Flood Protection Corridor Program:

Project Evaluation Criteria And Competitive Grant Application Form

I. Introduction

The following information constitutes the basis for determining whether a proposed project meets the legal criteria for funding under the Flood Protection Corridor Program and for evaluating the proposal to determine its priority in competition with all concurrent proposals. Proposals qualified under Section III of these criteria will be placed on one of two priority lists. If the proposal serves a flood protection need that is a high priority with the Department of Water Resources (other than through this Program) and it also rates a high priority *either* with the Department of Conservation for purposes of preserving agricultural land under the California Farmland Conservancy Program, *or* with the Department of Fish and Game for purposes of wildlife habitat or restoration, it will be placed on the "A List". All other qualified projects will be placed on the "B List". "A List" projects will be funded first, and when all "A List" projects have been funded to the Department's stated limit, "B List" projects will be funded.

II. General Information

Project Name:	City of St Helena Flood Protection and Flood Corridor Restoration Project
Project Location:	City of St Helena County; Napa, California
Name and address of sponsoring agency or non-profit organization:	City of St Helena 1480 Main Street St Helena, California
Name of Project Manager (contact):	Myke Praul
Phone Number:	707 963-2741
E-mail Address:	MykeP@ci.st-helena.ca.us
Grant Request Amount:	$5,000,000

Myke Praul, City Engineer/ Public Works Director

Project Manager, Title

Date

Bonnie Long, City Manager

Date

PROJECT OBJECTIVE(S):

Briefly describe your project and explain how it will advance FPCP goals. Please also include a detailed map of the immediate project site and another that shows its location within your geographical area. Photographs showing problem areas proposed to be enhanced by the project should also be included.

The City of St. Helena Flood Protection and Flood Corridor Restoration Project will protect 468 mobile homes, single-family dwellings, low-income multifamily units, and retail structures from frequent flood damage caused by overflow of the Napa River through the incorporated City of St. Helena in Napa County. The project is a multi-objective project which will provide flood damage reduction through restoration and re-establishment of the natural floodplain along the project reach, setting back of levees and the re-creation and restoration of a natural floodway corridor providing over 22 acres of high value riparian forest which will improve both terrestrial and fish habitat on the Napa River, which is listed by the EPA as an impaired waterway. Steelhead and salmon recovery will be improved by the project and passive recreation will provide Napa River viewing and interpretive opportunities for local residents who now have no access to this reach of the Napa River. The project will also provide all-weather cross-Napa Valley access for the residents of the City to its nearest hospital, which is presently inaccessible during flood events greater than the 50-year probability storm.

Flood Protection

Devastating flooding through the project reach has occurred regularly since the building of the Vineyard Valley Mobile-home Park in the *floodway* of the Napa River in the 1970's, before the National Flood Insurance Program was established. While the St. Helena City Council rejected the project, the proponents received approval to build the park through a voter referendum. The Park was completely flooded in 1986 and 1995 and partially inundated in 1997. In addition to average annual financial losses from flooding of $1.5 million, the area is a severe health and safety problem. Because the park experiences severe water velocities during inundation and has only one entrance/exit, the elderly population living in the park find themselves in a life threatening situation in flood events of 50 year probability and greater, as do emergency personnel who must evacuate the park.

The Hunt's Grove affordable housing complex will also be protected. This 56 unit low income-housing complex was flooded during the 1995 storm dislocating fifty-six families and causing millions of dollars of flood damage. Scattered single family and commercial structures will also be protected by the project.
The mobile-home park and surrounding properties are one of the highest repetitive flood loss locations in California, according to FEMA's NFIP records. Because of this, FEMA has provided planning funds and technical assistance in the design of this project.

The Enhanced Minimum Plan, the City's preferred alternative, will protect all of these properties from flooding events up to the 500-year probability storm.

Flood Corridor Re-Creation and Restoration

The project will provide flood protection by re-creating and restoring the natural floodplain corridor through the one (1) mile project reach and re-connect the Napa River to it's historical floodplain, thereby reducing water surface elevations through the area by several feet, and avoiding large flood control structures and channelization. Creation of flood and habitat terraces on the east bank of the Napa River across and upstream of the Vineyard Valley Mobile home Park and Hunt's Grove, as well as creation of a flood terrace set at the geomorphically appropriate dominant discharge elevation will be excavated and planted with native habitat and allow liberal Mannings "N" roughness for habitat restoration of the natural floodplain terraces. These terraces will vary from 100-300 feet in width and providing an overall flood corridor of over 1000 feet in width

Over 20 areas of rich floodplain riparian habitat will be re-established and restored through re-vegetation of native communities of willow/alder, vine/ash, Oak/Snowberry and Buckeye/Walnut in the newly created overflow channels. Aquatic habitat will be improved through the project reach through these planting providing new Shaded Riverine Habitat as well as through installation of large logs and woody debris providing improved fish passage habitat. There is presently little varied down wood in the existing river corridor due to demands for regular river clearing to maximize floodwater conveyance. The Enhanced Minimum plan will rectify this situation providing resting placed for migrating salmonids.

The new flood corridor terraces will also provide areas for filtering of non-point source storm water runoff and become a feature of the City's TMDL and NPDES strategy.

Setback Levees and Structural Elements

Relocation of 29 homes of the Vineyard Valley Mobile Home Park (VVMP) will be required to accommodate the new terraces. These homes will be re-located back away from the Napa River on land to the north of the VVMP which is zoned medium density residential in the City's General Plan.

Setback levees of approximately six feet in height (lower than current rock rip-rapped levees) will protect the remaining units in the park as well as the Hunt's Grove complex. These will replace the existing uncertified floodwall at the north boundary of VVMP.

A setback floodwall will be necessary through a 500-foot reach below the bend in the river. This floodwall will be setback over 50 feet from top of bank to avoid hardscape armoring and rip rap. All bank stabilization will use bio-technical methods.

Extension of Adams Street from its existing terminus to the Silverado Trail, including a causeway and bridge spanning the newly created flood terraces will serve as the northern boundary levee for the project area as well as providing the all weather cross Napa Valley access to hospital for St. Helena and County unincorporated west-side residents.

Public Access and Trails

Passive recreation and interpretive pedestrian paths will be included in the design to provide public access through the flood terraces where no public access now exists. The trail system will link to the City's recreation fields and existing park facilities to the south of the Pope Street Bridge and will connect to

pedestrian access on the Adams Street extension, providing a loop trail for City residents connecting to downtown St. Helena.

Funding and Cost Sharing

The cost estimate for this project is $26 million. The proposed cost sharing is 50% local funding from the City's share of the Napa County Flood Protection Sales Tax Ordinance (Measure A) approved by $^2/_3$ of the Napa County electorate in 1998. Under the Ordinance, a ½ cent Sales Tax was enacted for 20 years. While $^2/_3$ of the funds go to pay for the City of Napa Flood Protection and Estuary Enhancement Project (a Corps of Engineers sponsored Project) in the County's major urban center, goes to the County's small cities and unincorporated areas to address critical flood protection needs. The City of St. Helena's share of the Measure A through the year 2018 will pay for 50% of the Project costs. Measure A funds and other flood control facilities maintenance assessment funds will be dedicated to on-going adaptive maintenance and operations of the project once completed.

This application requests $5 million to pay for 20% of project capital costs. The City is also working with the Corps of Engineers and FEMA to obtain a 30% Federal participation through the COE Continuing Authorities Program, Section 206 and other programs.

The local Measure A funds may only be used for design flood protection projects in accordance with the Living River Guidelines developed by a Community Coalition of over 200 local residents and the SF Regional Water Quality Control Board in 1996 to guide the design of the Napa City project which has received international recognition as a more enlightened flood protection strategy compared with traditional Corps of Engineers channelization and structural projects. These are measurable objectives to which all Measure A projects must adhere. These guidelines assure a multi-objective project based upon sound geomorphic principals as the underlying goal.

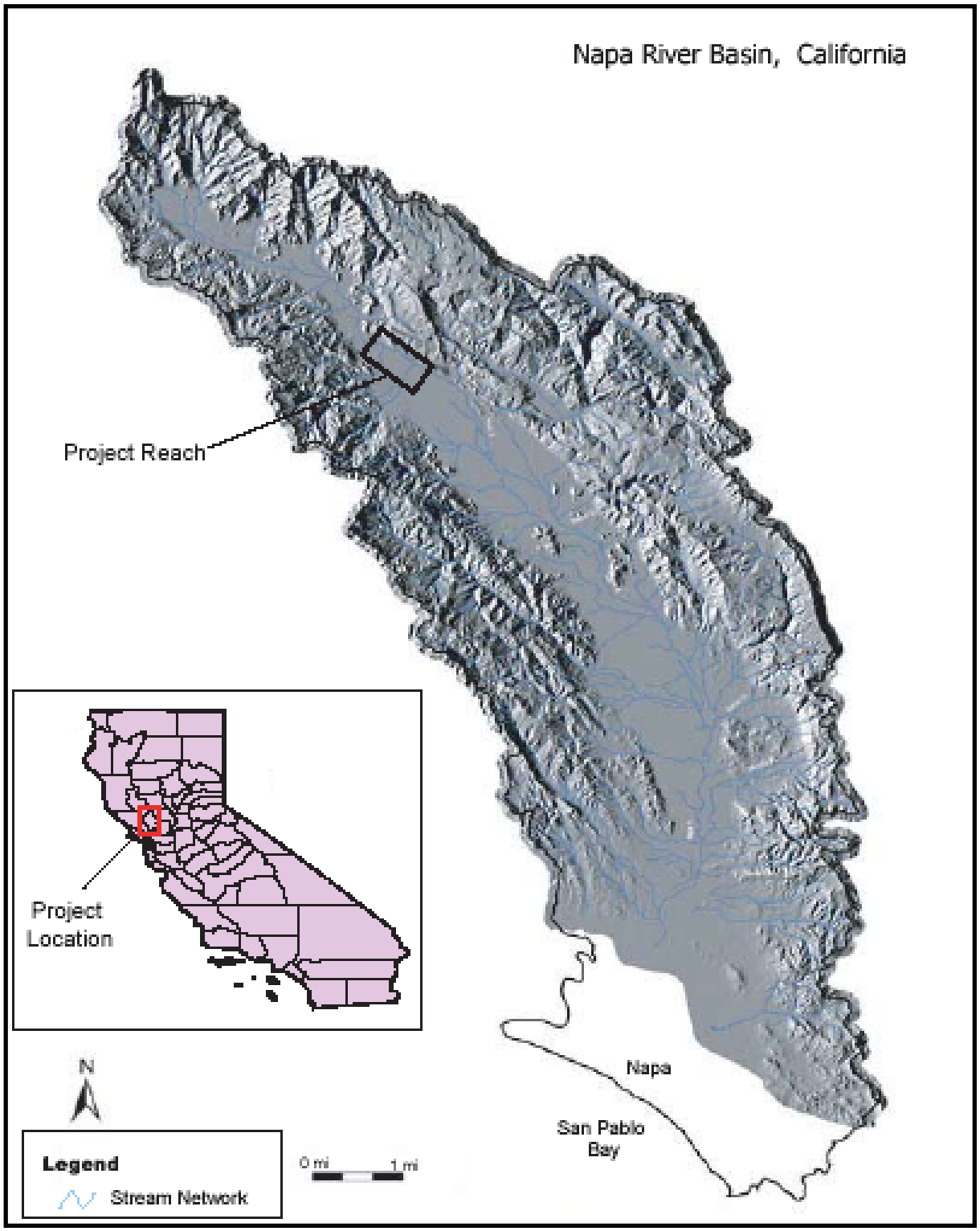


Figure 1. Napa River Basin Watershed Map

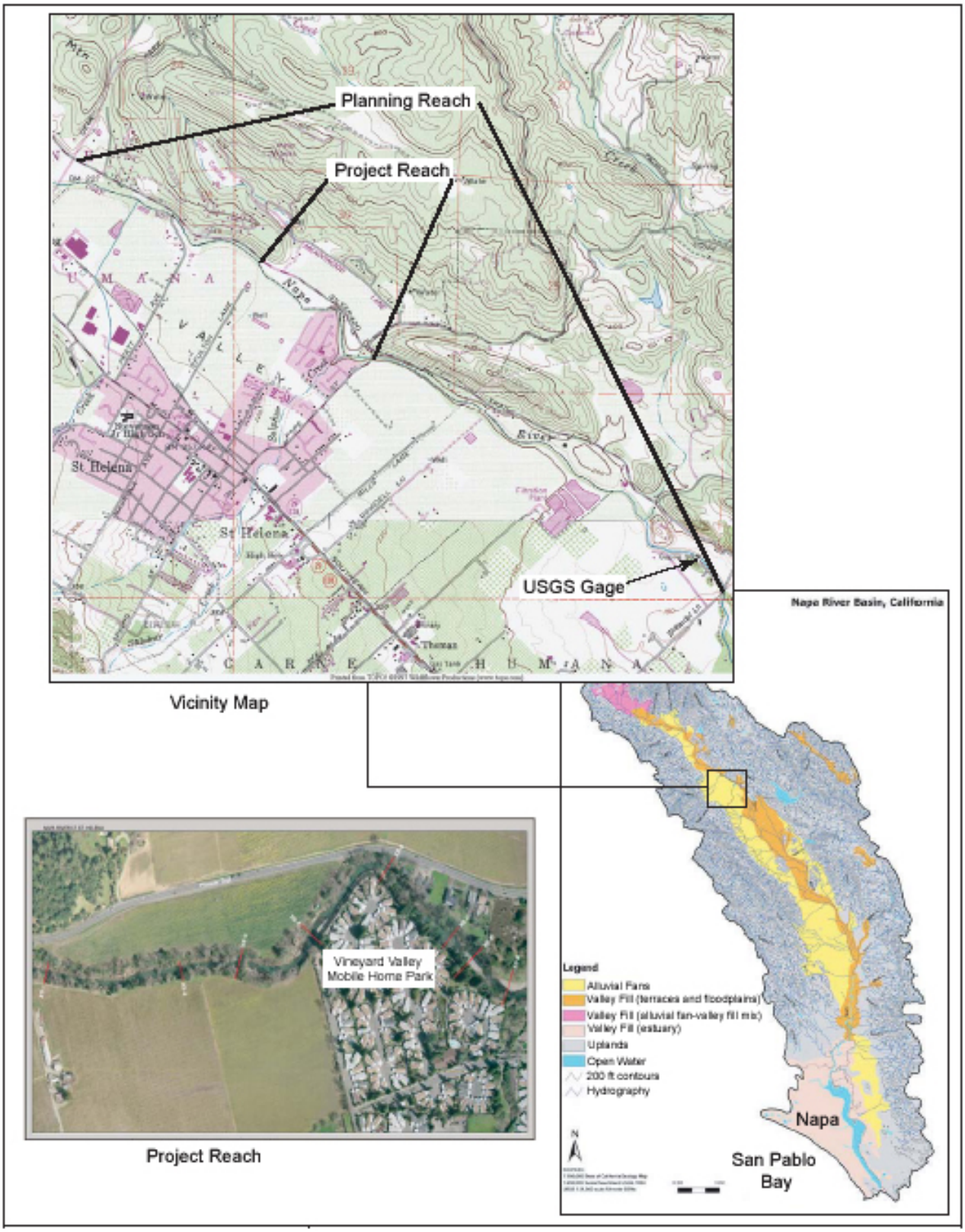


Figure 2. Vicinity Map showing the project reach and larger planning reach of the Napa River near St. Helena

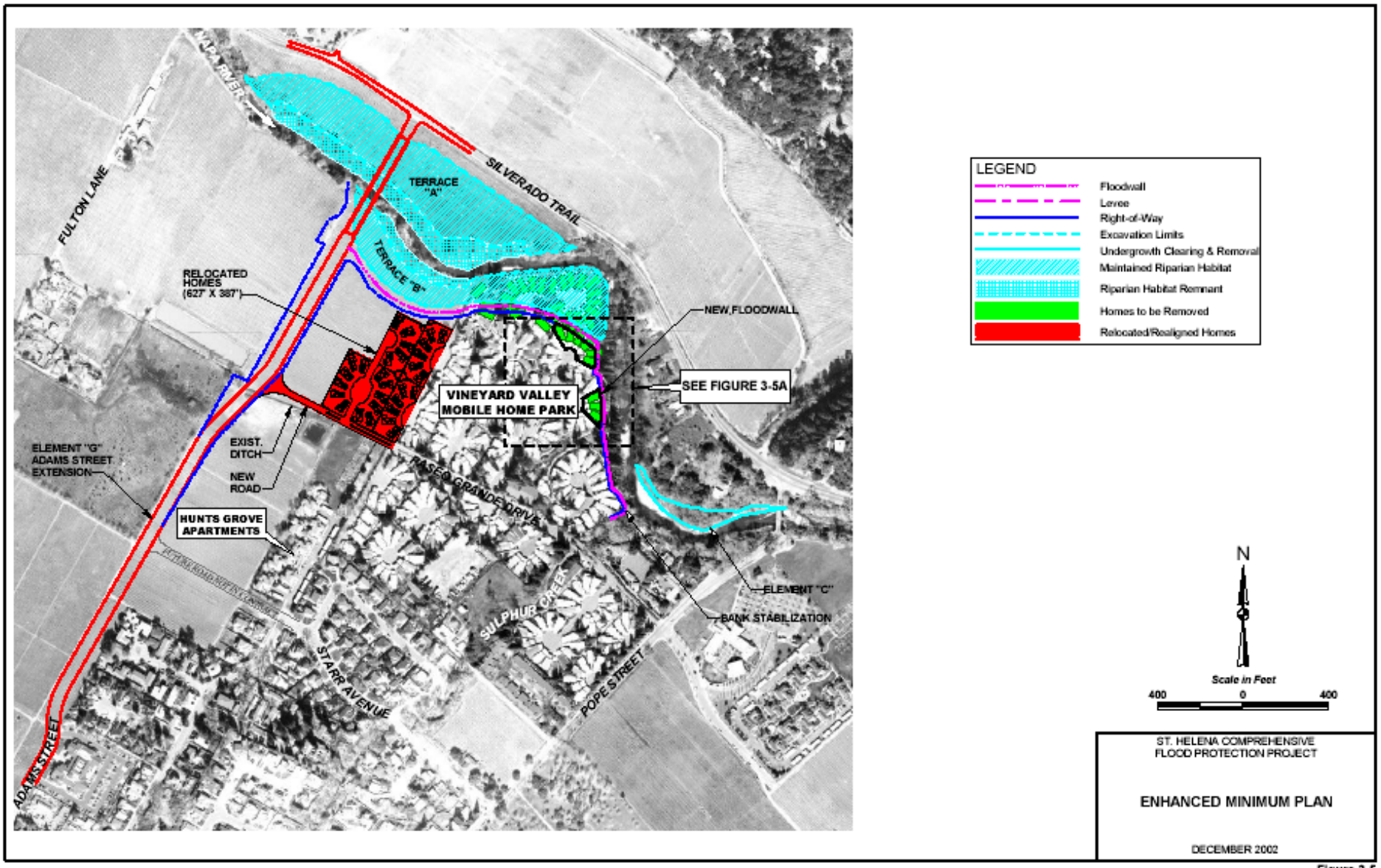


Figure 3. St Helena Comprehensive Flood Protection Project Enhanced Minimum Plan

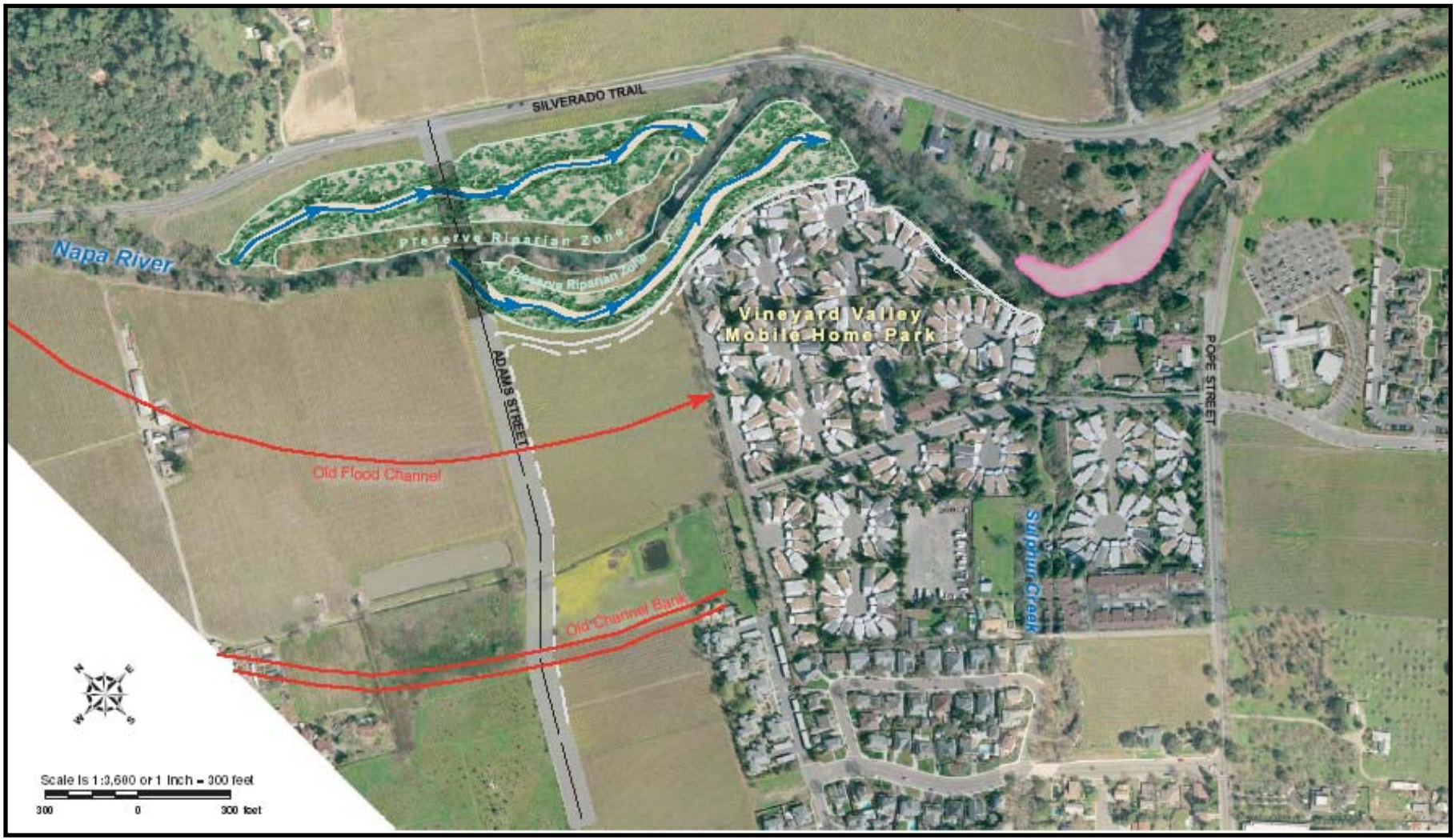
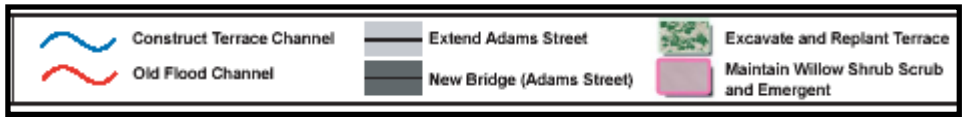


Figure 4. Napa River near St. Helena flood control project map



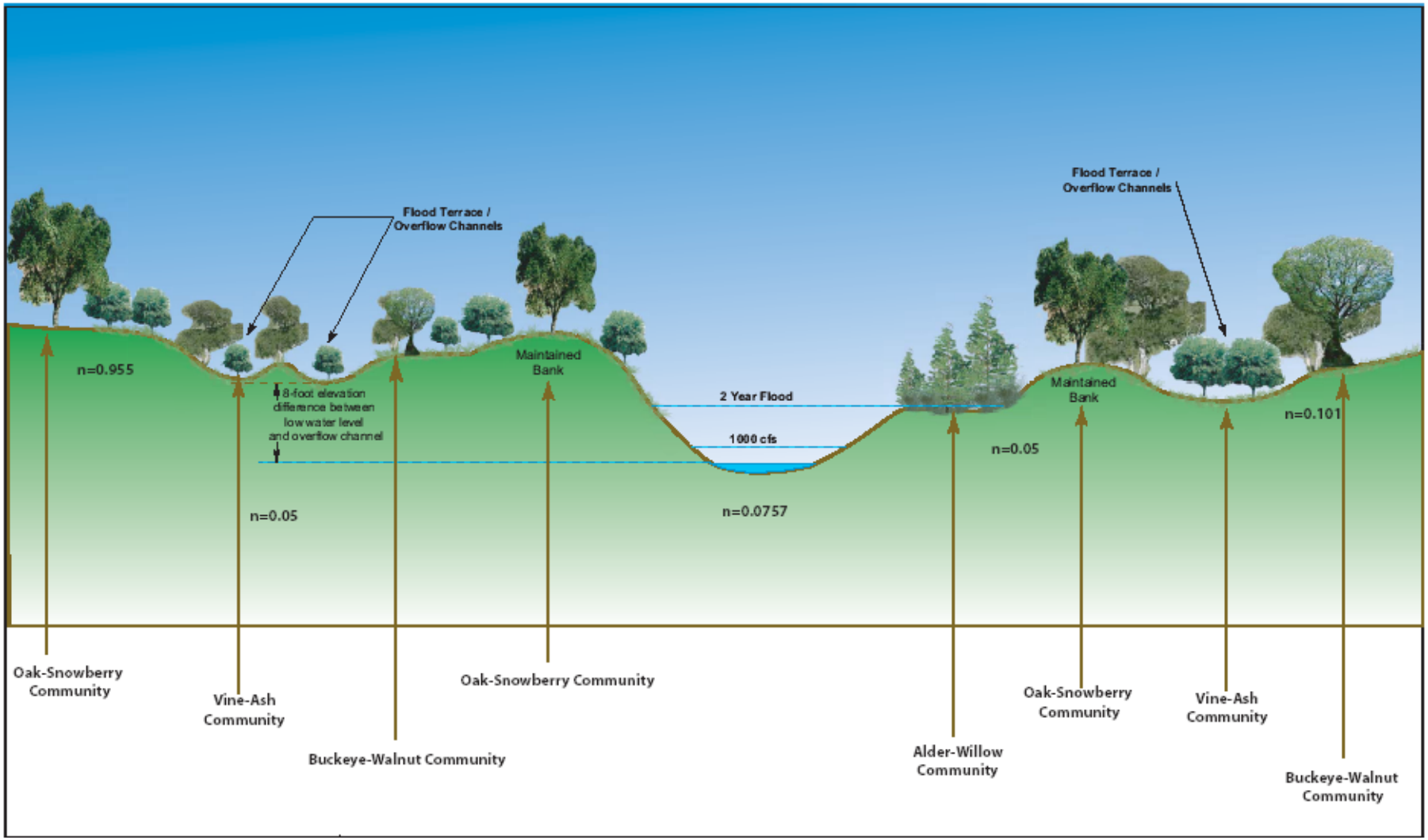


Figure 5. Conceptual cross section view of proposed grading and re-vegetation plan for the EMP. Flood terrace / overflow channels will be excavated behind the existing mature riparian vegetation corridor (labeled maintained bank). Manning's hydraulic roughness values (n) correspond to those used in the HEC-RAS models for proposed EMP.

**To be complete, an application package must include all of the items specified in the proposed Section 497.7 of Title 23, California Code of Regulations, Division 2, that is available on the FPCP web site (www.dfm.water.ca.gov/fpcp) by selecting the Regulations link.*

III. Minimum Qualifications

Project proposals that do not meet the minimum qualifications will not be accepted.

A. ☑ ***The project proposes to use any granted funds for protection, creation, and enhancement of flood protection corridors [Water Code Section 79037(b)].***

B. ☑ ***A local public agency, a non-profit organization, or a joint venture of local public agencies, non-profit organizations, or both proposes the project [Water Code Section 79037(a)].***

The City of St. Helena is a public agency.

C. ☑ ***The project will use the California Conservation Corps or a community conservation corps whenever feasible [Water Code Section 79038(b)].***

See letter from California Conservation Corps.

D. ☑ ***If it is proposed to acquire property in fee to protect or enhance flood protection corridors and floodplains while preserving or enhancing agricultural use, the proponent has considered and documented all practical alternatives to acquisition of fee interest [Water Code Section 79039(a)].***

Funds will not be used for land acquisition. Any property to be acquired will be acquired using local funds. All practical alternatives will be explored in the effort to avoid acquisition of fee interest.

E. ☑ ***Holders of property interests proposed to be acquired are willing to sell them [Water Code Section 79040].***

Funds will not be used for land acquisition. Any property to be acquired will be acquired using local funds. All practical alternatives will be explored in the effort to avoid using acquisition of fee interest.

F. ☑ ***If it is proposed to acquire property interests, the proposal describes how a plan will be developed that evaluates and minimizes the impact on adjacent landowners prior to such acquisition and evaluates the impact on the following [Water Code Section 79041]:***

Floodwaters including water surface elevations and flow velocities

- The structural integrity of affected levees
- Diversion facilities
- Customary agricultural husbandry practices
- Timber extraction operations

The proposal must also describe maintenance required for a) the acquired property, b) any facilities that are to be constructed or altered.

G. ☑ *The project site is located at least partially in one of the following:*

1. ***A Federal Emergency Management Agency (FEMA) Special Flood Hazard Area (SFHA), or***

   The Project is located within a FEMA Special Flood Hazard Area (SFHA) that was determined in accordance with FEMA regulations and is designated as a Zone AE.

2. ***An area that would be inundated if the project were completed and an adjacent FEMA SFHA were inundated, or***

   No

3. ***A FEMA SFHA, which is determined by using the detailed methods identified in FEMA Publication 37, published in January 1995, titled "Flood Insurance Study Guidelines and Specifications for Study Contractors", or***

   Yes

4. ***A floodplain designated by The Reclamation Board under Water Code Section 8402(f) [Title 23, California Code of Regulations, Division 2, Section 497.5(a)], or a***

   No

5. ***Locally designated Flood Hazard Area, with credible hydrologic data to support designation of at lease one in 100 annual probability of flood risk. This is applicable to locations without levees, or where existing levees can be set back, breached, or removed. In the latter case, levee setbacks, removal, or breaching to allow inundation of the floodplain should be part of the project.***

   Yes, the City has conducted new hydrology modeling as part of the planning process and believes the 100 Year "Q" is 2,000 CFS greater (21,000CFS) than current FEMA estimates used in current FIRM mapping for the area.

   Applicant has read the above requirements and meets them.

IV. (340 POINTS) FLOOD PROTECTION BENEFITS

A. EXISTING AND POTENTIAL URBAN DEVELOPMENT IN THE FLOODPLAIN (50)

1. ***Describe the existing and potential urban development at the site and the nature of the flood risk.***

Devastating flooding through the project reach has occurred regularly since the building of the Vineyard Valley Mobile Home Park in the floodway of the Napa River in the 1970's, before the National Flood Insurance Program was established. The Park was completely flooded in 1986 and 1995 and partially inundated in 1997. In addition to average annual financial losses from flooding of $1.5 million, the area is a severe health and safety problem. Because the park experiences severe water velocities during inundation and has only one entrance/exit, the elderly population living in the park find themselves in life threatening situation in flood events of 50 year probability and greater, as do emergency personnel who must evacuate the park.

The proposed project site would involve terracing banks along the Napa River, which is currently zoned for agricultural use on the east side of the river (Terrace A 16.6 acres) and 8 acres along the east side of the river (Terrace B), Terrace B would remove approximately 4.6 acres of residential land to be converted to open space for purposes of flood damage reduction.

The Napa River flows along the north boundary of the City of St. Helena in northern Napa County. Runoff produced from periodic large storms in the 80 square mile watershed above St. Helena has caused flooding in several developed areas along on the river's flood plain, most notably at the Vineyard Valley Mobile Home Park, the City's wastewater Treatment Plant, and the Hunt Grove Apartments. Flooding was particularly severe in 1986 and 1995 when many buildings were damaged and residents displaced. The 1995 flood is the storm of record and was considered a 100-year peak flood event. The nature of flooding risk is primarily the residential areas directly adjacent to the river. This includes Vineyard Valley Mobile Home Park (235 units), and several single family homes in outlying areas between Pratt Ave and Pope Street. Also includes Hunts Grove Apartments (56 units) all of which are located within the current FEMA flood plain.

The area shown on the map on the next page (Figure 6), shown as Parcel #31. (4.9 acres) would be converted for relocated homes from VVMHP. This property is currently under agricultural production; however, the conversion of this land is compatible with General Plan policy since it is contained within the urban service area. According to the General Plan the agricultural land is designated as Vacant or Underutilized Lands Suitable for Development and is zoned as medium density residential. The Remainder of Parcel #31, is approximately 7.5 acres is zoned medium density residential, however, the City will evaluate the potential for developing the remainder parcel for open space use. It is not likely that this will compromise the City's policy for providing adequate housing sites within the community. The construction of the Adams Street extension would convert 6.2 acres of existing agricultural land and would allow the development of that land for medium density residential as is consistent with the General Plan.

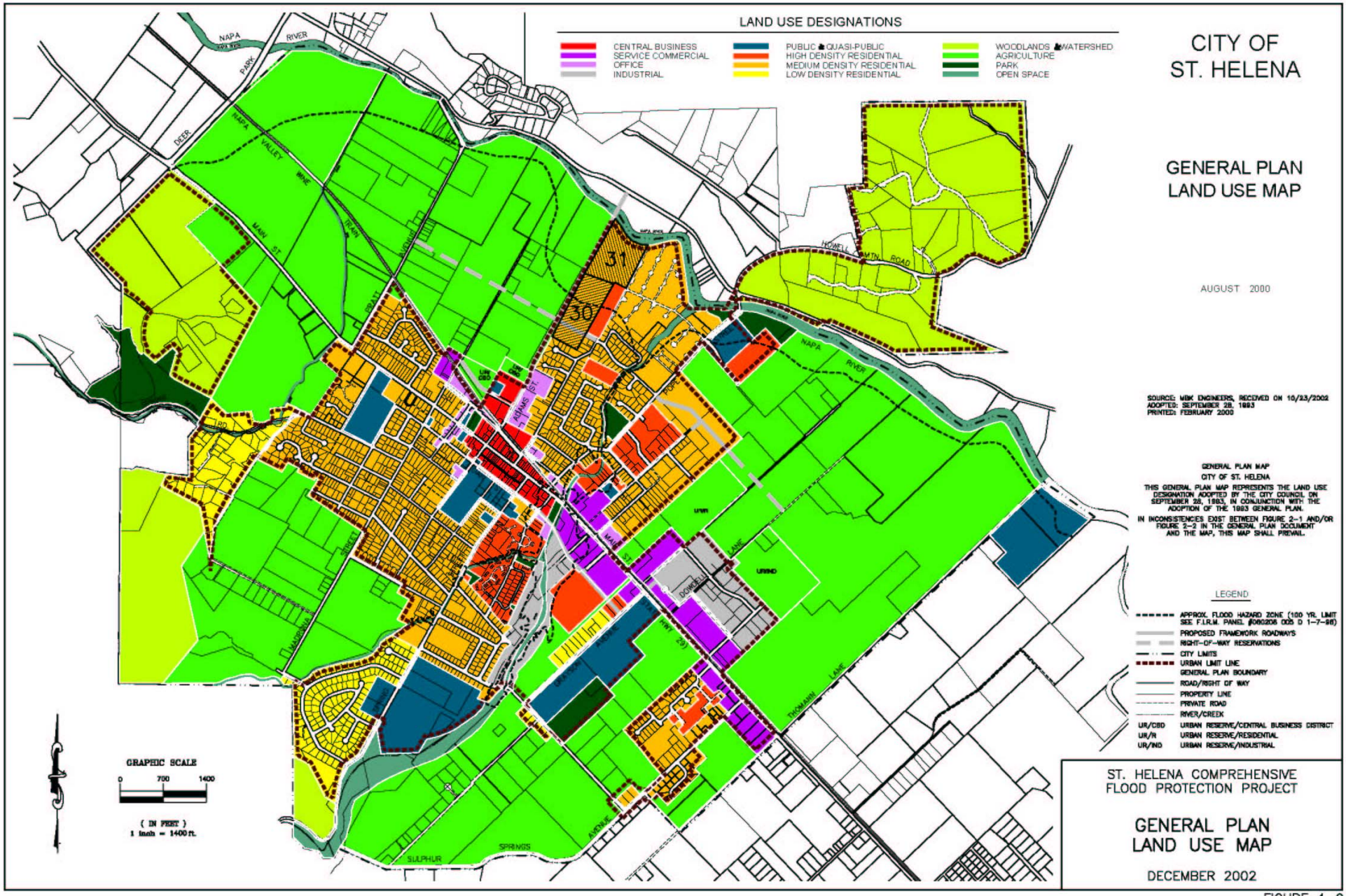


Figure 6. General Plan Land Use Map

Table1. Acreage Requirements of Project Features

Feature	Current Land Use/ (Zoning Designation)	Estimated Acreage Needed
		Enhanced Minimum Plan
Terrace A	Agriculture (Outside City Limits)	16.7
Terrace B	Residential/Agriculture (Medium Density Residential)	8.0
Element C	Open Space (Open Space)	1.0
Adams Street extension	(Framework Roadway)	6.2
Vineyard Valley Mobile Home Park	(Medium Density Residential)	4.9
Vineyard Valley levee/floodwall	(Medium Density Residential)	0.0
Hunts Grove Apartments levee/floodwall	(Medium Density Residential)	0.0
Total		**36.8**

2. ***How often has flooding occurred historically?***

Since 1853, it has been a continual battle defending St. Helena and its residents from the flooding Napa River. The City of Napa has suffered from 27 floods between 1862 and 1997, with the largest flood occurring on February 18, 1986. Between 1961 and 1997, Napa County residents suffered $542 million in property damage. In 1995 and 1997, the Napa River overflowed its banks, turning most towns along the Napa River into churning tributaries, and forcing people to abandon their homes and businesses (FEMA, 2001).

The flood event of 1986 and 1995 caused complete flooding at VVMHP, Hunts Grove Apartments and homes on Silverado Trail and Pratt Ave and the City's wastewater treatment plan. Estimated damages were well over $50 Million and the 1995 flooding resulted in the displacement of over 150 Vineyard Valley residents.

This particular area is one of the highest repetitive flood loss locations in the state of California.

3. ***Discuss the importance of improving the flood protection at this location. Include the number of people and structures that are affected by the flood hazard, and the flood impacts to highways and roads, railroads, airports and other infrastructure, and agriculture.***

Improving flood protection to this particular area is very important to prevent repetitive flood damages, loss of homes and displacement of an older population of residents within a small community. 300 residents in VVMHP and an additional 139 residents at Hunts Grove Apartments would benefit from improved flood protection, representing 8% of the total population within the community. An additional 200-500 residents in the surrounding area would also benefit from improved flood protection and reduced water surface elevations. Structures affected within the project area are listed below in Table 2. With the project in place, 202 structures includes 194 structures in VVMHP and 8 structures comprising Hunts Grove Apartments would be removed from the 100-year FEMA flood plain. Additional structures within the benefit assessment area shown on the map will benefit from reduced water surface elevations but will remain with the FEMA floodplain extent.

Roads: The extension of Adams Street would provide flood damage reduction for the land between the roadway and VVMHP and Hunts Grove apartments and is consistent with City's General Plan policies Adams Street extension would allow for an all weather access to St Helena Hospital (located on east side of Silverado Trail) for St. Helena and residents in outlying incorporated areas on the west side of Silverado Trail and Napa River. This would provide much improved emergency medical assistance and transport during flood events for entire community.

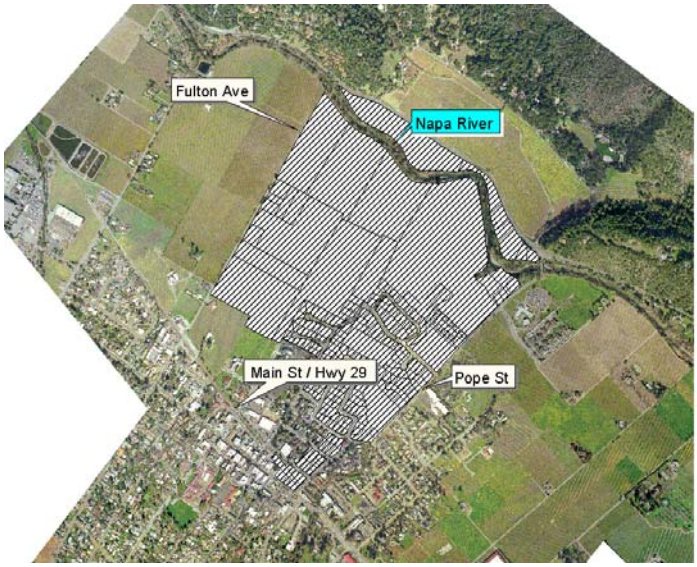


Figure 7. Benefit Assessment Area

Table 2. Structure Inventory Categories and Size

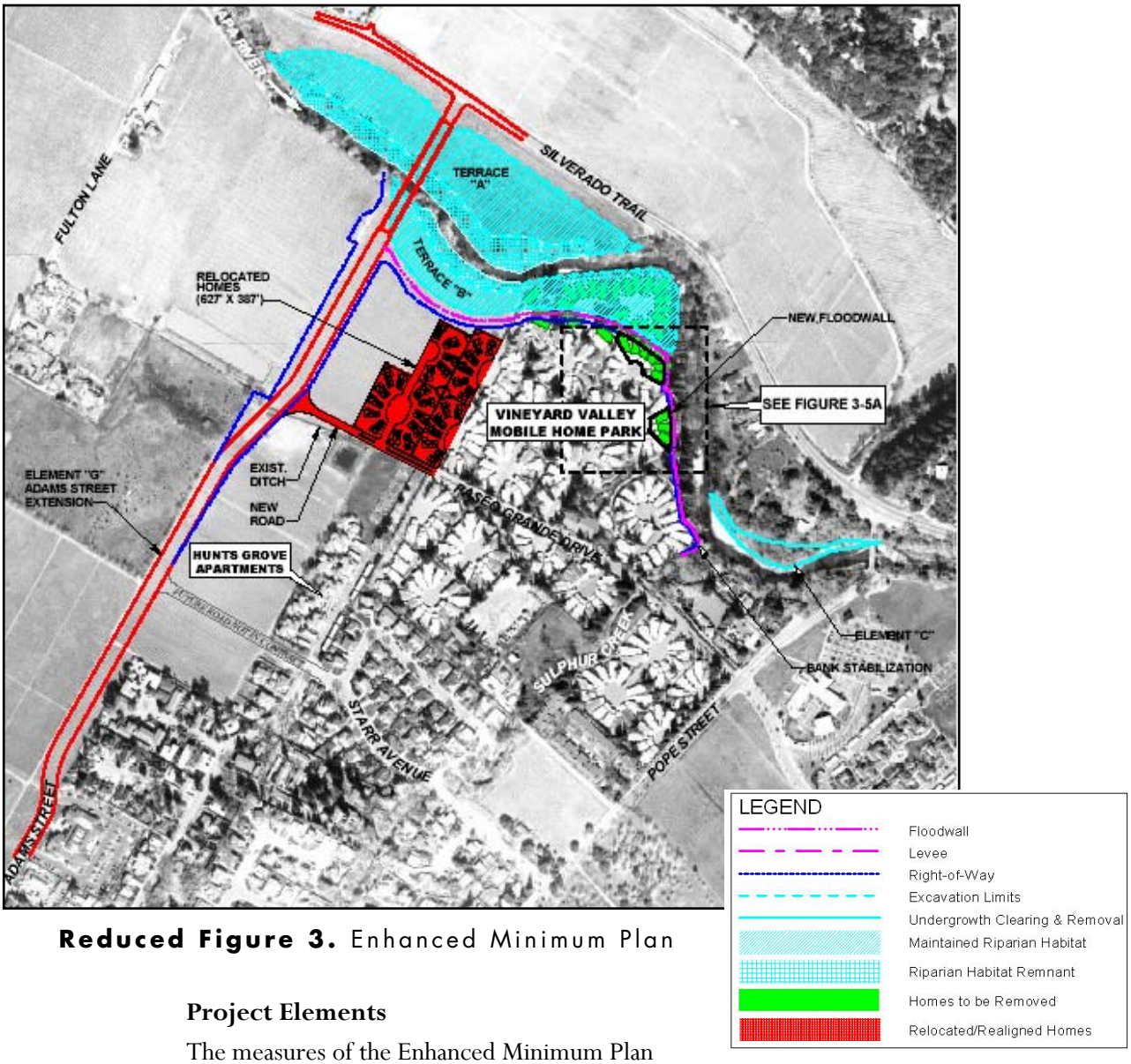
CATEGORY (1)	SUBCATEGORY (2)	NUMBER OF STRUCTURES (3)
Residential	Mobile homes in VVMHP	233
	One story, two story single family homes	189
	Townhouse / condo	18
	Residential duplex, triplex, fourplex	11
	Apartment complexes	10
Retail and Commercial	General retail, store/office combo, restaurant, shopping center, vehicle oriented	7
TOTAL		**468**

B. FLOOD DAMAGE REDUCTION BENEFITS OF THE PROJECT (100)

1. ***Does the proposed project provide for transitory storage of floodwaters?***

   The floodplain in the project reach provides significant transitory storage benefits. Construction of the project would not have a significant impact on transitory storage.

2. ***Describe any structural and non-structural flood damage reduction elements of the project. (Examples of structural elements are levees, weirs, detention/retention basins, rock slope-protection, etc. Examples of non-structural elements are acquisition of property for open space, acquisition of land for flood flow easements, transitory storage, relocation of structures and other flood prone development, elevating flood prone structures, flood proofing structures, etc.)***



Reduced Figure 3. Enhanced Minimum Plan

Project Elements

The measures of the Enhanced Minimum Plan include (MBK Engineers, 2002):

- The creation of terraces on the left (east) bank of the Napa River across from and upstream of VVMHP, as well as the creation of a terrace on the right (west) bank of the river within VVMHP and upstream to Adams Street. These terraces would vary from about 100 to 300 feet in width and would extend from about 5 to 8 feet in depth.

- The removal of under story and lower canopy vegetation on the existing left bank terrace of the Napa River, opposite of the Sulphur Creek confluence. The removal of this vegetation will improve channel conveyance in this section of the river.

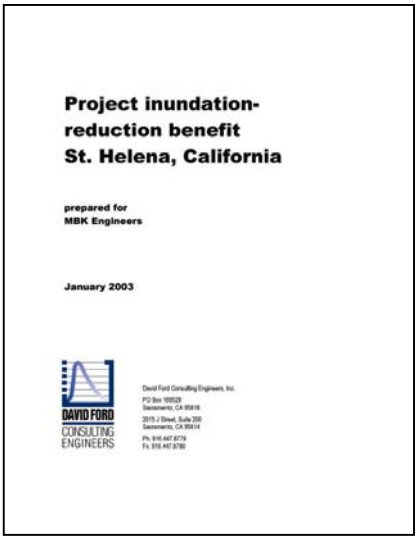
- Construction of a new set back levee/floodwall along the right bank terrace within VVMHP and upstream to Adams Street. This floodwall is an inverted T-type cantilever wall with a concrete keyway/cutoff. The length of the wall is approximately 925 feet. The height of this varies from 2 feet near Sulphur Creek to about 6 feet near Redondo Court in the VVMHP.

- The relocation of 31-33 spaces in VVMHP. The relocation of units in the VVMHP will be required to accommodate the proposed right side terrace and floodwall. These homes will be relocated to new spaces created along Del Rio and Del Campo Courts.

- The extension of Adams Street from its existing terminus to the Silverado Trail. This extension would lengthen Adams Street by approximately 3,500 feet. A new bridge structure will provide access across the Napa River and terraces adjacent to the river channel, with the roadway at a minimum elevation of 3 feet above the 100-year water level in the river. The Adams Street extension and bridge will provide all weather access to St. Helena Hospital.

- Modification of the existing storm drains in and/or along Del Rio Court.

3. ***By what methods and by how much dollar value will the project decrease expected average annual flood damages?***


Project inundation-
reduction benefit
St. Helena, California

prepared for
MBK Engineers

January 2003

DAVID FORD
CONSULTING
ENGINEERS

Attached as ***Appendix A***

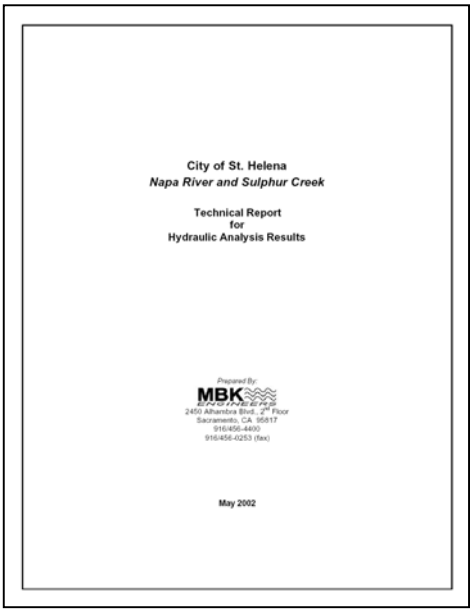
The project reduces the expected average annual flood damages by both reducing the water surface elevations in the project reach and protecting the structures with a constructed setback levee. As a result, both the frequency of flood damage and the depth of flooding at structures are reduced. Due to reduced water surface elevations and levee, the expected average annual flood damages are reduced $1,381,000. The attached Project inundation reduction benefit report prepared by David Ford Consulting Engineers details the flood damage calculations.

Table 3 shows the EAD inundation-reduction values computed for the without-project and with-project conditions and the annual inundation-reduction benefit. In addition, the estimated annual benefit in reduced national flood insurance administering cost is $30,000. Therefore, the sum of the annual inundation-reduction benefit and savings in flood insurance administering cost is $1,411, 000. Using a 50-year project life and the current California State discount rate of 6%, the justified cost of this project is $22,240,000.

Table 3. Expected Annual Flood-Damage Results

Condition (1)	Expected Annual Damage ($) (2)	Annual Inundation-Reduction Benefit ($) (3)
Without project	1,494	—
With project	113	1,381

4. ***How does the project affect the hydrologic and hydraulic conditions at the project site and adjacent properties?***


City of St. Helena
Napa River and Sulphur Creek

Technical Report
for
Hydraulic Analysis Results

Prepared By:
MBK
2450 Alhambra Blvd., 2nd Floor
Sacramento, CA 95817
916/456-4400
916/456-0253 (fax)

May 2002

Attached as ***Appendix B***

Construction of the project will reduce water surface elevations in the project reach by 2-2.4 feet for the 100-year flow and will not increase water surface elevations upstream or downstream of the project reach. Appendix B of the attached Engineering Feasibility Study details the hydrologic and hydraulic analysis of the project prepared by MBK Engineers. The project will provide 100-year protection with 3-feet of freeboard, which meets FEMA NFIP requirements and 500-year protection with 1-foot of freeboard.

a. *Will the project reduce the magnitude of a flood flow, which could cause property damage and/or loss of life?*

No

b. *What are the effects of the project on water surface elevations during a flood event, which could cause property damage and/or loss of life?*

Construction of the project would reduce water surface elevations in the project reach and would not increase water surface elevations up or downstream of the project reach. Appendix A of the attached Draft Feasibility Study details the hydrologic and hydraulic analysis of the project.

Table 4. Napa River at St. Helena

Calculated 100-Year Water Surface Elevations (WSE)

Alternative Analysis

Location	Peak Flow (cfs)	Ground	Napa River Existing Condition	Enhanced Minimum Plan	
			WSE	WSE	Diff
At Fulton Road RM 2.52 FF=219.2	17,750	219	219.9	218.8	-1.1
Hunts Grove Apts NE Corner (SA1) FF=217.2	N/A	215	218.5	216.1	-2.4
Napa River Vineyard Valley RM 2.23 Wall	19,000	212	218.2	216.1	-2.1
Pope Street Bridge RM 1.794 Upstream	22,000	213	214.9	213.0	-1.9
College Fields RM 1.68 FF=±213	22,000	211	211.2	211.6	+0.4

TABLE 5. Napa River at St. Helena

Calculated 500-Year Water Surface Elevations (WSE)

Alternative Analysis

Location	Peak Flow (cfs)	Ground	Napa River Existing Condition	Enhanced Minimum Plan	
			WSE	WSE	Diff
At Fulton Road RM 2.52 FF=219.2	21,450	219	221.0	219.6	-1.4
Hunts Grove Apts NE Corner (SA1) FF=217.2	N/A	215	218.9	N/A	N/A
Napa River Vineyard Valley RM 2.23 Wall	23,350	212	219.1	217.1	-2.0
Pope Street Bridge RM 1.794 Upstream	27,000	213	216.2	214.1	-2.1
College Fields RM 1.68 FF=±213	27,000	211	211.8	212.4	0.6

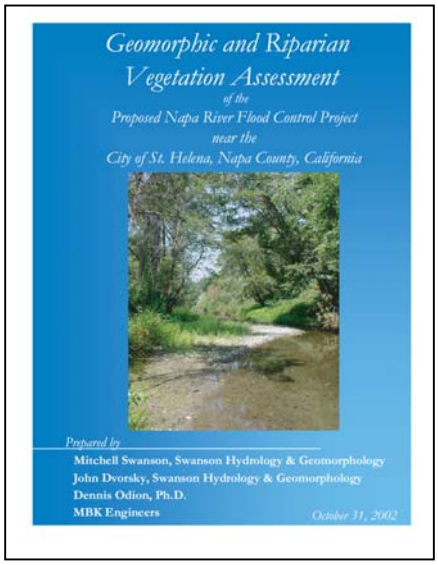
c. *How are flow velocities impacted by the project during a flood flow, which could cause property damage and/or loss of life?*

Flood flow velocities in the channel of the Napa River are not significantly changed by the project and subsequently do not impact property damage. Terraces have been designed and evaluated for geomorphic stability in the channel and in the floodplain over bank. A geomorphic assessment has been conducted to ensure that this change in hydraulic force will not lead to aggradation or degradation in the project reach. This report is included as Appendices C and D. Over bank velocities upstream and downstream of the project are not impacted by the project.

C. Restoration Of Natural Processes (60)

1. ***Describe how any natural channel processes will be restored (for example: for channel meander, sediment transport, inundation of historic floodplain, etc.) and describe how these natural processes will affect flood management and adjacent properties.***

Attached as ***Appendix C***



Attached as ***Appendix D***

The Geomorphic Design Report for the Enhanced Minimum Plan Flood Protection and Ecosystem Restoration Project is attached as Appendices C and D. This Report and the Geomorphic and Riparian Vegetation Assessment of the proposed project are prepared by Swanson Hydrology and Geomorphology and Dennis Odion, Phd., Plant Ecologist, to guide the design of the Project for maximum restoration of natural processes, while providing 100-500 year flood protection.

These Reports are developed using extensive field work, geomorphic science, and hydraulic analysis and detail how the project will restore the river and floodplain corridor natural processes, channel meander and stability, sediment transport, and adaptive maintenance and management of plan features.

In summary,

- The Project will establish approximately 22 acres of self-sustaining riparian habitat in the excavated areas that will also act as flood conveyance channels.
- The Project presents a significant opportunity to restore ecosystem function in the project reach because it involves lowering the valley flood surface closer to river channel bed, thereby creating a functional floodplain.
- The Project will create a self-sustaining channel and flood plain configuration which is geomorphically stable in that it will successfully pass varied levels of flow and sediment

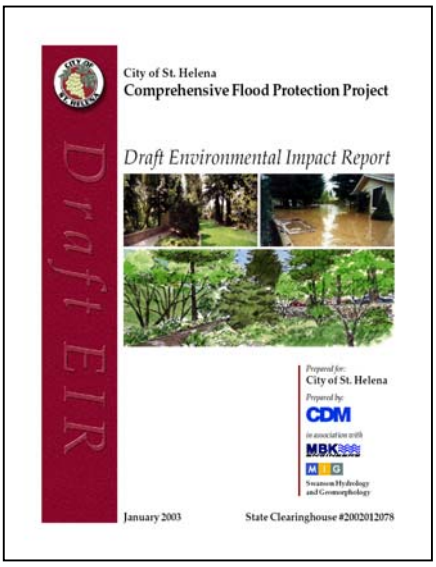
and that it is appropriate for present and future geomorphic conditions to maximize terrestrial and aquatic habitat resource values and diversity.

- The existing grouted rip rap bank protection structure at VVMP will be completely removed.
- Detailed grading and re-vegetation plans have been developed based upon extensive fieldwork completed by Swanson Hydrology and Geomorphology and Plant Ecologist Brian Odion.
- A detailed framework for Maintenance and Adaptive Management Plan has been developed which includes an intensive post-construction period to assure the desired vegetation communities in the excavated terrace areas.

2. ***Describe any upstream or downstream hydraulic or other effects (such as bank erosion or scour, sediment transport, growth inducement, etc.).***

Both the MBK Engineers Hydraulics Report and the 2 Swanson Reports (Appendices C and D) analyze the upstream and downstream hydraulic, sediment, and geomorphic effects of the Project from Deer Park Road to Zinfandel Lane and are summarized below:

Hydraulics: The project does not change Water Surface Elevations or velocities up or down stream of the Project reach.



Channel Stability: In summary, construction of the proposed enhanced minimum plan or minimum plan will not result in hydraulic changes significant enough to cause channel stability problems.

Sediment Transport: The Project will not reduce stability or increase sedimentation in the reach of up or downstream. The project will likely change the sediment transport competence slightly through the Project Reach, but not to a significant degree that could defect the project performance or channel stability. With the exception of results at one of the cross sections analyzed, bedload could raise the bed for a short period during the flood. However, the recessional flow would re-sour the streambed and create the low flow and bankfull channel sections.

Attached as ***Appendix F***

3. ***If the project includes channel modification or bank protection work, will riprap or dredging be part of the design? If so, provide an analysis of potential benefits and impacts.***

Bank Protection work will be minimal. However, where necessary, will be accomplished using bio-technical methods. Three such methods are included in Swanson Report for Bank Protection Design.

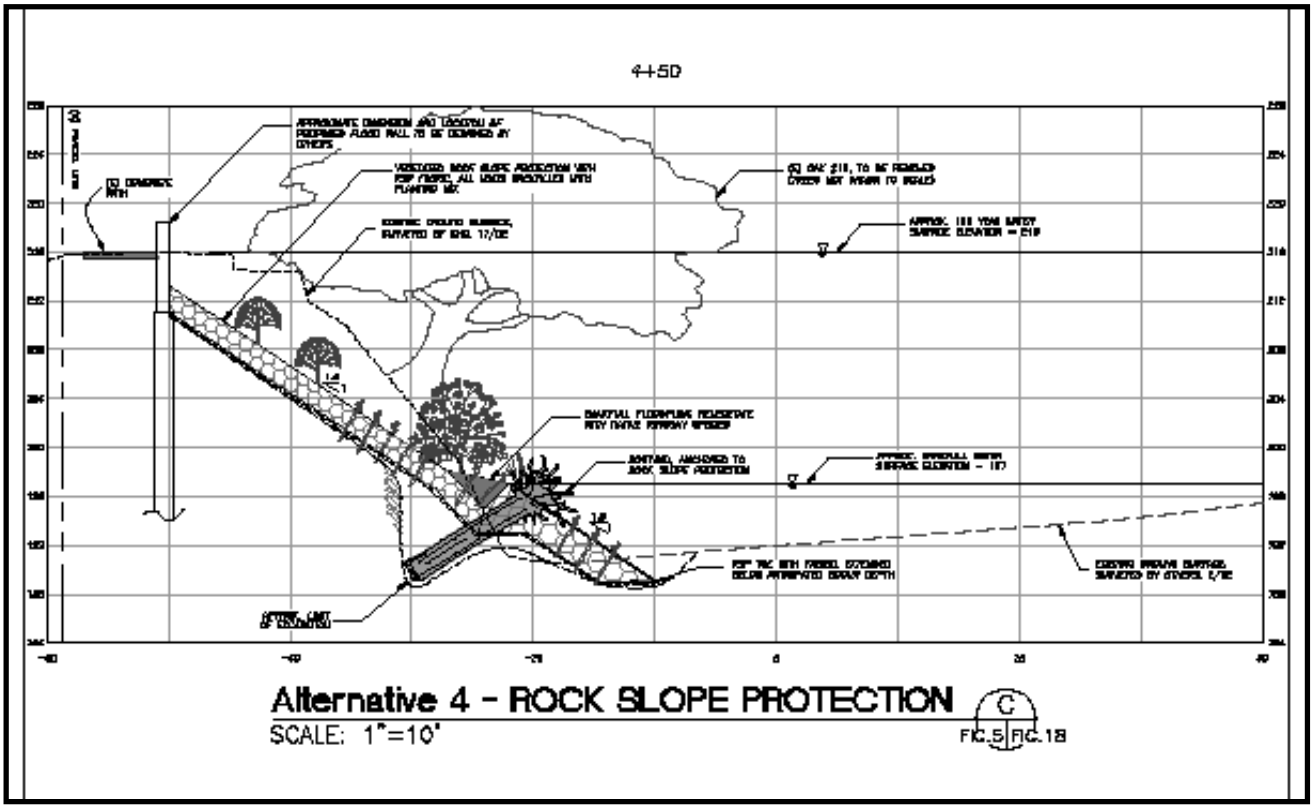


Figure 8a. 1 of 6 Bio-technical Methods included in the Swanson Report for Bank Protection

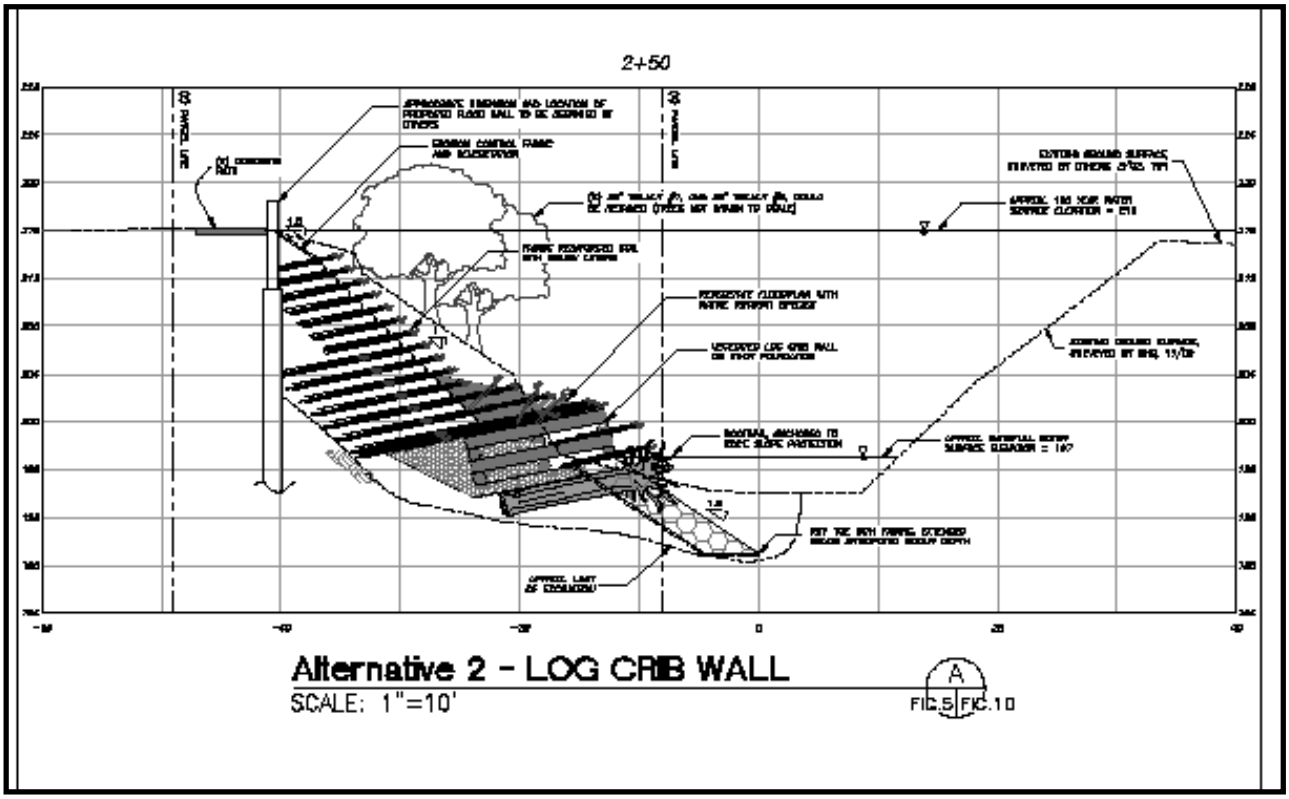


Figure 8b. 1 of 6 Bio-technical Methods included in the Swanson Report for Bank Protection

D. Project Effects On The Local Community (60)

1. ***How will the project impact future flooding on and off this site?***

   Construction of the project will significantly reduce flood damages in the project reach. The project will result in removal of VVMHP and Hunts Grove from the FEMA National Flood Insurance Program. The City has consulted FEMA throughout the design of the project and project design features recommended by FEMA have been incorporated to assure that a Letter of Map Revision will be approved by FEMA once the project is completed.

   VVMHP residents are presently paying in excess of $1000 per year for Flood Insurance. Many firms are no longer providing coverage due to the history of claims in the area.

   While the project is planned to provide **FEMA-NFIP** 100-year flow protection with 3-feet of freeboard necessary for LOMR approval, the project is also designed to protect the homes in the area from events up to 500-year event with 1- foot of freeboard.

2. ***How will the project affect emergency evacuation routes or emergency services and demands for emergency services?***

   The St Helena Hospital is on the east side of the Napa River while the City of St Helena is on the west side of the river. All of the bridges and roadways were closed during the 1986 and 1995 floods. The proposed project provides for an all weather access to the hospital.

   Implementation of the project will eliminate most of the need for emergency response and evacuation of the VVMHP and Hunt's Grove apartments which now occurs in 50 year flood events and greater. The St. Helena Police and Fire Departments, California Division of Forestry and Fire Protection, Red Cross, other social services agencies and FEMA had to respond with emergency services 4 times in the area since 1986. Because the mobile home park experiences severe water velocities during inundation and has only one entrance/exit, the elderly population living in the park find themselves in life threatening situation in flood events of 50 year probability and greater, as do emergency personnel who must evacuate the park.

3. ***Explain how the project will comply with the local community floodplain management ordinance and the floodplain management criteria specified in the Federal Emergency Management Agency's National Flood Insurance Program (FEMA's NFIP).***

   The project will protect existing structures in Vineyard Valley and relocate some structures to provide a minimum of 100-year flood protection per FEMA criteria. The project will also help to insure that development does not encroach into the regulatory floodway. Post-project conditions will reduce the amount and potential for flooding of structures from the Napa River

   New levees will be certified by the City. The City will maintain all certified flood protection levees as required under CFR§65.10(d) of FEMA regulations. This levee certification requires minimum freeboard, open closures, embankment erosion protection analysis, foundation stability, and interior drainage analysis.

A maintenance plan for the levee system will be developed to ensure levee stability, height and overall integrity.

E. Value Of Improvements Protected (70)

1. ***What is the assessed value of structural improvements that will be protected by the project?***

The assessed value of the structures in the benefit assessment area is $102.7 million. These structures include single-family and multi-family structures as well as retail and commercial structures. A map of the benefit assessment area is included below (Figure 9) and a description of the valuation process is included in the attached David Ford Project inundation reduction benefit report.

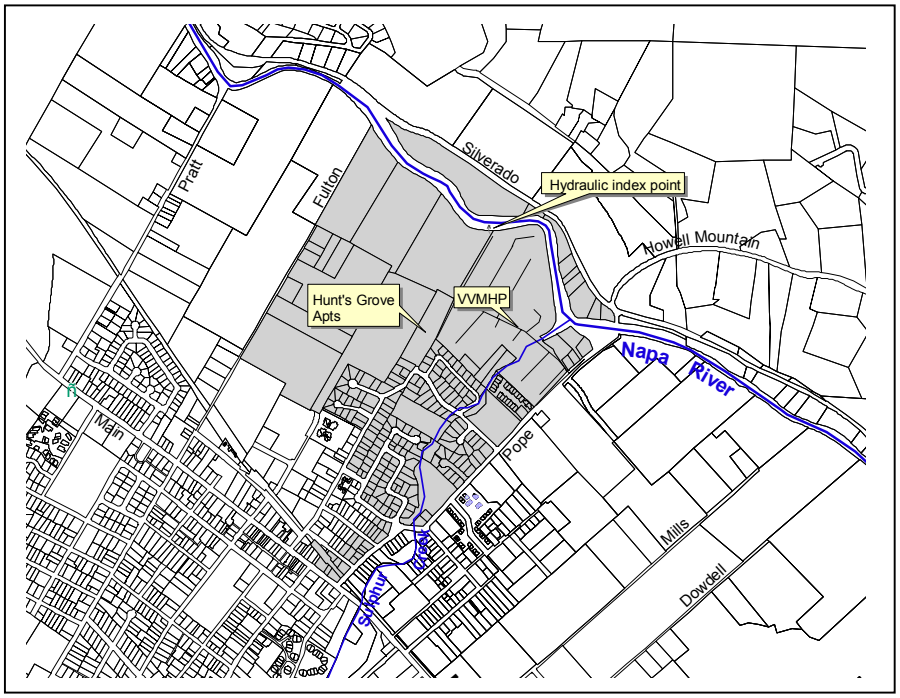


Figure 9. Shaded Parcels are Included in the Structure Database

2. ***What is the estimated replacement value of any flood control facilities or structures protected by the project?***

The depreciated replacement value of the structures in the benefit assessment area is $82.4 million. These structures include single-family and multi-family structures as well as retail and commercial structures. A map of the benefit assessment area and a description of the valuation process are included in the attached Project inundation reduction benefit report (Appendix A).

V. (340 POINTS) WILDLIFE AND AGRICULTURAL LAND CONSERVATION BENEFITS

Proponent should provide a statement of the relative importance of the project's wildlife and agricultural land conservation benefits. DWR will use the statement and all other project materials to assign a fraction of the total benefits to each type (wildlife ($\mathbf{F_w}$) or agricultural land conservation ($\mathbf{F_a}$)) so that the fractions total unity. Actual points scored for each type of resource will be multiplied by the respective fraction for each resource, and the wildlife and agricultural scores resulting for each type of resource will be added together.

A. (340xF_w POINTS) WILDLIFE BENEFITS

Habitat values refer to the ecological value and significance of the habitat features at this location that presently occur, have occurred historically, or will occur after restoration.

Viability refers to the site's ability, after restoration if necessary, to remain ecologically viable with minimal on-site management over the long-term, and to be able to recover from any natural catastrophic disturbances (fire, floods, etc.).

A1. Importance Of The Site To Regional Ecology (70)

1. ***Describe any habitat linkages, ecotones, corridors, or other buffer zones within or adjacent to the site. How are these affected by the project?***

   The proposed project addresses key elements of concern for biological productivity in the Napa River (Stillwater Sciences, 2002), especially for salmonids (steelhead and chinook salmon). The Stillwater Sciences Report was commissioned by the SF Water Quality Control Board and the University of California, Berkeley to assist the Regional Board, the County of Napa and other stakeholders to understand the Napa River system and to develop strategies for salmoid recovery in the Napa River. The Swanson Report utilized the Stillwater Report as a basis to evaluate the proposed Flood Protection Report. Table 2 on pages 57-58 of Appendix C shows a list of potential salmonid life cycle limitations and the potential change associated with the proposed project. In general, a lack of Large Woody Debris (LWD) can be addressed as design features to be installed with the project. Other factors, such as shading, connectivity to flood plain surfaces and reduction in substrate mobility, will be improved with the project.

   Stillwater Sciences (2002) also investigated the historical changes in the river habitat that may have reduced salmonids' productivity. Stillwater found that the Napa River near St. Helena in 1940,

   > *"…was a low gradient, gravel bedded stream exhibiting bar-pool morphology, with point bars, mid channel or island bars and multiple channels in unconfined reaches. These reaches were bordered by flood*

plains that appeared to be inundated annually with well established vegetation."

Also,

> *"Prior to anthropogenic disturbances in the basin, the Napa River would have had numerous side channels that provided backwater rearing habitat for salmonids. The main stem channel would have connected to it flood plain in most locations, with the flood plain inundated during several storms per year. In contrast, the 1998 aerial photographs depict a simplified river-flood plain system in which the channel has narrowed, incised and largely abandoned its former flood plain, resulting in a loss of backwater rearing habitat."*

The Project will reverse these changes by restoring flood plain through creation of backwater channels in the proposed terrace excavation and to increase the frequency and duration of overbank flow. The proposed project removes constraints to restoring habitat and a more functional channel flood plain system. Stillwater (2002) was unable to recommend any projects such as levee setbacks or gravel augmentation *"…due to expected high social and economic costs of potential main stem restoration activities…"*

In summary, the proposed enhanced minimum plan will have significant environmental benefits with respect to geomorphic channel stability, and riparian ecology.

Based upon a review of recently completed limiting factors study for salmonids productivity by Stillwater Sciences (2002) on the Napa River, the proposed project will address several key areas of habitat and water quality concern.

The Project site on the Napa River is very significant to the regional ecology in that it will provide a block of riparian vegetation rather than the narrow linear strand that occurs along much of the Napa River. These conditions will significantly improve the riparian corridor along the Napa River by providing a reservoir for wildlife, particularly birds.

The proposed flood control project on the Napa River near St. Helena represents a significant opportunity to enhance the natural resource values by widening the riparian corridor and restoring natural geomorphic processes. Excavation of about 18 acres of high terrace will create significant opportunities to establish self-sustaining riparian vegetation communities in a corridor over 1,000 feet wide. Areas of large established bank trees will be preserved under the existing project. Areas of degraded or denuded banks will be enhanced through excavation of terrace surfaces to elevations capable of supporting a variety of riparian plant communities.

Even more significant will be the restoration will enhance fish passage and salmonoid recovery in the Napa River System, as discussed below.

2. ***Is the site adjacent to any existing conservation areas?***

The entire Napa River and its riparian corridor is a conservation area under the County's Conservation Ordinance. The Ordinance has been recently amended to add river and stream set back requirements on property within 150-300 ft from top of bank. The Napa River is also under the jurisdiction of the California Department of Fish and Game, National Marine Fisheries Service, the Water Quality Control Board and the State Lands Commissions.

The basis for the setback requirements is the listing of Steelhead as Threatened Species. The primary cause of the decline of Steelhead, as determined by the Stillwater Sciences Report of he SFRWCB is an incision of the river due to encroaching agriculture and development and excessive fine sediment.

This Project demonstrates progressive examples of how multi-objective projects can address both flood protection and river restoration using "Living River Principles"

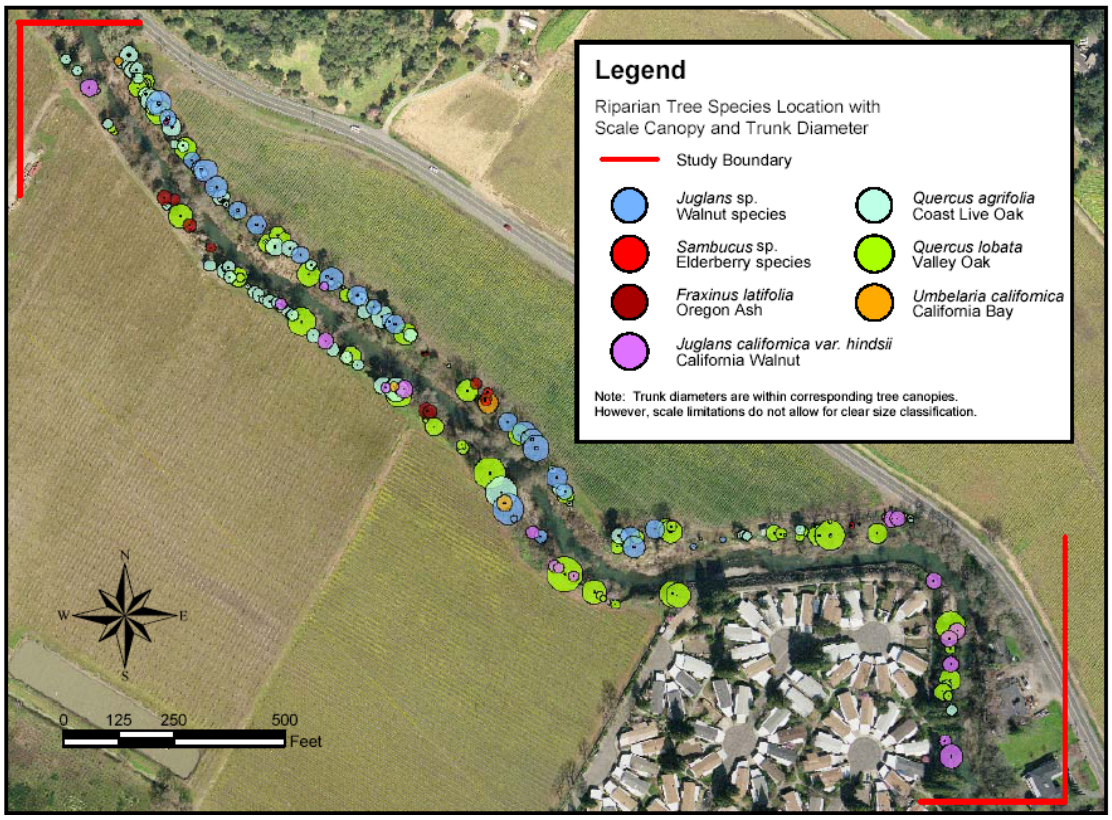


Figure 10a. Napa River Geomorphic and Riparian Vegetation Assessment: Riparian Trees Species Location

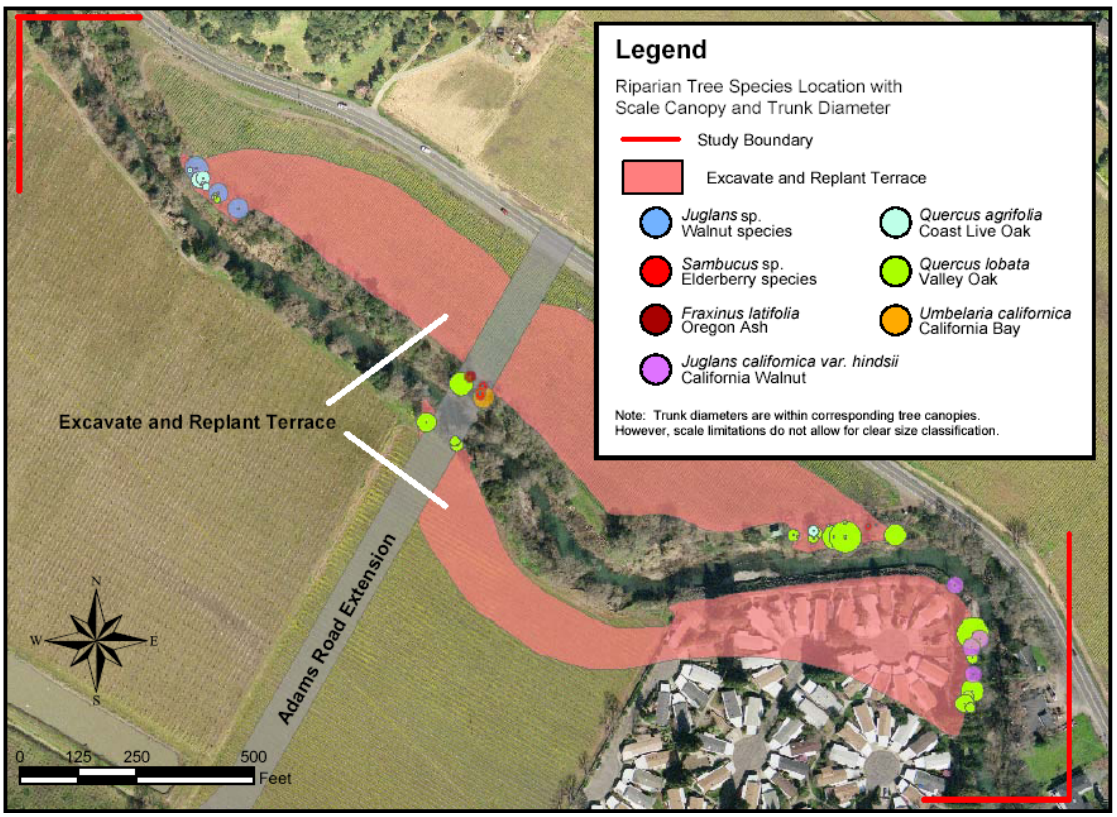
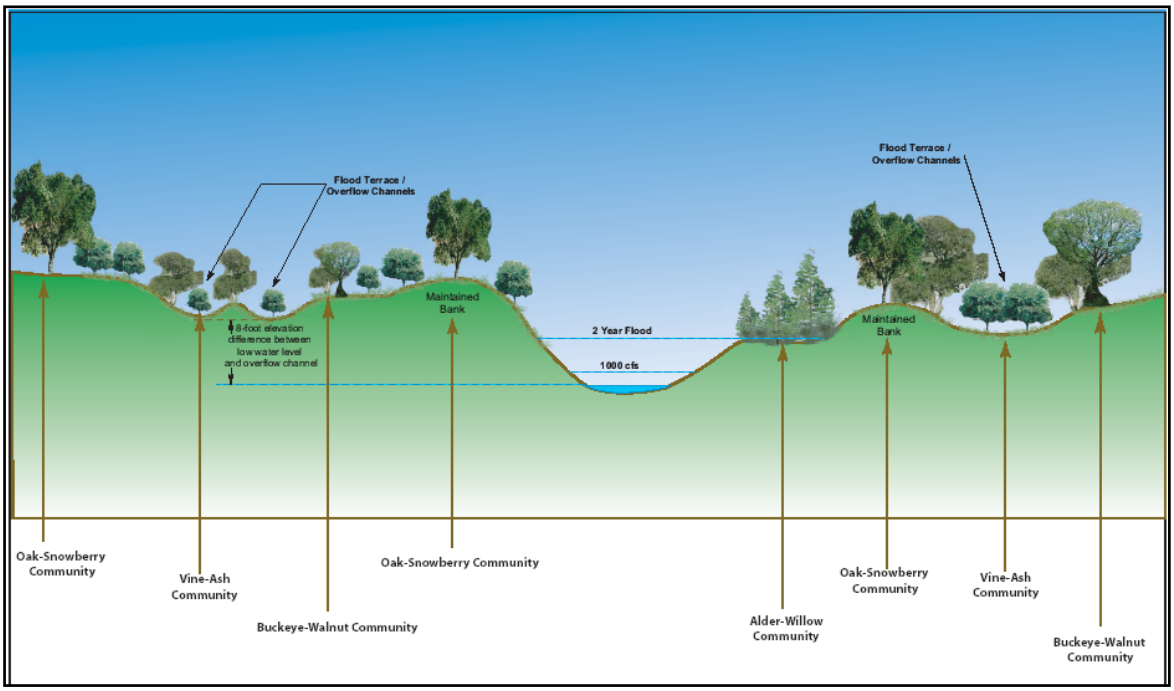


Figure 10b. Napa River Geomorphic and Riparian Vegetation Assessment: Disturbed Riparian Trees Species Location



Reduced Figure 5. Conceptual Cross Section View

3. ***Describe any plans for aquatic restoration resulting in in-stream benefits.***

The proposed project addresses key elements of concern for biological productivity in the Napa River (Stillwater Sciences, 2002), especially for salmonids (steelhead and Chinook salmon). Table 2 of the Swanson report shows a list of potential salmonid life cycle limitations and the potential change associated with the proposed project. In general, a lack of Large Woody Debris (LWD) can be addressed as design features to be installed with the project. Other factors, such as shading, connectivity to flood plain surfaces and reduction in substrate mobility, will be improved with the project.

4. ***Discuss any natural landscapes within the site that support representative examples of important, landscape-scale ecological functions (flooding, fire, sand transport, sediment trapping, etc.)?***

The Swanson Reports, Appendices C and D, discuss in detail the natural landscapes within and outside the Project site.

A2. Diversity Of Species And Habitat Types (70)

1. ***Does the site possess any:***
   i. ***Areas of unique ecological and/or biological diversity?***
   ii. ***Vegetative complexity either horizontally or vertically?***

The Swanson Reports, Appendices C and D, discuss in detail the vegetative complexity and unique biological diversity through the Napa River Corridor both within and outside the Project site.

Attached as ***Appendix C***

2. ***Describe habitat components including year-round availability of water, adequate nesting/denning areas, food sources, etc.***

   The Swanson Reports, Appendices C and D, discuss in detail the availability of water through the Napa River Corridor both within and outside the Project site.

3. ***Describe any superior representative examples of specific species or habitats.***

   See the response to question 5, below.

4. ***Does the site contain a high number of species and habitat types? List and describe.***

   See the response to question 5, below.

5. ***Does the site contain populations of native species that exhibit important subspecies or genetic varieties historically present prior to European immigration?***

   Sixty-seven plant species were found along the cross sections. Dominant species and their environmental relationships are described below.

   Valley oak was the most abundant over story tree in terms of both numbers and basal area. It also preferentially occupied the highest elevations and did not occur on sandy or gravelly substrata that are found closer to the streambed. Coast live oak was similar, and showed an even greater affinity for finer textured soils within the range that was found in the study area. Black walnut is mainly a riparian tree. It occurred over a relatively wide range of elevations above bankfull (about 4 feet), in sandy soils. White alder showed a pattern more readily apparent in the field as an obligate tree because it grows in the active channel, generally below bankfull elevations and on sandy to rocky substrata. Most of the under-story trees were multi-trunked and their diameters were often not measured, so only their presence is shown. Buckeye and elderberry are not riparian obligates and occur in similar positions in ordination space as the oaks. Riparian species like Oregon ash and especially red willow tend to occur much closer to the summer low water elevation, with the willow showing an affinity for coarser soils and the ash occurring over a range of soils. Willows were mainly within the bankfull portion of the stream within the lower 6 feet of the bank.

RE-VEGETATION PLAN

The type of vegetation to be restored on the newly excavated terraces will depend upon the final grade, elevation above summer low water, and soil substrate. The Napa River through the Project reach shows overflow channels lined with dense overstory riparian vegetation at its ultimate development. If sediment deposition in the flood plain areas becomes excessive, excavation and vegetation removal could occur along the overflow channels to mimic flood disturbance; this technique has worked very well on the San Lorenzo River in the City of Santa Cruz, where annual vegetation removal in the late fall months is hardly detected in the following summer's growth and habitat quality.

A field reconnaissance investigation of soils and geology in the proposed excavation zones found that the areas are underlain by deep, loamy soils. Some reaches immediately downstream of the project reach have substantial bedrock control lining the low flow channel and at shallow depths below the channel banks. The project reach exhibits deep loamy soils that, when excavated, should be appropriate substrate for riparian vegetation after construction.

Based upon fieldwork completed for SH&G (2002), a set of four basic plant communities was identified for use in the EMP project (Table 1). These communities were derived from field data collected in 2002, which measured occurrence of plants above summer low water elevation and soil substrate conditions. Figure 11 shows the proposed application of plant communities to the conceptual grading plan. As mentioned above, the entire north and south bank will be preserved except for the inlets and outlets of the flood channels and the right bank along much of the VVMHP.

The proposed re-vegetation plan calls for establishment of a Willow/Alder community at the inlets and outlets of the flood channels and within the point bar excavated at the bend. These areas will be subject to the greatest sediment transport, scour and sediment depositional processes and should exhibit a great deal of change over time.

The vine/ash plant community in the overflow channels is very important to the success of the project. It must become established and out-compete non-native species to retain low hydraulic roughness in the newly created overflow channels.

The plant communities of buckeye/walnut and oak/snowberry are designed to inhabit higher terraces and banks and result in dense overstory and understory structure.

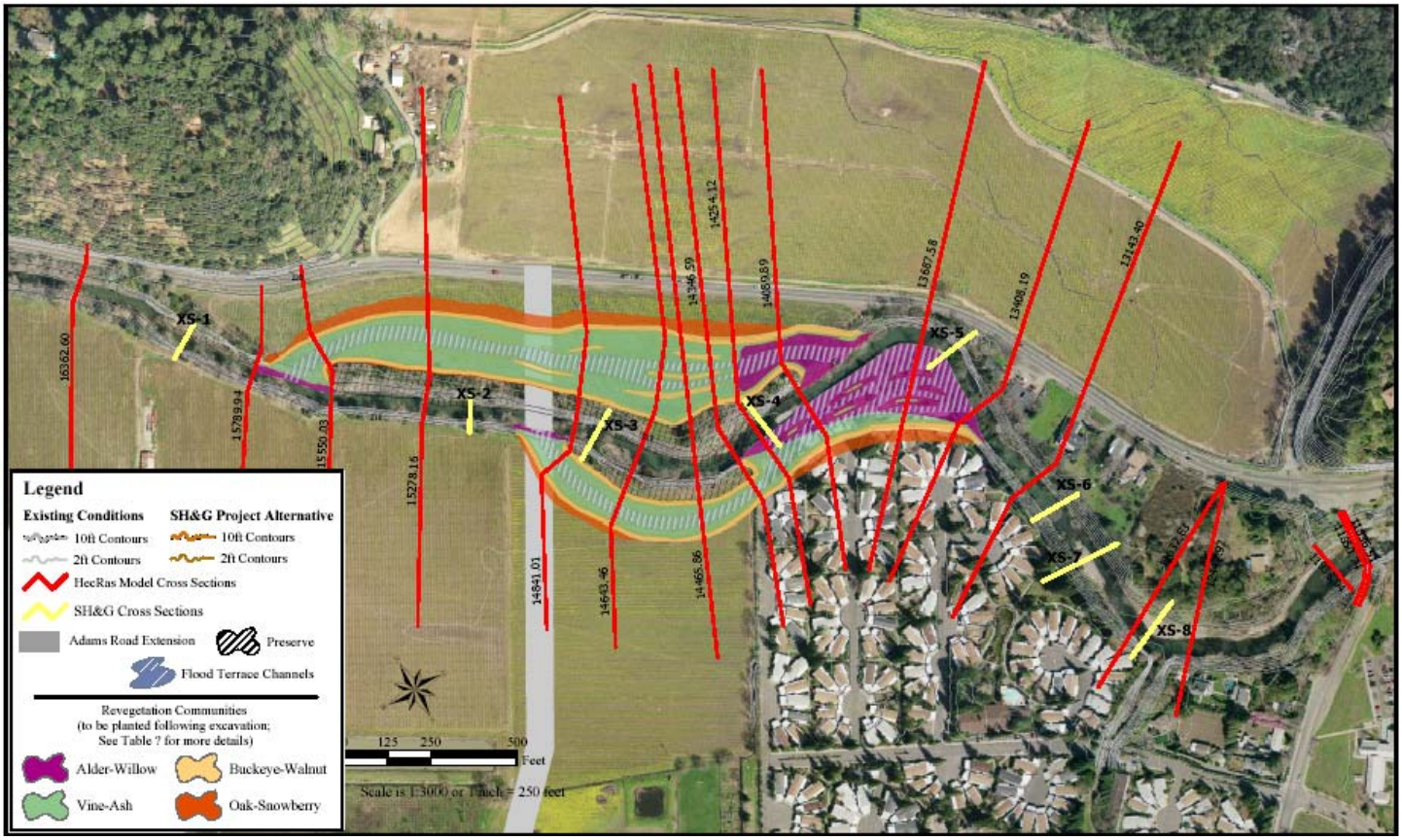


Figure 11. Napa Geomorphic Review EMP Grading and Re-Vegetation Plan

A3. Ecological Importance Of Species And Habitat Types (100)

1. ***Discuss the significance of habitat types at this location and include any local, regional, or statewide benefits received by preserving or improving the area.***

   The Project will advance Steelhead and Salmonoid recovery on the Napa River.

2. ***Does the site contain any significant wintering, breeding, or nesting areas? Does it fall within any established migratory corridors? What is the level of significance? How are these affected by the project?***

   The Napa River riparian corridor is a significant migratory, corridor for a number of birds that use the Pacific Flyway.

3. ***Describe any existing habitats that support any sensitive, rare, "keystone" or declining species with known highly restricted distributions in the region or state. Does the site contain any designated critical habitat? How are these affected by the project?***

   The Napa River and its Riparian Corridor are considered Critical Habitat for Steelhead and Salmon recover.

4. ***What is the amount of shaded riverine aquatic (SRA) and riparian habitat to be developed, restored, or preserved?***

   SRA through the Project reach will be preserved and approximately 7 acres of new SRA will result from the Project.

A4. Public Benefits Accrued From Expected Habitat Improvements (60)

1. ***Describe present public use/access, if any. For instance, does or will the public have access for the purpose of wildlife viewing, hunting, fishing, photography, picnics, etc.***

   There is currently no public use or access along the east or west sides of the Napa River within the project reach. VVMHP does have some private access via a walking path at the west riverbank that extends along the river and connects back to an interior street in VVMHP.

   The proposed project will provide passive recreational opportunities including a public pathway system along the river and connecting the public park to the south and the Adams Street Extension to the north. (Along Terrace B) Bike and pedestrian access will also be provided through Adams Street extension and provide much needed community and regional access across the Napa River to the Silverado Trail. Terrace A on the east side of Napa River will provide significant opportunities for wildlife viewing areas and interpretative signage.

Public Access Visuals

Figure 12a. Pre- and Post-Project Conditions Terrace B with Adams Street Extension – Vineyard Area viewed from VVMHP.

Figure 12b. Pre- and Post-Project Conditions Terrace B – VVMHP Viewed from Vineyards

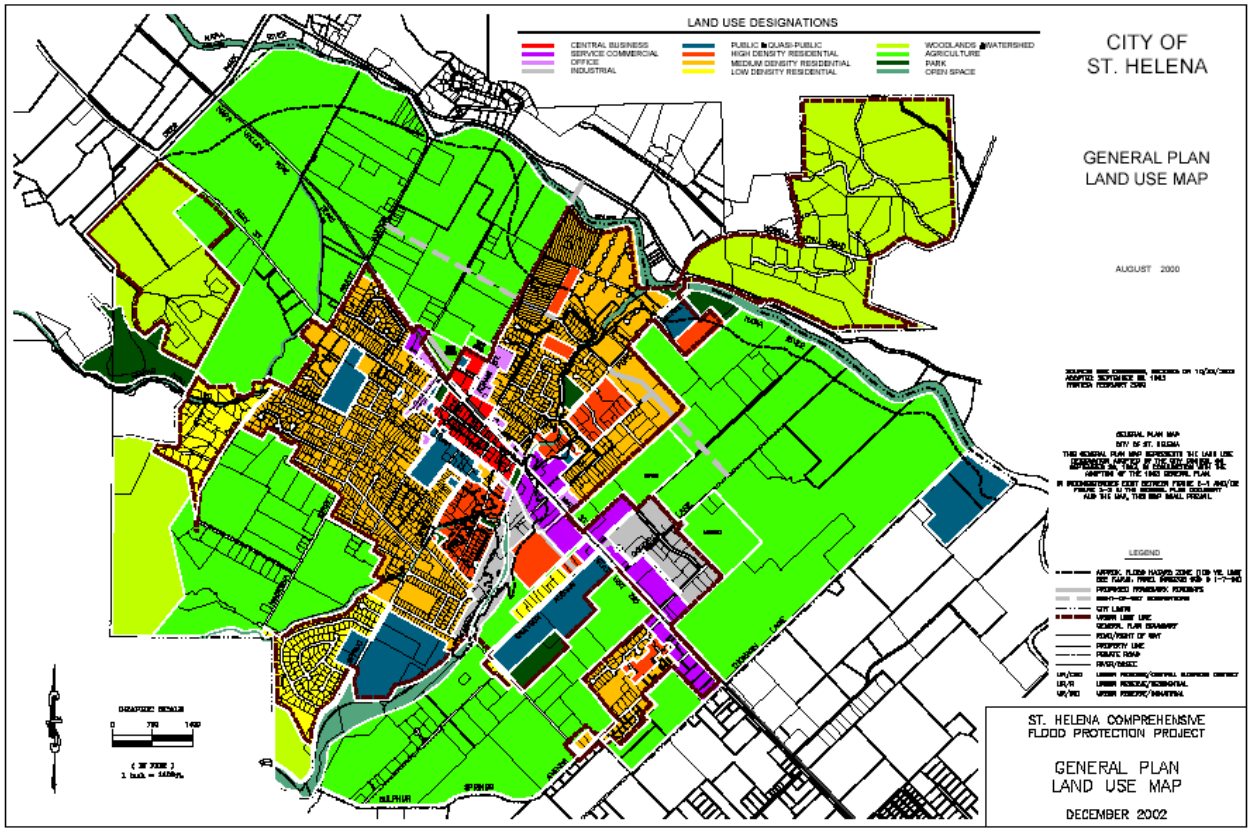
Figure 12c. Pre- and Post-Project Conditions Terrace B – VVMHP viewed from within VVMHP

2. ***Discuss areas on the site that are critical for successfully implementing landscape or regional conservation plans. How will the project help to successfully implement the plans?***

Implementing a public pathway between Pope Street and Adams Street Extension to the Silverado Trail would provide critical link toward implementing the regional wide Bay Trail Connection and countywide bike and Pedestrian trail plan. There are no other opportunities up valley for this kind of pedestrian or bike connection along or across the Napa River.

Regional conservation plans: implementing the proposed river setbacks would accomplish recommendations contained in the Stillwater Sciences report, an extensive regional planning effort sponsored by the San Francisco Regional Water Quality Control Board that encourages creation of opportunities for fishing, with restoration plans allowing some form of public access. This project would be the first of its kind to demonstrate how those concepts could be implemented.

3. ***Describe the surrounding vicinity. Include the presence or absence of large urban areas, rapidly developing areas, and adjacent disturbed areas with non-native vegetation and other anthropogenic features. Do any surrounding areas detract from habitat values on the site?***



Reduced Figure 6. General Plan Land Use Map

The surrounding vicinity includes a combination of agricultural (vineyards) and residential uses. Most of the land to the north of VVMHP is vineyards with some homes and winery buildings in the floodplain along the west bank on Pratt Ave and Fulton lane. The developed areas directly adjacent to the project area include VVMHP and medium density single-family residential neighborhoods to the east Hunts Grove Apartments, 56 planned unit low income housing development is located adjacent to the eastern project boundary where 29 Vineyard Valley homes will be relocated.

The agricultural area currently north adjacent to VVMHP and Hunts Grove Apartments (approximately 33 acres) is zoned for medium high-density residential development with a development potential for 390 units.

Figures 12 a -12d represent the current visual setting of the project area. This visual setting includes primarily the VVMHP and vineyards, as well as the Napa River and associated riparian vegetation. VVMHP was constructed in 1978 and contains mobile homes surrounded by extensive landscaping with mature vegetation. The right bank vineyard includes vines that are

harvested on an annual basis and scattered trees. The left bank vineyard was planted in 2002 and has yet to be harvested. The riparian corridor along the Napa River consists of large oaks, walnuts, and ash with a diverse understory of other trees, shrubs, vines, and herbaceous vegetation.

These areas are set back far enough from the river and project area terracing to not detract from habitat values. Agricultural use to north of Adams Street extension will remain agriculture per the City's General Plan and connect with the riparian corridor to be developed as part of this project.

4. ***Describe compatibility with adjacent land uses***

The proposed project increases riparian setbacks along the riverfront providing improved buffers between existing and potential residential development. It connects with agricultural open space to the north and east, retaining views to the river. The project is consistent with General Plan policies that ensures minimum encroachment on productive vineyard land or open space; protect, enhance and preserve riparian corridors and vegetation and wildlife habitat; preserve St. Helena's streams and associated riparian corridors as natural open space and seek to protect and preserve views of vineyards, hillsides and river.

A5. Viability/Sustainability Of Habitat Improvements (40)

1. ***Describe any future operation, maintenance and monitoring activities planned for the site. How would these activities affect habitat values?***

The City is committed to an active operation, maintenance and monitoring of the project elements. The City intends to develop, fund, and execute an Adaptive Management Program to assure that both flood protection and habitat objective of the Project are met. The City has funding from its' Flood Protection Sales Tax funds and it's drainage assessment program to pay for the on-going Adaptive Management Program.

Based upon the proposed structural modifications with the Project, the main areas of maintenance concern are as follows:

1) Vegetation planting success.
2) Topographic Changes in the Channel and created overbank areas.
3) Hydraulic performance of the project to pass various flows.
4) Erosion monitoring to address problems threatening infrastructure or properties designated for protection.
5) Aquatic and biotic resource conditions.

The framework for the City's Adaptive Management program is contained in Swanson Report, Appendix D. The maintenance and adaptive management plan is to achieve the project's objectives after construction and well into the future. Adaptive management is by definition the

linking of new data to actions and measures in order to achieve the overall project goals. The post-construction period will involve an initially intensive effort to establish the desired vegetation communities in the excavated areas. As described in the proposed construction sequence above, it is anticipated that the over bank areas would be planted prior to exposure to floods in order to establish a stable plant community that will hold soil. This would be followed, after a 1 to 2-year period, with completion of the project and installation of the remaining features.

2. ***Does the site contain large areas of native vegetation or is it adjacent to large protected natural areas or other natural landscapes (for example, a large stand of blue-oak woodland adjacent to public land)?***

   The area includes large areas of native vegetation as detailed in 3., below.

   A census of large trees within the Napa River riparian corridor in the project reach was taken in order to document the potential large tree losses due to terrace excavation with the EMP and the MP. The loss of these trees will be minimal and will be offset by new plantings on the immediate banks of the Napa River and on 22 acres of newly created excavated terraces. Outside of preserved areas for the MP and EMP, the newly constructed overflow channels will be excavated on the landside of the drip lines of the preserved trees with benches set at an elevation capable of sustaining large trees such as oaks, cottonwoods, walnuts, bay laurel and Buckeye**.** New excavated inlets and outlets and lower bank areas would be planted to expand shoreline cover of riparian obligate species such as willow, alder and cottonwood as well as native herbaceous (e.g. Carex).

3. ***Is the watershed upstream of the site relatively undisturbed or undeveloped and likely to remain so into the foreseeable future? Describe its condition.***

   The watershed of the Napa Valley above the Project Reach is almost exclusively vineyard and undisturbed lands, with rural residential scattered throughout. These conditions must continue as agricultural or open space under the County's Agricultural Preserve Zoning Laws enacted by Napa County Voters. The new Conservation Ordinance establishing river and stream setbacks also assure that development of impervious surfaces upstream of the Project Reach does not render the Project non-functional. The strict agriculture land use regulations will assure minimal development of impervious surfaces in the watershed above the Project.

4. ***Describe any populations of native species or stands of native habitats that show representative environmental settings, such as soil, elevations, geographic extremes, or climatic conditions (for example, the wettest or most northerly location of a species within the state).***

*See Section *indicates non-native species*

Common Name Abundance

TREES

Acer macrophyllum	Big leaf maple	Uncommon
Aesculus californica	California buckeye	Common
Alnus rhombifolia	White alder	Common
Fraxinus latifolia	Oregon ash	Scattered
Juglans californica (var.hindsii)	Black walnut	Common
Juglans regia	English walnut	Uncommon
Quercus agrifolia	Coast live oak	Common
Quercus lobata	Valley oak	Common
Salix laevigata	Red willow	Common
Sambucus mexicana	Elderberry	Scattered

SHRUBS

Arundo donax	Giant reed	Scattered
Mentha sp	Mint	Scattered
Populus fremontii	Fremont cottonwood	Uncommon
Prunus subcordata	Sierra plum	Uncommon
Rosa californica	Wild rose	Uncommon
Salix hindsiana	Sandbar willow	Scattered
Salix lasiolepis	Arroyo willow	Uncommon
Salix lucida ssp. lasiandra	Shining willow	Uncommon
Symphoricarpos albus	Common snowberry	Common

VINES

Aristolochia californica	Pipevine	Common
Cornus glabrata	Brown dogwood	Uncommon
Marah fabaceous	Wild cucumber	Uncommon
*Rubus discolor**	Himalayan berry	Common
Toxicodendron diversilobum	Poison oak	Scattered
*Vinca major**	Periwinkle	Common
Vitus californicus	California wild grape	Common

TERRESTRIAL HERBS AND GRASSES

*Agrostis spp.**	Bent grass	Common
Artemisia douglasiana	Mugwort	Scattered
*Avena barbata**	Wild oak	Uncommon
Bacopa eisenii	Water hyssop	Common
*Bromus diandrus**	Rip-gut brome	Uncommon
*Carduus pycnocephalus**	Italian thistle	Scattered
Carex obnupta/barbarae	Sedge	Common

Chenopodium botrys	Goosefoot	Common
*Convolvulus arvensis**	Bindweed	Uncommon
*Cortaderia sp.**	Pampas grass	Uncommon
*Cynosaurus echinatus**	Dog-tail grass	Uncommon
Cyperus eragrostis	Nutgrass	Common
*Daucus carrota**	Carrot	Scattered
Epilobium brachycarpum	Willow herb	Common
Epilobium ciliatu		Uncommon
Equisetum telmateia	Horsetail	Scattered
*Foeniculum vulgare**	Fennel	Uncommon
*Galium aparine**	Bedstraw	Common
*Gnaphalium luteo-album**	Fragrant everlasting	Uncommon
*Hirschfeldia incana**	Field mustard	Uncommon
*Hordeum murinum**	Foxtail	Uncommon
Juncus sp	Rush	Uncommon
*Lactuca serriola**	Wild lettuce	Uncommon
Leersia oryzoides	Cut grass	Common
Lemus triticoides		Uncommon
*Melilotus albus**	White sweet clover	Scattered
Paspalum urvellei	Dallis grass	Uncommon
Piptatherum milacea	Smilo grass	Scattered
*Polypogon monspeliensis**	Rabbit's foot grass	Uncommon
*Rhaphanus sativa**	Wild radish	Uncommon
*Rumex sp.**	Dock	Uncommon
Scrophularia californica	Figwort	Uncommon
Stachys ajugoides	Hedge nettle	Uncommon
Torilis nodosa *	Wild parsley	Scattered
Xanthium strumarium	Cockle bur	Scattered

AQUATIC HERBS AND GRASSES

Alisma plantago-aquatica	Water plantain	Uncommon
Carex nudata	Dudley's sedge	Scattered
Ludwigia peploides	Water primrose	Scattered
Polygonum amphibium water	Smartweed	Scattered
Scirpus fluviatilis	River bulrush	Uncommon

B. (340xF_A points) Agricultural Land Conservation Benefits

This is a wildlife habitat project, not an agricultural preservation project.

The City believes that the point allocation between Wildlife benefits and Agricultural Land Conservation should allocate all points to Wildlife and that the Agricultural Land Conservation Section should not apply. Nevertheless, we have completed selected sections to provide an overview of the agricultural setting in which this flood corridor-wildlife habitat project is proposed.

B1. Potential Productivity Of The Site As Farmland (120)

1. ***Describe the quality of the agricultural land based on land capability, farmland mapping and monitoring program definitions, productivity indices, and other soil, climate and vegetative factors.***

2. ***Are projected agricultural practices compatible with water availability?***

3. ***Does the site come with riparian, mineral, and/or development rights?***

4. ***Is the site large enough to sustain future commercial agricultural production?***

5. ***Does the site contain any adverse or beneficial deed restrictions affecting agricultural land conservation?***

6. ***Describe the present type of agricultural use including the level of production in relation to the site's productivity potential. What is the condition of the existing infrastructure that supports agriculture uses?***

B2. Farming Practices And Commercial Viability (40)

1. ***Does the area possess necessary market infrastructure and agricultural support services?***

2. ***Are surrounding parcels compatible with commercial agricultural production?***

3. ***Is there local government economic support in place for agricultural enterprises including water policies, public education, marketing support, and consumer and recreational incentives?***

4. ***Describe any present or planned future environmentally friendly Farm practices (no till, erosion control, wetlands avoidance, eco-friendly chemicals, recycling wastes, water conservation, biological pest control).***

B3. Need And Urgency For Farmland Preservation Measures (70)

1. ***Is the project site under a Williamson Act contract?***

   The agricultural land within the City limits (west side of river) is not under Williamson Act contract. However, Terrace A. 16.67 acres on the east side of the river—is currently under a

Williamson Act contract. The contract would be terminated under this plan; however, termination of the contract is legal under the Act for public improvement projects. The proposed project would convert that property to open space and riparian corridor to provide terracing to extend the flood plain, reduce flooding within the project reach and reconnect to Napa river.

According to the City of St. Helena General Plan, the agricultural land that would be converted within the City is designated as Vacant or Underutilized Lands Suitable for Development and is zoned as medium density residential (Parcel #30 and #31 on the General Plan Land Use Map). The impacts of converting this agricultural land have been evaluated in the General Plan and would not be considered significant. Additionally, the General Plan states that while agricultural conversion is not preferable, conversion is permitted as long as the overall agricultural viability of the area is not affected. The amount of agricultural land that would be converted under the Enhanced Minimum Plan is 0.04 percent of the important farmland within Napa County; 1.0 percent of the important farmland within the City of St. Helena. These percentages are not substantial and would not affect the agricultural viability of the City or County.

The overall impact of the Enhanced Minimum Plan on agriculture resources is considered less than significant.

2. ***Describe the surrounding vicinity. Include the presence or absence of large urban areas, rapidly developing areas, low density ranchette communities, and adjacent disturbed areas with non-native vegetation and other human-induced features. Do any surrounding areas detract from agricultural values on the site?***

   Refer to answer A4.3 in this section.

3. ***What types of conversion or development are likely on neighboring parcels? What are the land uses of nearby parcels? Describe the effects, if any, of this project to neighboring farming operations or other neighboring land uses.***

   Under the Enhanced Minimum Plan, a total of 14.5 acres of agricultural land within City limits would be converted (6.2 acres for the Adams St. extension, 3.4 acres of terracing, and 4.9 acres for relocation of homes and associated roads). A total of 16.67 acres outside City limits would be converted to open space as Terrace A.

   Currently there are approximately 20-25 acres directly adjacent to the project being actively farmed for vineyard use. That area is currently zoned for medium density residential and would be removed from the floodplain and could be developed as a result of this plan. Project would convert 15 acres to open space and relocation of VVMHP homes (8 acres) with approximately 7 acres likely to remain as open space leaving 10 acres available for medium density residential development, adjacent to other residential areas.

4. ***Describe the relationship between the project site and any applicable sphere of influence.***

This project is within the City's sphere of influence, which conforms to City limit boundaries.

5. ***Is the agricultural land use on the project site consistent with the local General Plan? Does the General Plan demonstrate commitment to long-term agricultural conservation?***

   Yes—agricultural use is consistent with local General Plan. It is a permitted use but as noted above, the current General Plan designation for the area impacted by the project is medium density residential.

   The primary goal of the City's General Plan is to "preserve the rural small town quality and agricultural character of St. Helena." Guiding principles includes policies that protect agricultural lands and operations from urban encroachment and provides policies encouraging and protecting uses that provide support services to the winemaking and agricultural industry. The proposed plan would be consistent with preserving a sense of strong connection to the surrounding agricultural open space and hillside and maintain views of the vineyards, hillsides, creek and major landscape features.

   Agricultural lands currently comprise over 47% of the including area and of that total the majority of acres are actively cultivated with vineyards. This project would provide a continued buffer and connection to open space and vineyard use on the east side of the River to the North.

B4. Compatibility of project with local government planning (50)

1. ***Is the agricultural land use on the project site consistent with the local General Plan? Does the General Plan demonstrate commitment to long-term agricultural conservation?***

   Please refer to B3 (5) response above and Figure 6.

   Napa County's vision for preserving agricultural land and open space is integral part of Napa Valley land use policy. The vast majority of land within the Napa Valley is dedicated to agricultural use with urban development restricted to within the cities' Sphere of Influence.

2. ***What is the present zoning and is the parcel developable?***

   The present zoning is medium density residential (within the City limits) and Agricultural for the parcel located on the east side of the river, within the unincorporated area of Napa County.

3. ***Is there an effective right to farm ordinance in place?***

Yes, the City of St. Helena has implemented a Right to Farm Ordinance: (Reference General Plan 8.3.14; Zoning Ordinance Article II Division 2 Section 27.66; Section 27.8. This regulation is included in all City zoning districts.

4. ***Is the project description consistent with the policies of the Local Agency Formation Commission?***

   Yes, the project description is consistent with LAFCO policies and is within the City's Sphere of Influence

5. ***Will the project as proposed impact the present tax base?***
   The project will positively impact the City's property tax base (though not significantly) when med density residential development occurs to parcels north and west of the project area. Relocation of 29 VVMHP homes to current vacant land zoned for medium density residential may have a neutral impact on property taxes as the current land where those homes reside will no longer generate property taxes—if the remainder of parcel #31 remains in open space (7.5 acres), the City stands to receive less property tax revenues due to much lower density residential development but not significant.

B5. Quality of agricultural conservation measures in the project (50)

1. ***For agriculture lands proposed for conservation, describe any additional site features to be conserved that meet multiple natural resource conservation objectives, including wetland protection, wildlife habitat conservation, and scenic open space preservation where the conservation of each additional site feature does not restrict potential farming activities on the agriculture portions of the site.***

   Not Applicable

2. ***What are the present biological/ecological values to wildlife? How are these values affected by the proposed project?***

   Not Applicable

3. ***Is the project proponent working with any local agricultural conservancies or trusts?***

   Not Applicable

4. ***Does conservation of this site support long-term private stewardship of agricultural land? How does this proposal demonstrate an innovative approach to agricultural land conservation?***

   Not Applicable

5. ***Without conservation, is the land proposed for protection likely to be converted to non-agricultural use in the foreseeable future?***

Not Applicable

VI. (320 POINTS) MISCELLANEOUS BENEFITS AND QUALITY OF PROPOSAL

A. SIZE OF REQUEST, OTHER CONTRIBUTIONS, NUMBER OF PERSONS BENEFITING, COST OF GRANT PER BENEFITED PERSON (40)

Estimated Total Project Cost	$25,696,440
Amount of FPCP Grant Funds Requested	$5,000,000
Amount of Local Funds Contributed	$12,869,400
Amount of In-kind Contributions	
Additional Funding Sources	$7,800,000
Number of persons expected to benefit	4,200
Flood Protection Corridor Funds per person benefited.*	$1,191

(Count as beneficiaries those receiving flood benefits, recreational users of habitat areas protected by the Project, and consumers of food products from agricultural areas conserved by the Project.)*

460 residential units X 2.5 persons per household = 1,150 receive direct flood protection benefits
Emergency Service personnel not needed = 50 receiving flood protection benefits
Recreational users of habitat areas protected by St. Helena area residents = 3,000

Total Beneficiaries = 4,200

Table 6. Project Cost Allocation – Prop 13 Grant and Local/Other

Feature (1)	Project Cost (2)	Prop 13 Grant Funded	Local Measure A Funded and Federal Funded
Construction			
Adams Street extension	484,000		484,000
Silverado Trail	375,000		375,000
Drainage ditch	25,000	25,000	
New bridge	3,326,000		3,326,000
Terrace A	905,000	905,000	
Terrace B	334,000	334,000	
Element C	25,000	25,000	
Storm drain Modifications	68,000	68,000	
Drain at Del Rio Court	18,000	18,000	
New levee	75,000	75,000	
New floodwall east of park	422,000	422,000	
Fill Del Rio Court	21,000	21,000	
Treatment Plant	167,000		167,000
Dem Vineyard Valley	68,000	68,000	
Slope stabilization and protection	307,000	307,000	
Environmental Enhancements	886,000	886,000	
Mobilization	210,000	210,000	
Additional terrace lowering for restoration			
Restoration plantings	1,000,000	1,000,000	
Construction subtotal	8,716,000		
Engineering (12% of construction subtotal)	1,045,920	200,000	845,920
Construction management (8% of construction subtotal)	697,280	139,456	557,824
Construction total	10,459,200		
Real Estate			
Terrace A, 16.7 acres X $200,000/acre	3,340,000		3,340,000
Terrace B, 8.0 acres X $200,000/acre	1,600,000		1,600,000
Element C, 1.0 acres X $200,000/acre	200,000		200,000
Adams Street extension, 6.2 acres X $200,000/acre	1,240,000		1,240,000
VVMHP relocation area, 4.9 acres X $200,000/acre	980,000		980,000
Relocations			
Mobile homes, $68,328+$12,200 per unit X 34 units	2,737,952		2,737,952
Other			
Contingency @ 25%	5,139,288	296,544	4,842,744
Total	**$25,696,440**	**$5,000,000**	**$20,696,440**

B. Quality Of Effects On Water Supply Or Water Quality (90)

1. ***Will water stored by the project provide for any conjunctive use, groundwater recharge, or water supply benefit?***

   The proposed project alternatives do not include water storage features. The preferred plan includes large terraced area along the Napa River that will have some groundwater recharge potential but during the time of year when recharge is not very likely.

2. ***Does the project fence cattle out?***

   There are no grazing or cattle operations within the limits of the project and therefore none of the alternatives include cattle fencing from the waterway.

3. ***Does the project pass water over newly developed fresh water marsh?***

   The newly created flood terraces are adjacent to the Napa River and will be graded to drain back to the river through newly created riparian vegetation. These areas would not be considered marshes.

4. ***Does the project trap sediments?***

   Yes. Storm water discharge from approximately one-half of the City's urban area will be discharged through the newly vegetated terraced area to the west of the Napa River. The terraced area will serve as low velocity run-out zone in which sediments may be trapped during intermediate and lower river flows. Any contaminants found in the City's storm water system may be retained in the area during the first flush of the system each winter. The Adaptive Management Plan being considered by the City will address the removal of these depositions prior to larger winter river flows.

C. Quality Of Impact On Underrepresented Populations Or Historic Or Cultural Resources (60)

1. ***Does the project benefit underrepresented populations? Explain.***

   The project directly benefits approximately 300 senior citizens currently residing in VVMHP within the flood plain. It provides important flood protection but also preserves critical affordable housing within the community for VVMHP and Hunts Grove Apartments.

   Additionally, 139 low-income residents residing at adjacent Hunts Grove Apartments will receive flood protection benefits through the proposed levee, floodwall and setback improvements.

2. ***Are historical or cultural resources impacted by the project? Explain.***
   Yes, cultural resources associated with Native American artifacts of the Wappo Indian tribe have been identified at or near the project site. Mitigation measures have been included in the

EIR in addition to BMP's to follow if archaeological resources are encountered during excavation or construction.

Significant Impacts Minimum Plan	Significant Impacts Enhanced Minimum Plan	Significant Impacts Vineyard Valley Relocation Plan	Mitigation and Best Management Practices	Level of Significance with Mitigation
				Enhanced Minimum
Cultural Resources				
Native American artifacts have been known to occur in the project area and could be disturbed during construction .	Native American artifacts have been known to occur in the project area and could be disturbed during construction.	Native American artifacts have been known to occur in the project area and could be disturbed during construction.	A visual field survey will be performed by an archaeologist to assess the potential for cultural and/or historic resources to be present within the construction areas. Any resource found will be evaluated and mitigation measures will be provided based on the significance of the resource. Mitigation measures will be developed in consultation with the State Historic Preservation Officer.	SU

Historic Resources:

Adjacent to the project site is the Pope Street Bridge, a National Historic Register site. "The Pope Street Bridge is the oldest remaining stone bridge in Napa County, and was built in 1894 by R.H. Pithie, the Scots stonemason responsible for many of the 19th century stone buildings in St. Helena; it was listed on the National Register of Historic Places in 1978." (City of St. Helena, 1997)

This bridge will be preserved and will not be impacted by the project.

D. Technical and fiscal capability of the project team (60)

1. ***Does the project require scientific or technical expertise, and if so, is it provided for in the grant proposal?***

   Yes, the project will require expertise from a geomorphologist , a riparian ecologist and landscape professional for design assistance as well as monitoring during construction. Expertise from those disciplines will also be needed to complete the Adaptive Management Program outlined in the Draft EIR, Geomorphology Analysis and in developing a long term O & M plan for the project.

   Funds for completing that work are not included in the grant proposal and will be paid for out of the City's local contribution.

2. ***Grant funds will be available in phases. What monitoring and reporting mechanisms are built into your administrative plan to track progress, initiation, and completion of successive phases?***

   A project management team has been established for the planning phases of this project and will continue to work through all subsequent design and construction phases to monitor progress, initiation and completion of construction. This team includes local City Staff (City Manager, Public Works Director and Finance Director), project management and grant administration consultants (2); the project engineer and technical experts as needed including a geomorphologist, and riparian ecologist. A subcommittee of 2 council members will meet on a regular basis with the team to monitor project process and provide input regarding public outreach and communications. This has been a very effective approach during the last 3 years of planning for this project.

   A post construction monitoring team will also be established as recommended in the Maintenance and Adaptive Management Plan contained in the Swanson Geomorphic Design Report (January 2003) (Appendix C, Draft EIR attachment-Appendix F). The monitoring team will consist of a project engineer, geomorphologist, wildlife biologist, plant ecologist, re-vegetation specialist, and representative of the City of St Helena. The post-construction period will involve an initially intensive effort to establish the desired vegetation communities in the excavated areas. This would be followed, after a 1 to 2-year period, with completion of the project and installation of the remaining features.

3. ***Please outline your team's management, fiscal and technical capability to effectively carry out your proposal. Mention any previous or ongoing grant management experience you have.***

   The project planning team has included the following members listed below. This same team is likely to continue through the implementation phases of the project, although contracts will not be approved until a project has been approved and financing plan is in place.

PROJECT MANAGEMENT:

Myke Praul, City Engineer/Public Works Director, City of St Helena

Role: Overall Project Manager
Experience: Myke Praul P.E. has over 20 years of experience in public sector engineering and project management. He worked for the U.S. Army Corps of Engineers preparing feasibility reports and reviewing Environmental Impact Statements for Corp Projects. While with the Sacramento Branch, he was the principle engineer in charge of the flood feasibility report for the City of Coalinga and the EIS for the New Melones Dam Project. For 10 years at the Napa County Flood Control & Water Conservation District, he was involved in the re-design of the Corps project for the City of Napa and the annual maintenance projects for the Napa River. His last couple of years with Napa County involved the coordination of the preliminary hydraulic work and feasibility study for the St. Helena project. Myke has also had experience in managing local, state and Federal government grants as well as contract and budget administration for multi -million dollar capital projects. In May of 2000, Myke became Director of Public Works/City Engineer for St. Helena and established the current project study team.

DESIGN/ENGINEERING:

Ric Reinhardt, P.E., MBK Engineers

Role: Project Engineer
Experience: (see attached resume, Appendix G)
Mr. Reinhardt is a registered Civil Engineer with the State of California. He served as a consulting civil engineer with MBK Engineers in Sacramento, CA. Ric has served with the Army Corps of Engineers as a Senior Project Planner and was involved in the design and hydraulic analyses for the Napa River Flood protection Project. Mr .Reinhardt has extensive experience in hydraulic analyses and modeling as well as ecosystem functions and biotechnical stream bank stabilization plans and mitigation design and has developed several major feasibility reports in support of congressional authorizations.

TECHNICAL ASSISTANCE: (DESIGN AND CONSTRUCTION/MAINTENANCE MONITORING)

Mitch Swanson, Swanson Hydrology and Geomorphology

Role: Technical assistance for geomorphic and hydraulic design and development of Adaptive Management Plan and monitoring
Experience: (see attached resume, Appendix G)
Mitchell Swanson has over *eighteen years* of experience in hydrology, hydraulic studies, geologic hazards, and geomorphology related to restoration and resource management in rivers, streams, coastal estuaries, and wetlands. This experience includes the development, management and completion of comprehensive technical and planning studies for a full range of private and public sector clients. Mr. Swanson specializes in the development of technically and

environmentally sound management and restoration plans for *rivers, estuaries and watersheds*. These studies often involve the coordination of many disciplines by including biological sciences, hydraulic engineering, land use planning, economics, landscape architecture and environmental planning. In the present era of conflict between environmental regulation and society's need for flood control and utilization of water resources, Mr. Swanson has become a recognized expert in conflict resolution between governmental agencies, and public and private interests. Mr. Swanson has first hand knowledge of international management techniques used by public water resource agencies in England and Germany to help resolve problems faced by flood control engineers and resource agencies.

Mr. Swanson has extensive expert witness experience having appeared before the *California State Water Resources Control Board, California Superior Court, and the U. S. Congress.* Mr. Swanson has testified with regards to hydrology, flood control, reservoir operations, hydraulics, geomorphology, and environmental impacts.

Mr. Swanson's technical expertise includes historical geomorphic and hydrologic studies for geologic hazards assessments (landslides, seismic, erosion, sedimentation, sediment transport and flooding) and in determining the causes and effects of human modification on hydrologic and geomorphic systems. He has extensive field experience in hydrologic and sediment transport measurement, geomorphic mapping and surveying in rivers, watersheds and estuaries. Mr. Swanson has conducted hydraulic and hydrologic analyses using the *HEC-RAS*, *HEC-6 and HEC-1* computer simulation programs.

Dennis Odion, Ph.d, Vegetation Ecologist
Role: Riparian Ecologist
Experience: (see attached resume, Appendix G)

GRANT ADMINISTRATION:

Dave Dickson/Nancy Weiss, MIG Consultants

Role: Grant administration; project management assistance and community outreach
Experience: (see attached resume, Appendix G)

Dave Dickson, MIG Project Manager, was the project manager for the Napa River multi-objective, multi-jurisdiction flood management plan and sales tax initiative while with the County of Napa. The Napa Project is an international model for multi-objective floodplain planning and financing. David Dickson has over 28 years of experience in public agency management, community development, public finance, and community-based planning. He has an extensive and successful track record in generating local resources to address important local infrastructure needs, particularly in the area of flood protection. His public agency work has included positions as Chief Financial Officer of the Napa County Flood Control and Water Conservation District, Project Manager for the Napa River Multi-objective Floodplain Management Plan, and Community Development Director for the Napa County Administrator's Office. Mr. Dickson is also a national and international consultant to the Federal Emergency Management Agency (FEMA), Environmental Protection Agency (EPA),

and The U. S Army Corps of Engineers, City of Boise and the University of Idaho, in the areas of watershed management, restoration, disaster resistance, and financial planning. For the past 3 years, Dave has assisted the City of St Helena in managing a FEMA planning study grant.

Nancy Weiss, MIG's Assistant Project Manager, was the Town Manager of Yountville through the floods of 1995 and 1998 during which 1/3 of the Town's housing stock was evacuated and damaged. She is presently managing a multi-million dollar flood barrier construction project and subsequent FEMA re-mapping for the Town of Yountville funded by FEMA and local flood protection sales tax revenues. She is also managing a comprehensive flood project planning process for the City of St. Helena involving FEMA, OES, and numerous regulatory and local stakeholders.

Nancy Weiss has over 19 years of local government experience working in various professional management positions for the cities of Healdsburg, Benicia, and most recently, Yountville. Ms. Weiss's expertise in public administration has involved project management planning, coordination, financing, grant administration and contract negotiation for various capital projects including libraries, affordable housing, flood protection, drainage, and wastewater treatment and reclamation facilities, community centers and public safety facilities, transportation, parks and water resource planning and acquisition. Ms. Weiss has practical knowledge of local government finance, administration, intergovernmental relations, personnel management and organizational development, and grant writing and administration. Ms Weiss also has extensive land use planning and economic development experience as well as community participation and public outreach skills.

FISCAL MANAGEMENT

Tamera Haas, City of St Helena Finance Director

Role: fiscal oversight, budget and accounting, grant administration assistance
Experience:
Ms. Haas has over nine years of municipal experience. Five years of experience assisting departments with grant development, administration and budgeting within the City of Santa Rosa on various grants. While with the City of Santa Rosa was involved in the CAD RMS grant process, and various police, recreation, TDA, wastewater and water grants. Ms Haas has served as the Finance Director for the City of St. Helena for approximately 3.5 years overseeing the Finance Department , which is responsible for providing financial management of all City Funds and administrating internal service functions for all departments. Major activities include: maintaining the City's investment program and providing necessary financing for capital needs; preparing management and financial analysis reports; developing the Annual Budget; monitoring legislation affecting finances of the City; monitoring the City's risk management needs, and administration of the Business License Ordinance. Other activities include billing and collection services for City water and sewer utilities, business licenses, parking citations and miscellaneous receivables; payroll and benefit administration; directs computer systems operations; and purchasing services. Ms. Haas will assist the project team in

fiscal monitoring and budget management including providing fiscal oversight for grant and contract administration.

E. Coordination and cooperation with other projects, partner agencies, and affected organizations and individuals (80)

1. ***List cost sharing and in-kind partners and any other stakeholders involved with your project and indicate the nature of their contribution, if any. Address the team's ability to leverage outside funds.***

   Cost sharing partners include the City of St. Helena, through our share of Measure A Flood Protection Sales Tax proceeds. Based upon current projects through the year 2018 prepared by the County Auditor-Controller, the City will receive $20-25 million. While this is adequate to fund the local share of the Project, the City is also working with the Corps of Engineers and other Federal programs to obtain a 30% Federal Share of project costs. The City has retained the Carmen group in Washington D.C. to work with Corps Headquarters, South Pacific Division and the SF Regional office to bring the Corps on board through their Continuing Authorities small flood project program (Section 205) and Environmental Restoration Program (Section 206). The Corps of Engineers SF office has already identified this project in its 905 B Feasibility Report and Karen Rippey of the SF office has been actively involved in the design of this project.

   The City also receives an annual appropriation from the Napa County Flood Control and Water Conservation District's watershed benefit assessment program which levees benefit assessments on all property in Napa County for river system drainage and maintenance. This funding source has no sunset and provides the necessary funding for on-going project operation and maintenance.

   The California Conservation Corps will provide in-kind resources in project construction (planting and monitoring of vegetation establishment), and on-going maintenance and monitoring. While Flood District benefit assessment proceeds pay for CCC direct costs, the CCC work crews provide the in-kind labor. See attached CCC Letter.

   The project leverages Prop 13 funds 4:1 and these local funds are dedicated and in-place.

2. ***Does your project overlap with or complement ongoing activities being carried out by others (such as CALFED, the Sacramento and San Joaquin River Basins Comprehensive Study, the Delta levee program, local floodplain management programs, the Reclamation Board's Designated Floodway program, or a multiple objective regional or watershed plan)? If so, indicate any coordination that has taken place to date or is scheduled to take place in the future.***

3. ***Will this application, if approved, begin the next phase of a previously approved project or advance an ongoing project substantially toward completion?***

This project is a new Project addressing critical flood protection needs in Napa County.

4. ***Describe how the proposal demonstrates a coordinated approach among affected landowners, local governments, and nonprofit organizations. If other entities are affected, is there written support for the proposal and a willingness to cooperate?***

Please refer to the attached Letters of Support for the project form (Appendix I):

Early in the study, a comprehensive public involvement strategy was developed to ensure that agencies, organizations, and individuals potentially affected by the project or with an interest in the project would be included in the process. A Measure A Steering Committee was formed in 1999 to bring together the various elected officials, local groups, impacted stakeholders and residents including elected City and County officials and staff, representative from VVMHP, and local citizens to provide input on the flood study and review recommended strategies. That committee has remained active since its formation, providing input on the joint study and development of subsequent hydrology and other technical studies. The committee also provided input on the draft feasibility study presented to Council in December 2001 and July 2002. A Council subcommittee and project study team also met on a regular basis to discuss and implement community outreach strategies and monitor the study's progress.
The public was involved in the initial environmental scoping process to aid in developing flood reduction measures. Copies of the NOP, revised NOP, and comments on both documents are included in Appendix B. Minutes from public meetings regarding the flood protection project are available upon request from the City of St. Helena.
In addition to the required EIR scoping process, community outreach and input has played a significant role in developing the alternatives and identifying issues to be addressed in the draft EIR and feasibility study. The City Council has placed emphasis on establishing a collaborative community outreach and education process to inform and involve various community members and groups as the flood study progressed. Discussions regarding the flood study and issue identification have taken place with various stakeholders including Vineyard Valley Mobile Home Park homeowners association, Fulton Avenue residents, and adjacent property owners. Meetings have also been held with St Helena Chamber of Commerce board, former city mayors involved in previous flood planning efforts and local environmental groups including Friends of the Napa River.
Since March 2002, the City Council directed the study team to expand the outreach to stakeholder groups and the community with the intention of receiving additional input on the study alternatives. The subsequent outreach included meetings and/or communication with the following groups and individuals:

Napa County Flood Control and Water Conservation District

Federal Emergency Management Agency

California Department of Fish and Game

San Francisco Bay Regional Water Quality Control Board

Vineyard Valley Mobile Home Park Homeowners Association

Vineyard Valley Mobile Home Park, Park Owners

US Army Corps of Engineers

National Marine Fisheries Service

Friends of the Napa River

US Fish & Wildlife Service

Native American Heritage Commission

California Department of Water Resources

California Department of Transportation

Office of Historic Preservation

St. Helena City Council, Flood Subcommittee

Measure A Steering Committee

Napa County Resource Conservations District

Sulphur Creek Restoration Stewardship Group

Private Property Owners

Members of the General Public

The City has facilitated the active involvement of local, state and federal resource agencies and legislators informed of the study to pro-actively pursue potential funding opportunities and to resolve regulatory issues in the future. This coalition building represents a positive step towards achieving the Council's goal of reaching broad based community consensus in selecting and implementing a flood project.

Thank you for taking the time and effort to fill out this application. Please send one hard copy with required signatures **by 3:00 p.m. on February 14th, 2003** to:

Earl Nelson, Program Manager
Flood Protection Corridor Program
Division of Flood Management
1416 9th Street, Room 1641
Sacramento, CA 95814

Please also send an electronic copy by 3:00 p.m. on February 14th, 2003 to:

Bonnie Ross at bross@water.ca.gov