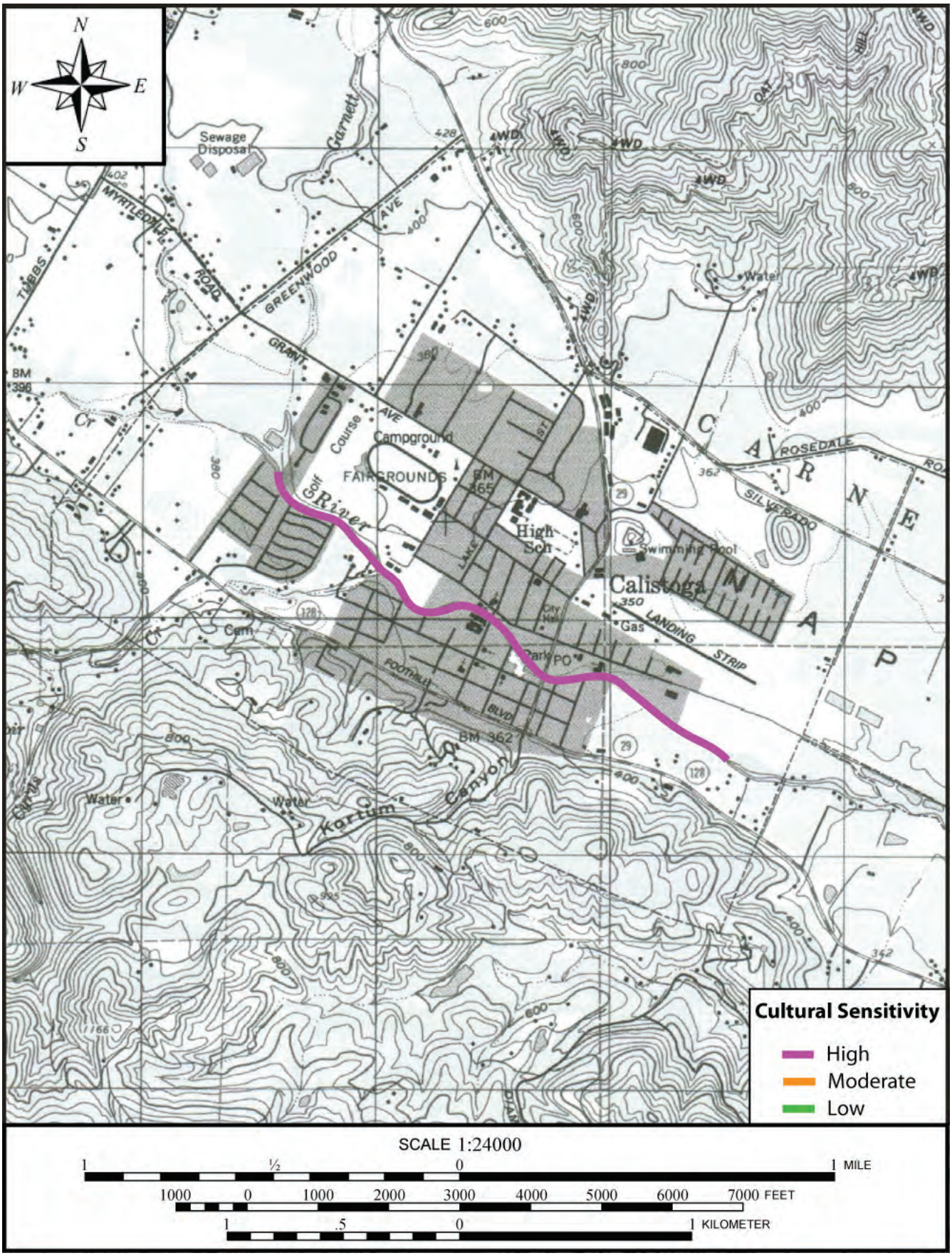
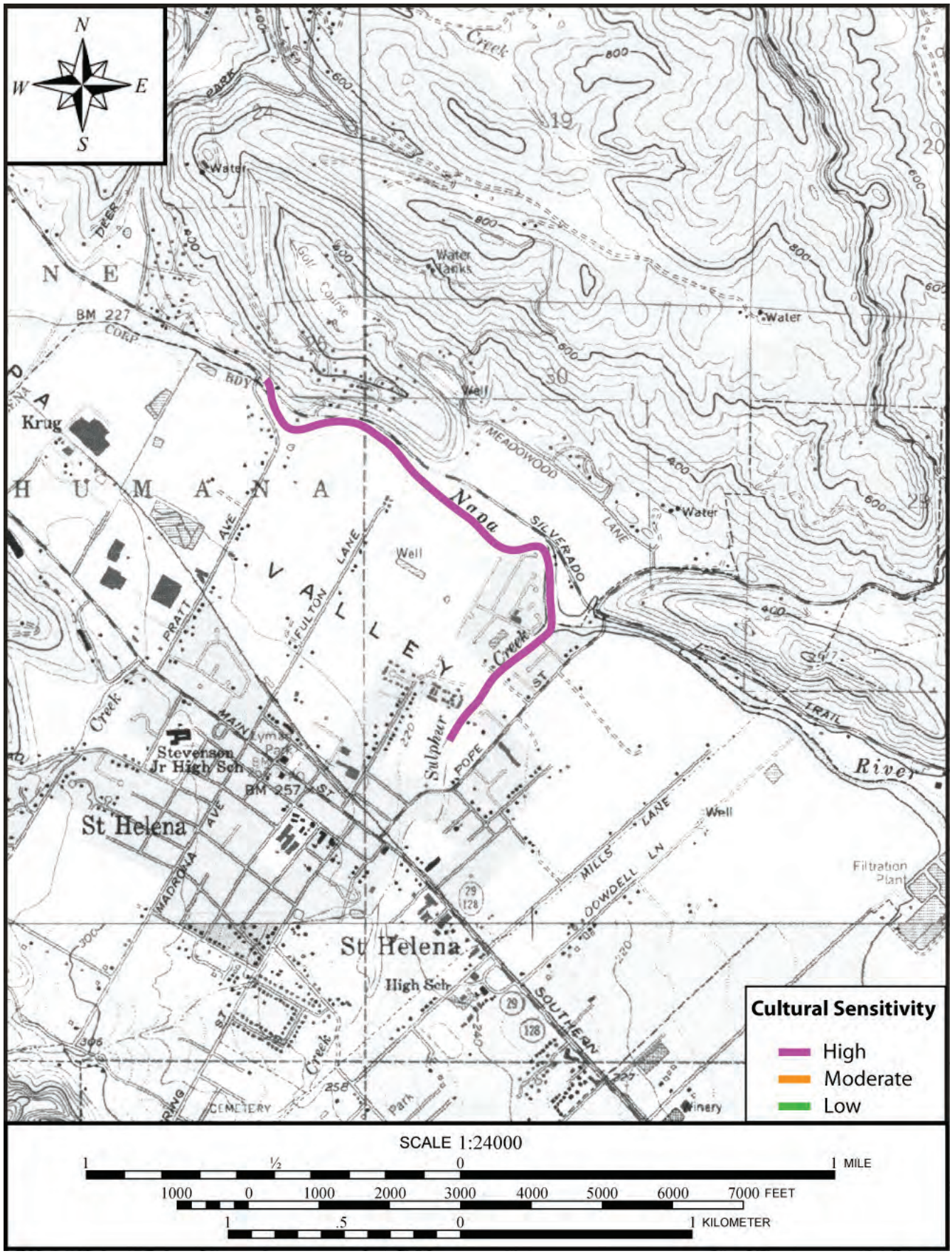
Appendix A

Cultural Sensitivity Maps



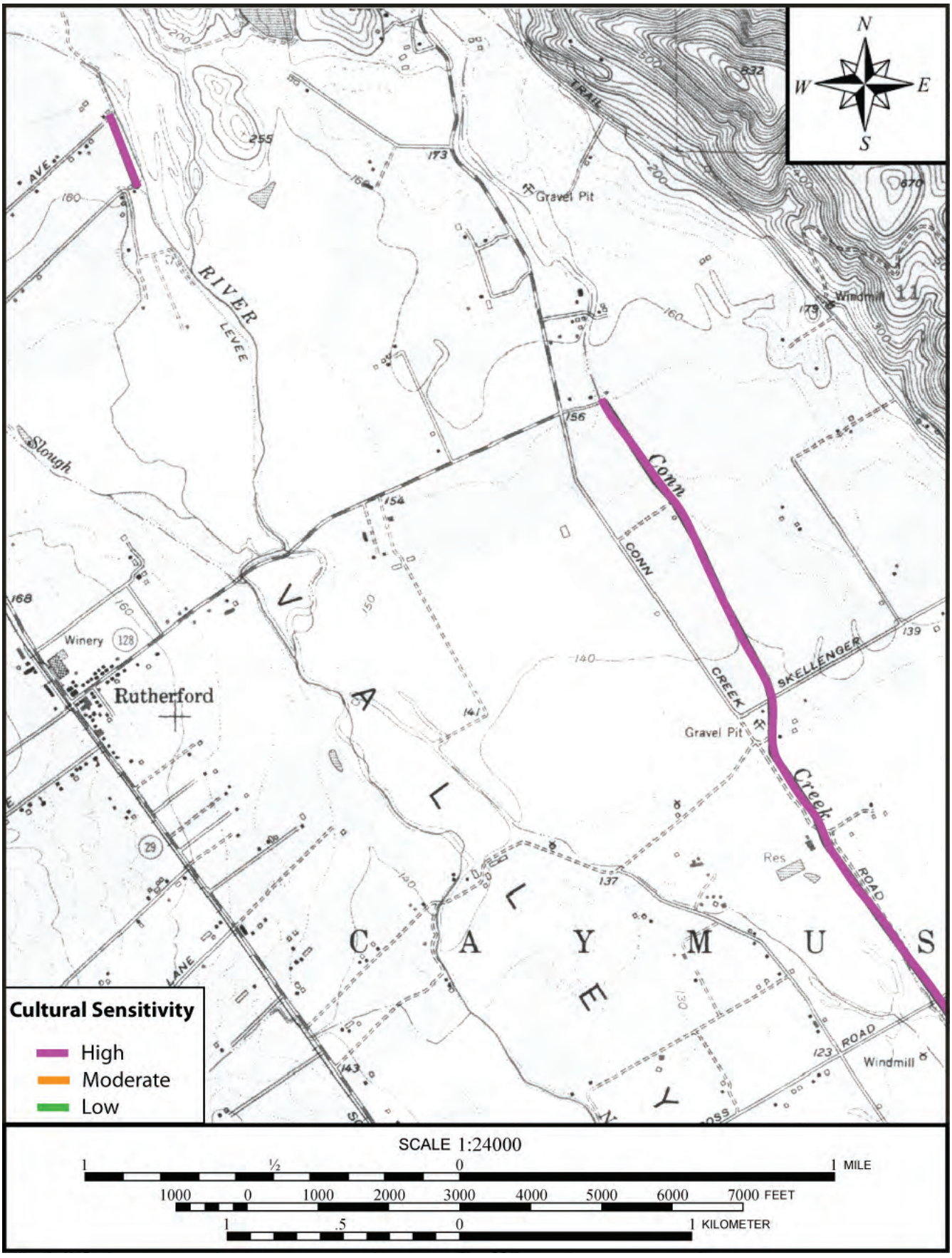
Project: \ 10.004\NapaSMP\Origer\Oct2011

Figure A-1
Cultural Resource Sensitivity: Calistoga Area



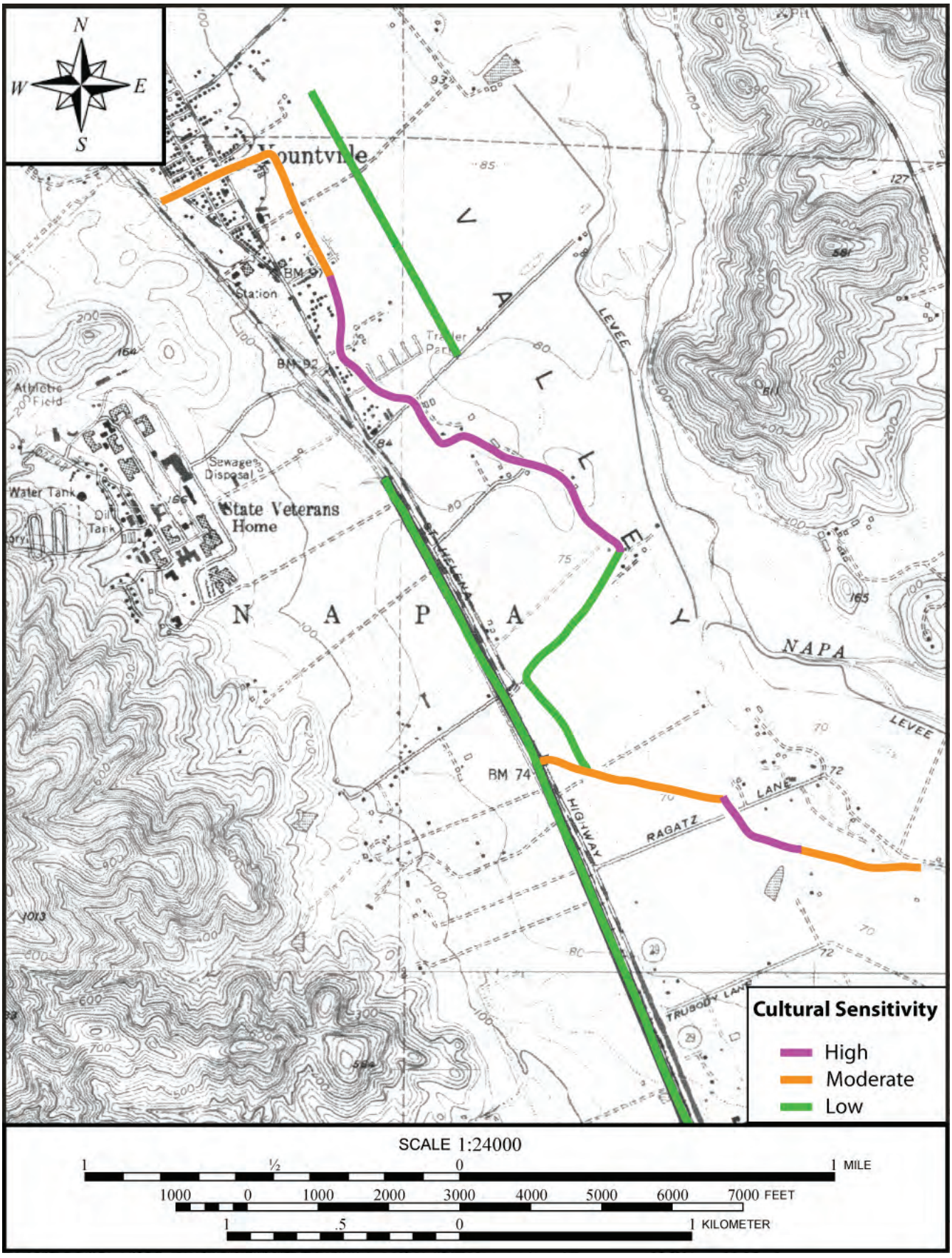
Project: \ 10.004\NapaSMP\Origer\Oct2011

Figure A-2
Cultural Resource Sensitivity: St. Helena Area



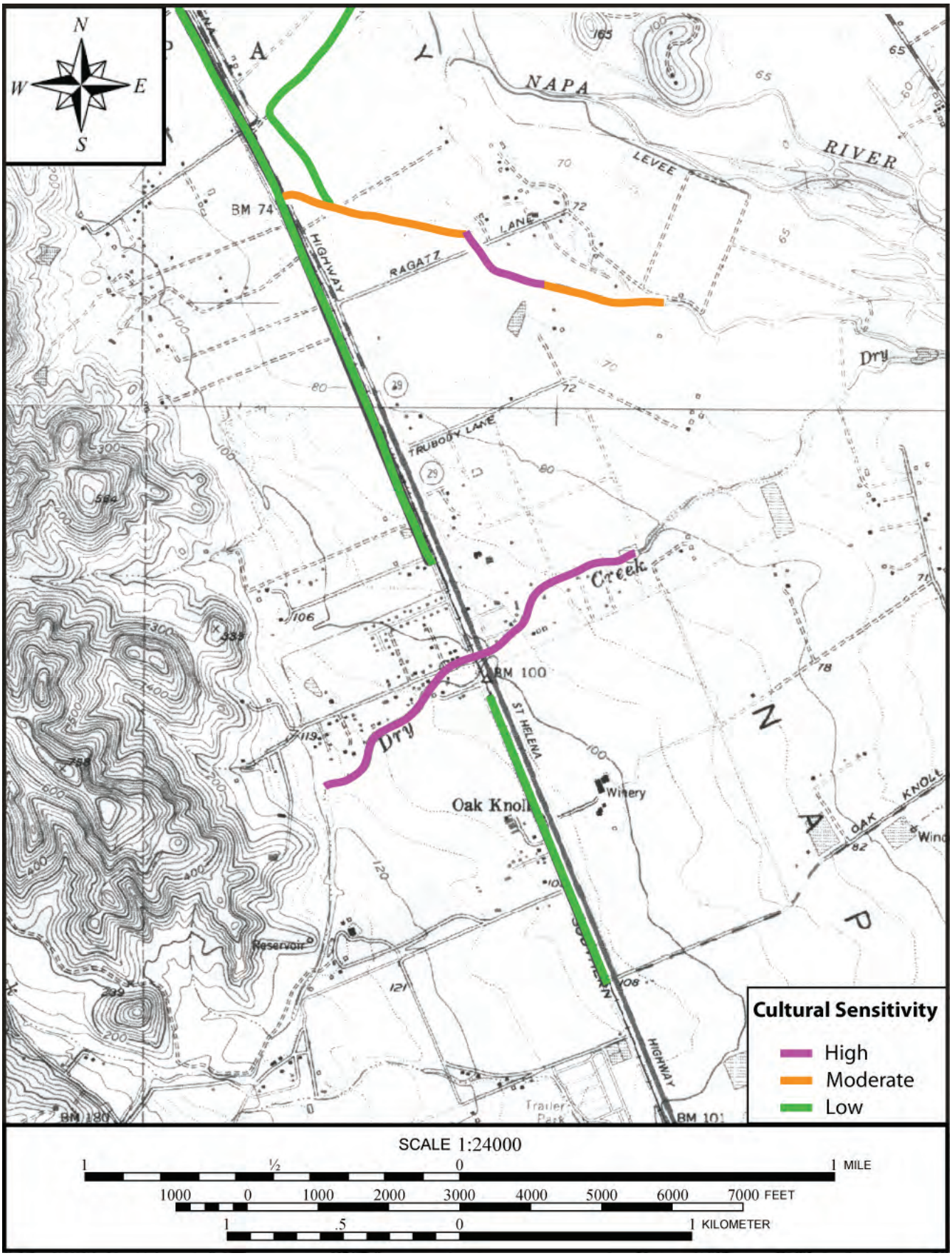
Project: \ 10.004\NapaSMP\Origer\Oct2011

Figure A-3
Cultural Resource Sensitivity: Conn Creek Area



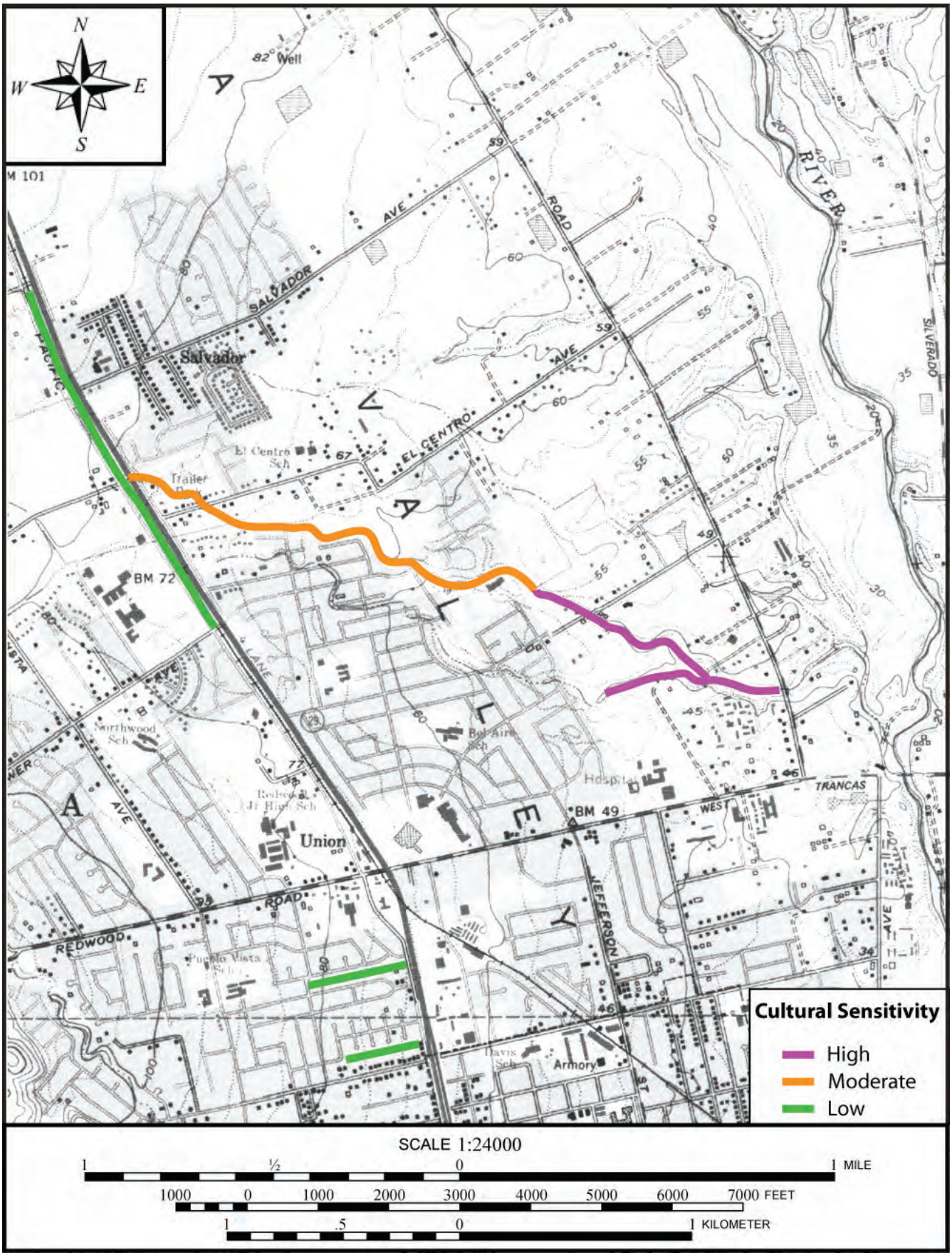
Project: \ 10.004\NapaSMP\Origer\Oct2011

Figure A-4
Cultural Resource Sensitivity: Yountville Area



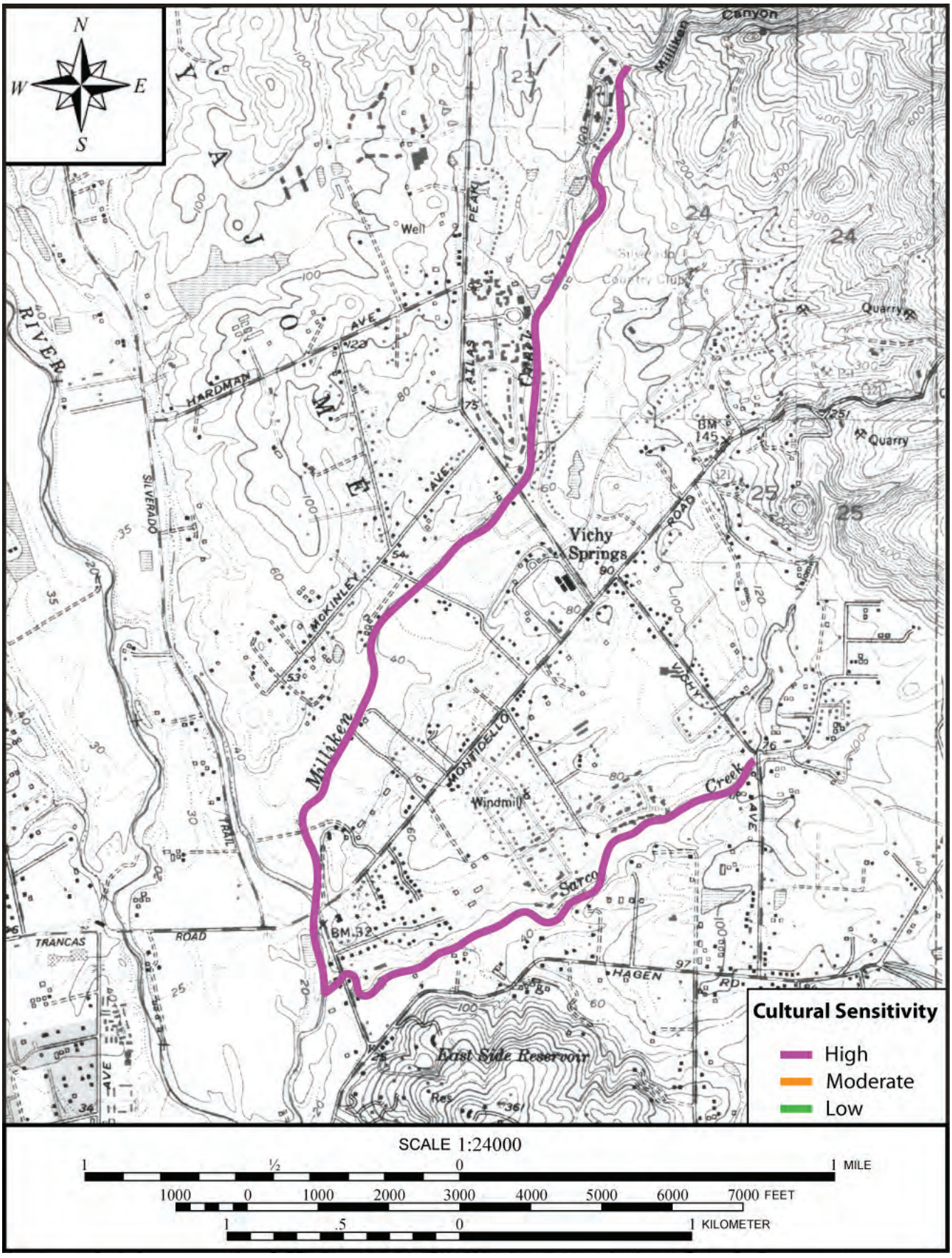
Project: _10.004\NapaSMP\Origer\Oct2011

Figure A-5
Cultural Resource Sensitivity: Oak Knoll Area



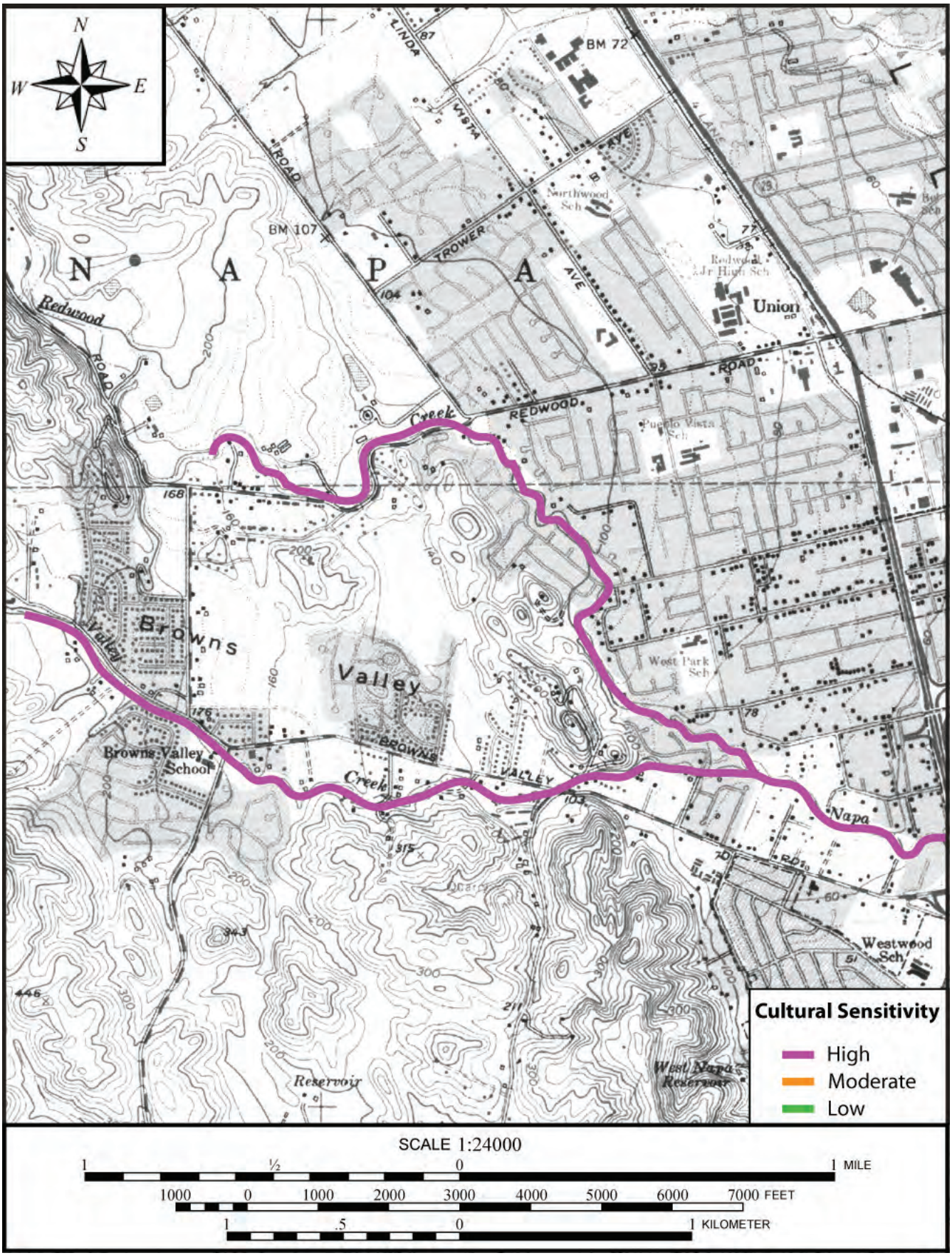
Project: \ 10.004\NapaSMP\Origer\Oct2011

Figure A-6
Cultural Resource Sensitivity: City of Napa North



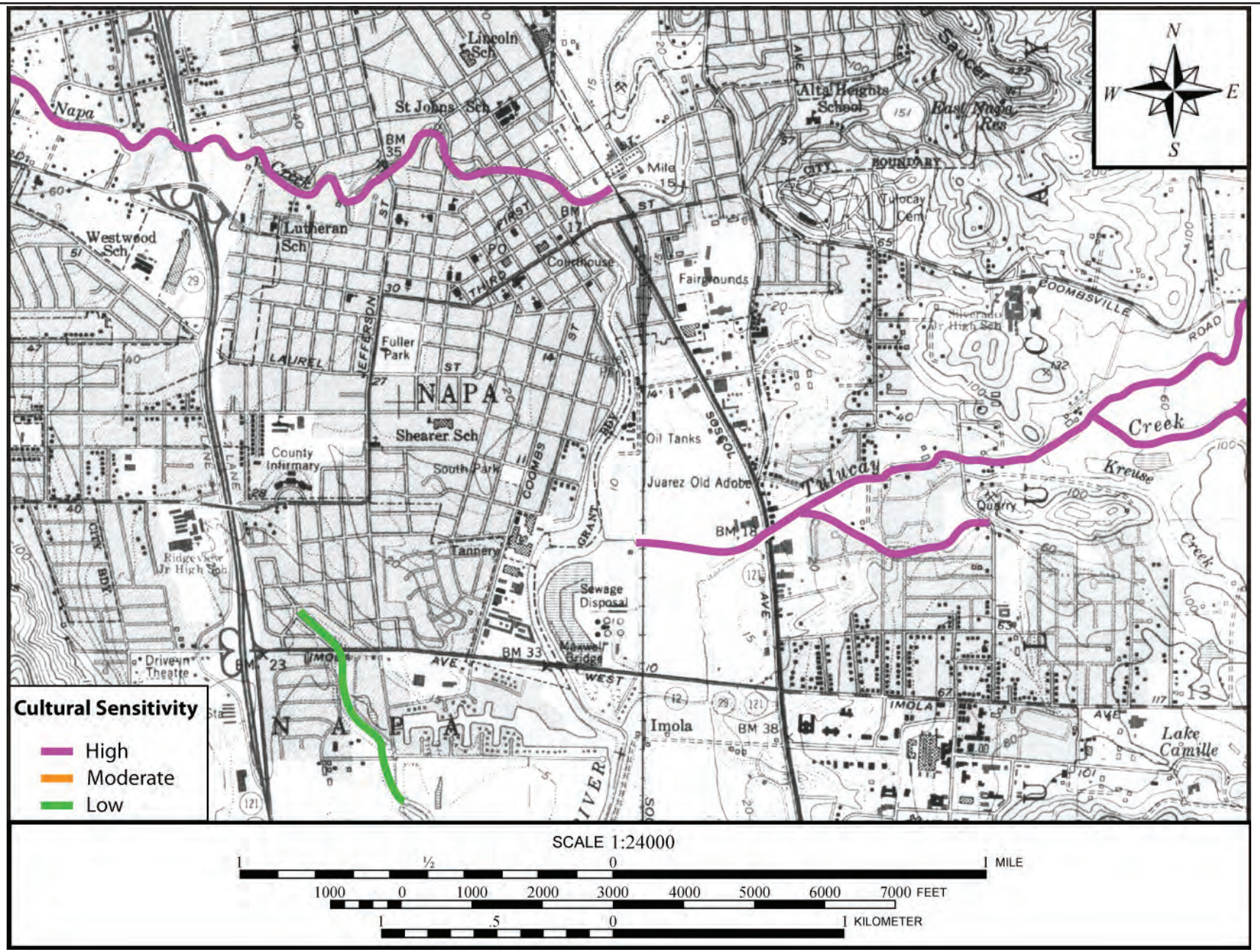
Project: \ 10.004\NapaSMP\Origer\Oct2011

Figure A-7
Cultural Resource Sensitivity: Milliken-Sarco Area



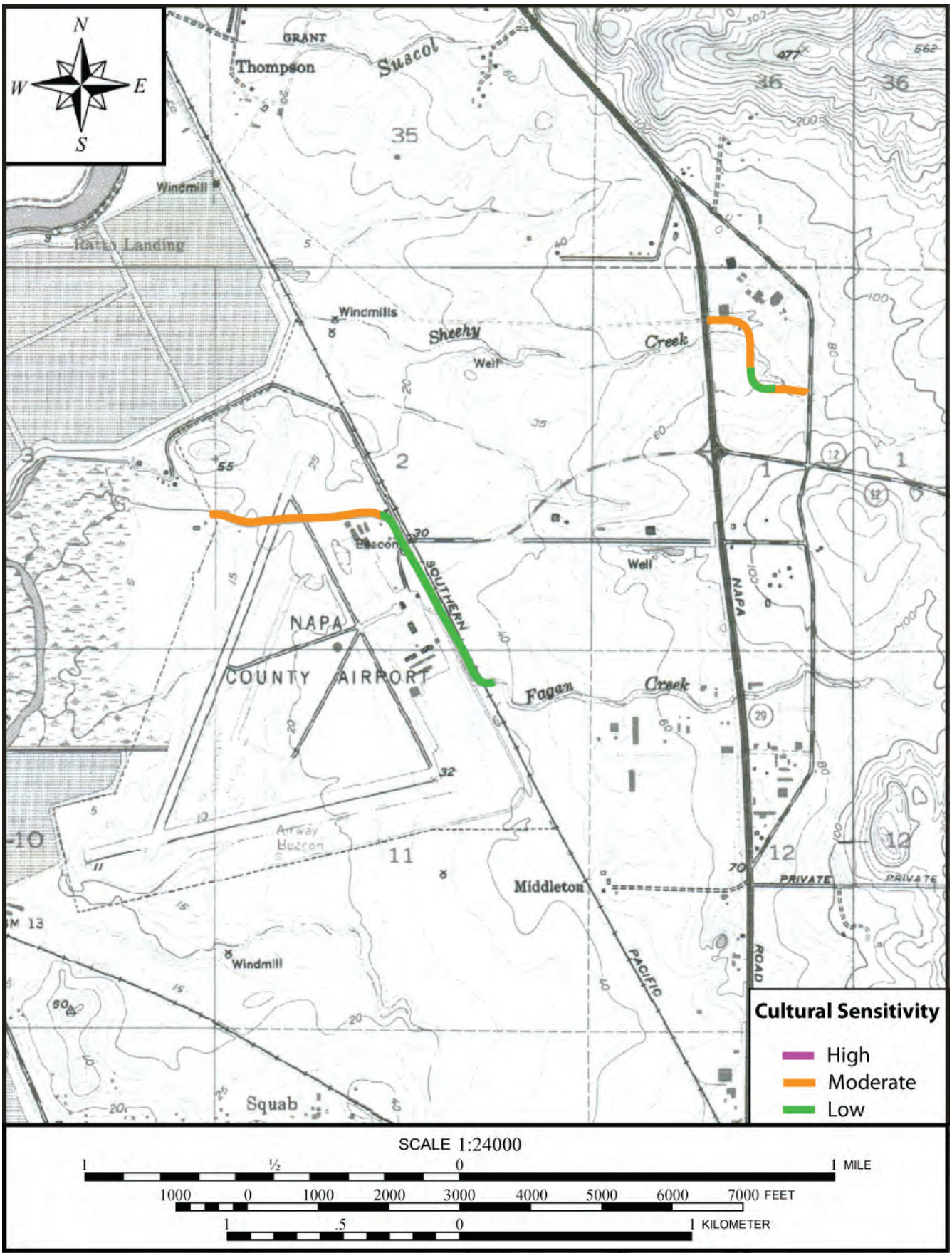
Project: \ 10.004\NapaSMP\Origer\Oct2011

Figure A-8
Cultural Resource Sensitivity: Browns Valley Area



Drive: \ 10.004\NapaSMP\Origer\Oct2011

Figure A-9
Cultural Resource Sensitivity: Central Napa Area



Project: \ 10.004\NapaSMP\Origer\Oct2011

Figure A-10
Cultural Resource Sensitivity: Airport Area

Appendix B

COPIES OF PERMITS

Forthcoming

Appendix C

CEQA Compliance Documentation

Initial Study/Negative Declaration – On File at District Office

State of California—The Resources Agency
DEPARTMENT OF FISH AND GAME

RECEIPT # 004

2012 ENVIRONMENTAL FILING FEE CASH RECEIPT

STATE CLEARING HOUSE # 2011122050
(If applicable)

TYPE OR PRINT CLEARLY

LEAD AGENCY **NAPA CO FLOOD CONTROL & WATER CONS. DIST.**			DATE 02-09-2012
COUNTY/STATE AGENCY OF FILING **NAPA COUNTY CLERK**			DOCUMENT NUMBER 2012-010
PROJECT TITLE NAPA COUNTY STREAM MAINTENANCE PROGRAM			
PROJECT APPLICANT NAME **RICHARD THOMASSER**			PHONE NUMBER (707) 259 - 8657
PROJECT APPLICANT ADDRESS **804 FIRST ST**	CITY **NAPA**	STATE CA	ZIP CODE 94559

PROJECT APPLICANT *(Check appropriate box):*
☐ Local Public Agency ☐ School District ☒ Other Special District ☐ State Agency ☐ Private

CHECK APPLICABLE FEES:

☐ Environmental Impact Report	$2,919.00	$ _____
☒ Negative Declaration	$2,101.50	$ **2101.50**
☐ Application Fee Water Diversion *(State Water Resources Control Board Only)*	$850.00	$ _____
☐ Projects Subject to Certified Regulatory Programs	$992.50	$ _____
☐ County Administrative Fee	$50.00	$ _____
☐ Project that is exempt from fees		
☐ Notice of Exemption		
☐ DFG No Effect Determination (Form Attached)		
☐ Other _____		$ _____

TRANSACTION # _____

PAYMENT METHOD:
☐ Cash ☐ Credit ☐ Check ☒ Journal 225617

TOTAL RECEIVED $2101.50

SIGNATURE X L. Ibarra	TITLE **DEPUTY COUNTY CLERK**

ORIGINAL - PROJECT APPLICANT COPY - DFG/ASB COPY - LEAD AGENCY COPY – COUNTY CLERK

FG 753.5a (Rev. 01/2010)

2012-004

Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

For U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Sacramento, CA 95814

☒ County Clerk

County of: Napa

Address: 900 Coombs Street, Rm 116, Napa, CA 94559

From:

Public Agency: Napa County Flood Control and Water Conservation District

Address: 804 First Street, Napa, CA 94559

Contact: Richard Thomasser

Phone: (707) 259-8657

Lead Agency (if different from above):

Address:

Contact:

Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2011122050

Project Title: Napa County Stream Maintenance Program

Project Location (include county): Napa County (county-wide)

Project Description:

The District has developed the Stream Maintenance Manual to improve the management of streams and drainage channels in the District's jurisdiction through establishing consistent guidance for stream maintenance activities. The Manual provides the organizational framework to oversee routine stream maintenance activities, including vegetation management, erosion protection and bank stabilization, sediment removal, and habitat enhancement. These maintenance activities occur in channels and streams throughout Napa County on an as-needed basis.

This is to advise that the Napa County Flood Control and Water Conservation District has approved the above described project on

☒ Lead Agency or ☐ Responsible Agency

February 7, 2012 (Date) and has made the following determinations regarding the above described project:

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☐ were ☒ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☐ was ☒ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☐ were ☒ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at: District offices: 804 First Street, Napa CA 94559, Monday thru Friday 8 AM - 4:45 PM (except holidays)

Signature (Public Agency) Richard Thomasser Title Watershed & Flood Control Operations Manager

Date February 8, 2012 Date Received for filing at OPR

ENDORSED

FEB 09 2012

JOHN TUTEUR
Napa County Recorder - County Clerk
By J. YBARRA
DEPUTY RECORDER - CLERK

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2005

Appendix D

Sediment Sampling and Analysis Guidelines

Appendix D: Sediment Sampling and Analysis Guidelines

Introduction

These sediment sampling and analysis guidelines accompany the description of sediment disposal in Chapter 7 of the Stream Maintenance Manual (Manual), and identify disposal options based on characteristics of the sediment. Guidance is provided for identifying sediment sampling frequency, sampling methodology, sediment analysis, and other sediment characterization activities. Sediment sampling, disposal, monitoring, and reporting conditions issued by the San Francisco Bay Regional Water Quality Control Board (RWQCB) under the forthcoming Waste Discharge Order (No. R2-2012-XXXX) are included by reference and as guided by the "Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines" developed by the RWQCB in May 2000. The sediment sampling and disposal process will be coordinated annually between the RWQCB and the Napa County Flood Control and Water Conservation District (District) as part of the review and approval process for annual stream maintenance and disposal activities.

Sediment Disposal

Sediment disposal sites will be identified when the need for sediment removal activities arise; sediment removal and disposal activities may not be necessary every year. Sediment disposal sites will be reviewed and approved by the RWQCB based on analytical results from sediment sampling at the channels to be maintained and in consideration of the ultimate fate of the sediment. The conditions for approval will evolve as the RWQCB and District become familiarized with the characteristics of sediment removed as part of maintenance activities and with sediment disposal and reuse conditions.

In general, sediment disposal sites can be characterized into five categories based on potential reuse or disposal opportunities. These categories include (1) on-site reuse, (2) other wetland, channel, or floodplain restoration reuse, (3) upland agricultural or commercial reuse (dry), (4) landfill disposal, and (5) hazardous waste disposal options. These disposal options are listed below in preferential order according to how well they support program objectives for ecologic sustainability.

- **Option 1: On-site reuse.** This includes reusing the sediment on-site (i.e., at the project site) within the channel or easement area for various fill or restoration purposes. For example, sediment excavated from the channel bottom could be placed adjacent to the active channel (remaining within the easement area), to enhance soil, vegetation, and riparian habitat conditions. Sediment could also be used on-site for bank stabilization purposes.
- **Option 2: Wetland, channel, or floodplain restoration or enhancement.** Option 2 consists of beneficial reuse of the sediment outside or off-site of District channel or easement areas, but in a wetland, channel, or floodplain setting to support ecologic functioning and habitat. As examples, gravel removed from one creek that does not support

steelhead or salmonids could be placed in another creek that does in order to enhance salmonid habitat. Additionally, excavated sediment could be reused as part of habitat enhancement activities along the Napa River mainstem.

Under this option, sediment would be used as fill in an already approved and permitted restoration project. This is a specific case where an approved and permitted project requires the use of sediment to fill a wetland or enhance in-stream habitat. It is important to note that this sediment disposal plan in no way encourages or sanctions the filling of existing wetlands. However, for restoration projects that are already approved and permitted, it may be preferable to use sediment materials that share similar properties. In this way, using good quality excavated channel sediment for reuse in a wetland, channel, or floodplain setting may be preferable or advantageous to using other fill material or soils.

For the purposes of the sediment quality criteria discussed below, Option 2 sites are located in the vicinity of and potentially drain to wetlands or water bodies.

- **Option 3: Upland agricultural or commercial reuse (dry upland sites).** Under this option, sediment would be reused for upland agricultural or commercial uses that are dry, whereby the sediment would not be secondarily eroded to stream channels or water bodies. Demand for dry sediment is high, particularly for use as soil amendment for agricultural crops, construction of foundation pads for buildings or structures, or permanent fill of pits or to level the landscape. It is likely that upland disposal sites within Napa County will be frequently available and can accept large quantities of sediment.
- **Option 4: Landfill disposal.** In this option the sediment would be disposed at an approved and operating landfill for use as daily cover material for landfill operations. The nearest operating landfills are the Upper Valley Disposal and Recycling (UVDS) Clover Flat Landfill located in St. Helena and the Portero Hills Sanitary Landfill in Suisun City. Another landfill disposal option is the Redwood Landfill located in Novato. Sediment would be taken to the nearest landfill in need of cover material.

  The District, in conjunction with the City of Napa and the U.S. Army Corps of Engineers, maintains two sediment disposal sites in the southern portion of the county. These are the Edgerly Island Disposal Site and the Napa Sanitation District Imola Site. Both sites are approved by the USACE to receive sediment spoils from dredging of the Napa River and other sites within the county. The Edgerly Island Disposal Site has the capacity to receive up to 300,000 cu. yds. of sediment and has only been used once; the site is nearly empty. The Napa Sanitation District Imola Site has the capacity to receive up to 55,000 cu. yds. of sediment and has not been utilized since it was developed in 2006. Both sites operate under Waste Discharge Requirements (WDRs) issued by the RWQCB.
- **Option 5: Hazardous waste disposal.** This option involves the disposal of sediments containing hazardous levels of contaminants. Hazardous waste will be disposed at appropriate hazardous waste facilities. The nearest hazardous waste landfill is located in Kettleman City, California.

These five disposal options will be evaluated in decreasing preference with potential site selection based on the quality of sediment. The preference is to select disposal options that most beneficially reuse the sediment with the least environmental effects.

It is anticipated that off-site disposal (Options 3 and 4) would be proposed for the majority of maintenance activities. Disposal Option 2 would be implemented on rare occasions due to the

infrequency of sediment removal and the specific needs of other pre-approved restoration projects in the County. Option 5 would only be used if the sediment is deemed hazardous. The specific disposal sites for the options selected will be identified as part of the sediment planning process and approved by the RWQCB prior to maintenance.

Sample Analysis Approach

All sediment samples will be analyzed according to the forthcoming conditions of the RWQCB Waste Discharge Requirements - Monitoring and Reporting Program (Order No. R2-2012-XXXX). Sampling parameters/analytes may be modified after a history of sampling is obtained. This may result in not requiring monitoring for some of these contaminants under certain situations or at certain locations, or the addition of more parameters/analytes if deemed necessary by the RWQCB.

Analytes tested will vary depending on the proposed reuse of the sediment, as follows.

- If sediment is reused on-site (Option 1), no testing is required because it is assumed the sediment quality would not change from existing conditions.
- If sediment is reused for wetland, channel, or floodplain restoration, where the newly placed sediment would be in contact with water bodies (Option 2), analysis would be conducted according to the "wetland surface" testing requirements stated in the *Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines* (RWQCB 2000). Required analysis includes sediment chemistry and acute toxicity testing.
- If sediment is reused for upland agricultural or commercial use where dry sediment would be permanently removed from the system (i.e., there would be no contact with water bodies), than analytes listed in Table 1 would be tested. This analyte list is the "wetland foundation, levee, and construction fill" requirements stated in the *Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines* (RWQCB 2000). Required analysis includes sediment chemistry (Table 1). Note that the majority of proposed upland disposal sites would not generate leachate, thus the leachate testing requirements in RWQCB (2000) would not be conducted unless directed by the RWQCB.
- If sediment is taken to a landfill for use as cover material or to the Edgerly Island Disposal Site or the Napa Sanitation District Imola Site, sediment quality testing would be conducted as required by RWQCB permits issued to those sites and in compliance with DTSC waste acceptance regulations.
- Sediment exhibiting levels in the hazardous range, as defined by the California Department of Toxic Substances Control (DTSC), would be taken to a permitted hazardous waste facility.

Sample Collection Frequency and Locations

- For sediment removal projects that involve the removal and disposal of less than 200 cubic yards of sediment, one sample will be collected and analyzed. Details on the methodology used to collect and composite samples are described below.

- For sediment removal projects that require the removal and disposal of more than 200 cubic yards of sediment, one sample will be collected for every increment of 500 cubic yards

of sediment to be removed (beyond the original 200 cubic yards). Details on the methodology used to collect and composite samples are described below.

- Sampling locations will be selected to represent overall sediment conditions at the maintenance site. Sampling sites will be selected to target conditions at the upstream and downstream ends of the project zone. As is feasible, sampling sites will also specifically target conditions downstream of culvert crossings, culvert outfalls, and key stream confluences.

Sediment Sampling Methodology

This guidance applies to discrete (single) samples and composite samples. All samples shall be collected by means of a hand trowel, a hand auger, or another sampling method approved by the regulatory agencies. The individual collecting the sample will have the discretion of choosing the sampling method which is the most efficient to perform.

All sampling equipment will be decontaminated using Alconox© soap and rinsing with distilled or de-ionized water. Latex-free gloves will be worn when handling cleaned equipment. Sampling will be conducted in accordance with the methods described below:

Hand Trowel Procedure

1. Remove vegetation and woody debris from the ground surface.
2. If collecting a subsurface sample, use a shovel to dig down to the desired sampling interval.
3. Use a stainless steel hand trowel to collect soil.
4. Place soil in an appropriate sampling container.
5. Replace all excavated soils to their original location (i.e., backfill the sampling hole).

Hand Auger Procedure

1. Remove vegetation and woody debris from the ground surface.
2. Use the hand auger to advance down to the top of the sampling interval.
3. Use a hand auger to collect soil from the desired depth.
4. Use a clean (decontaminated) tool to scoop the soil out of the auger and place in an appropriate sampling container.
5. Replace all excavated soils to their original location (i.e., backfill the sampling hole).

Composite Sediment Sampling

Discrete sediment samples will be collected from multiple locations to represent the entire wedge of sediment designated for removal using a hand trowel or auger. Discrete samples will be composited into one sample by mixing the soil in a decontaminated contained, then filling the sampling jars. Laboratory analyses will be performed on the composite sample.

Sampling Depth

The sampling depth will be determined in the field. At each sampling location, the staff collecting the samples shall make an estimate of the depth of the sediment using visual clues and/or existing data. Sediment samples shall be collected at the surface and at 1 ft. intervals down to a maximum 3 ft level. In the event that the depth of the sediment is less than 1 foot, then the sample shall be collected at the surface. Samples will be collected up to a maximum depth of 3 feet because collection of samples below that depth is prohibitively difficult due to the finite strength of the individual collecting the sample, and the wet properties of the sediment, which may cause a borehole to collapse. In some locations it may even be infeasible to collect a sample at 3 feet bgs due to the unstable nature of the sediments or grain size (gravels or cobbles too large or compacted to sample). In the event that it is infeasible to collect a sample at the depth interval specified, the sample shall be collected at the deepest interval possible (using 1/2 foot increments). Also note that the maximum depth at the majority of sediment removal sites is not greater than 3 feet because sediment is removed at this threshold due to the significant reduction in channel conveyance capacity which occurs when sediment is accumulated higher than 3 feet.

Other Sediment Sampling Details

In general, samples will be taken from the finest sediment at a sampling site and every attempt will be made to collect sediments that are representative of the materials to be removed. Most contaminants are associated with fine-grained sediment, and it is therefore important that some of the samples contain the finest sediment that is present at a given project site. Fine sediments include mud, silts, and finer sandy materials. A suitable field test for grain size is to rub sediments between the fingers: finer sediments will feel smooth, whereas coarser sediments will be gritty (SWRCB 2008). Note that in many of Napa County channels, the grain size of accumulated sediments is larger, in the large sand and small gravel ranges. Contaminants are less apt to sorb onto larger sized materials.

Observed Contamination and Results That Exceed Water Quality Criteria

For all projects, any observed contamination as evidenced by chemical-like odors, oily sheens, or irregularly colored sediment would be immediately reported to the local fire department's hazardous materials team and the appropriate RWQCB staff person in the Cleanups and Investigations Unit. The RWQCB will direct the District on how to handle and remove potentially hazardous sediment.

In addition, if sediment test results are found to exceed water quality criteria, the District will coordinate with the RWQCB to develop an action plan to properly handle and dispose of the sediment. Under the guidance of the RWQCB, the sediment removal activity may proceed according to the action plan or the maintenance activity may not be conducted.

Sediment Disposal Best Management Practices

Sediment Disposal Best Management Practices are discussed in Chapter 7 of the Manual and in Table 3-1, the Stream Maintenance Manual Best Management Practices Table.

Reporting of Sediment Sampling Results

The District will maintain records of field sampling methods, locations, depths, analysis, and results.

The District will submit complete laboratory sediment sampling results to the RWQCB when sediment removal activities are proposed.

TABLE 1: Sediment Sampling Analyte List

EPA Test Method[1]	Analyte	Reporting Limit for Soil (dry weight mg/kg)	Analyte (cont.)	Reporting Limit for Soil (mg/kg)
	Conventional Parameters			
	Grain Size (%)	0.1		
9060	Total organic carbon (TOC) (%)	0.1		
	Total solids (%)	0.1		
6020	Total Metals			
	Arsenic	0.1		
	Cadmium (total)	0.1		
	Chromium (total)	0.1		
	Copper (total)	0.1		
	Lead (total)	0.1		
	Mercury (total)	0.02		
	Nickel (total)	0.1		
	Selenium (total)	0.1		
	Silver (total)	0.1		
	Zinc (total)	1		
	Butyltins			
	Monobutyltin	0.01	Total Butyltins	NA
	Dibutyltin	0.01		
	Tributyltin	0.01		
	Tetrabutyltin	0.01		
1668	Polychlorinated biphenyls (PCBs)			
	Aroclor 1242	0.20	Total Aroclors	NA
	Aroclor 1248	0.20		
	Aroclor 1254	0.20		
	Aroclor 1260	0.20		
1668	Organochlorine Pesticides			
	Aldrin	0.02	Endosulfan I	0.02
	α-HCH (hexachlorocyclohexane)	0.02	Endosulfan II	0.02

[1] The most recent version of EPA's Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", also known as SW-846, will be used.

EPA Test Method[1]	Analyte	Reporting Limit for Soil (dry weight mg/kg)	Analyte (cont.)	Reporting Limit for Soil (mg/kg)
	β-HCH	0.02	Endosulfan sulfate	0.02
	γ-HCH (Lindane)	0.02	Endrin	0.02
	δ-HCH	0.02	Endrin aldehyde	0.02
	Chlordane (tech)	0.02	Heptachlor	0.02
	2,4'-DDD	0.02	Heptachlor epoxide	0.02
	4,4'-DDD	0.02	Toxaphene	0.02
	2,4'-DDE	0.02		
	4,4'-DDE	0.02		
	2,4'-DDT	0.02		
	4,4'-DDT	0.02		
	Total DDT	MA		
	Dieldrin	0.02		
8270	Poly Aromatic Hydrocarbons (PAHs)			
	1-Methylnaphthalene	0.2	Low molecular weight PAHs, sum	NA
	1-Methylphenanthrene	0.2	High molecular weight PAHs, sum	NA
	2,3,5-Trimethylnaphthalene	0.2	PAHs, total	NA
	2,6-Dimethylnaphthalene	0.2		
	2-Methylnaphthalene	0.2		
	2-Methylphenanthrene	0.2		
	3-Methylphenanthrene	0.2		
	Acenaphthene	0.2		
	Acenaphthylene	0.2		
	Anthracene	0.2		
	Benz(a)anthracene	0.2		
	Benzo(a)pyrene	0.2		
	Benzo(b)fluoranthene	0.2		
	Benzo(e)pyrene	0.2		
	Benzo(g,h,i)perylene	0.2		
	Biphenyl	0.2		
	Chrysene	0.2		
	Dibenz(a,h)anthracene	0.2		
	Fluoranthene	0.2		
	Fluorene	0.2		
	Indeno(1,2,3-cd)pyrene	0.2		
	Naphthalene	0.2		
	Perylene	0.2		
	Phenanthrene	0.2		
	Pyrene	0.2		

NOTE: this table is replicated from Table 5 “Routine Parameters and Target Analytes for Evaluation of Dredged Material (RWQCB 2000)

[1] The most recent version of EPA’s Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", also known as SW-846, will be used.

References Cited

California Department of Toxic Substances Control (DTSC). 2005. California Regulations, Title 22, Chapter 11, Article 3. Characteristics of Hazardous Waste. Available: http://www.dtsc.ca.gov/LawsRegsPolicies/Title22/upload/OEARA_REG_Title22_Ch11_Art3.pdf.

California State Water Resources Control Board (SWRCB). 2008. *SWAMP Statewide Stream Contaminant Trend Monitoring at Integrator Sites*. Available: http://www.swrcb.ca.gov/water_issues/programs/swamp/docs/workplans/statewide_stream_contaminants_trend_montoring_plan.pdf

San Francisco Bay Regional Water Quality Control Board (RWQCB). 2010. Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin (Region 2). Oakland, CA. Available: http://www.waterboards.ca.gov/sanfranciscobay/basin_planning.shtml

RWQCB. 2000. *Beneficial Reuse of dredged materials: sediment screening and testing guidelines. Draft Staff Report.* Available: http://www.waterboards.ca.gov/sanfranciscobay/water_issues/available_documents/benreuse.pdf

U.S. Environmental Protection Agency (USEPA) 2008. *Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites. RSL Table Update. Region 9.* September 12, 2008. Available: http://www.epa.gov/region09/waste/sfund/prg/pdf/master_sl_table_bwrun_12SEP2008.pdf