This restoration initiative may serve as a demonstration project for the involvement of private landowners in restoring valuable habitat.

#### **Additional Criteria**

7. **Urgency:** The banks along the Rutherford Reach of the Napa River are unstable, resulting in loss of riparian vegetation, excess deposition of sediment, and degradation of riffle-pool habitat, which is important for salmonids, including Chinook salmon and Steelhead trout, a federally listed threatened species. Unless projects to repair this damage are undertaken soon, these declines will continue to impair the threatened and endangered aquatic wildlife that live in the river. Implementation of well-designed restoration measures to support a riparian system in a state of dynamic equilibrium with valuable wildlife habitat is much more preferable than performance of emergency repairs by landowners after significant storm events breach levees and erode banks.
8. **Resolution of more than one issue:** This restoration project is being designed to restore and protect natural stream processes and functions to improve water quality and protect wildlife, including Steelhead trout. The project is also being designed to enhance and manage the river's response to floodwaters, including by re-establishing meanders and a connection to the floodplain, where possible. The design component involving removal of nonnative plants, including those that serve as hosts for Pierce's disease, a serious concern for wine-growers, will also protect adjacent agricultural land.
9. **Leverage:** See the "Project Financing" section above.
10. **Conflict resolution:** The project will resolve conflicts between the needs of agricultural operations and natural resources.
11. **Innovation:** The involvement of the private landowners in initiating this restoration project, becoming educated about river processes and functions, and helping to fund this project, is an

innovative model that is already inspiring other groups of landowners along the Napa River to take on a leadership role in restoring the river.

12. **Readiness:** The NRCDC and its partners are ready to move ahead with this phase of the project, guided by the recommendations of a conceptual plan completed in November 2003.
13. **Realization of prior Conservancy goals:** “See “Project History” above.”
14. **Cooperation:** The Napa River, Rutherford Reach project involves private landowners, nonprofit organizations and local, state and federal government agencies. A technical advisory committee consisting of representatives from interested agencies and organizations will be established to guide project development. Landowner input will be a significant component of the project.

**CONSISTENCY WITH LOCAL GOVERNMENT PLANS:**

The proposed riparian restoration project is consistent with the Napa County General Plan, and the associated Zoning Ordinance, including the Conservation Regulations (Title 18). Section 18.108.010 of the Zoning Ordinance, which sets forth the objectives of the conservation regulations, states that the regulations are intended to preserve riparian areas, minimize soil erosion, and maintain and improve, to the extent feasible, existing water quality.

The proposed project is also consistent with the Napa County Floodplain Management regulations. These regulations recognize the importance of protecting riparian vegetation for the preservation of fish and game habitats, prevention or reduction of erosion, maintenance of cool water temperature, and prevention or reduction of siltation (Section 16.04.050). The Floodplain Management regulations include findings that riparian vegetation is a valuable natural resource and that streamside vegetation benefits wildlife, protects against erosion, and preserves the rural character of the County (Section 16.04.010).

**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 that is not yet adopted by the Conservancy. Preparation of the engineering studies does not legally bind the Conservancy to future implementation of the restoration project. 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.