RESOLUTION NO. 27736

RESOLUTION OF THE COUNCIL OF THE CITY OF SANTA ROSA APPROVING AND ADOPTING A MITIGATED NEGATIVE DECLARATION FOR THE COLGAN CREEK RESTORATION AND PARK PROJECT AND AUTHORIZING THE DEPARTMENT OF PUBLIC WORKS TO PROCEED WITH THE FINAL DESIGN.

WHEREAS, the Environmental Coordinator has conducted an Initial Study on the possible environmental consequences of the Colgan Creek Restoration Project, completed in June 2010 and revised to address public comments in August 2010; and

WHEREAS, the Environmental Coordinator, based on the Initial Study, determined any potential environmental effects of the proposed project have been clearly mitigated by identified mitigation measures to the point where no significant environmental effects would occur and the Environmental Coordinator, based on this determination, prepared a Mitigated Negative Declaration subject to mitigating requirements with respect to the environmental consequences of the subject property; and

WHEREAS, a Notice of Mitigated Negative Declaration was duly posted and given and comments from the public and interested persons were invited; and

WHEREAS, the Council considered the Initial Study, the findings and determinations of the Environmental Coordinator, the proposed Mitigated Negative Declaration, and Associated Mitigation Monitoring Plan, public comments previously received, the staff report, written and oral, and the testimony and other evidence of all those wishing to be heard.

NOW, THEREFORE, BE IT RESOLVED that based upon the findings, and the record herein, the Council of the City of Santa Rosa determines that the proposed improvements will not have a significant effect upon the environment.

BE IT FURTHER RESOLVED that the Council adopts the Mitigated Negative Declaration and associated Mitigation Monitoring Plan for the Colgan Creek Restoration project, dated June 2010.

BE IT FURTHER RESOVLED that the Council authorizes the Department of Public Works to proceed with the final design.

BE IT FURTHER RESOLVED that the Council specifies that the documents and materials constituting the record of proceedings in this matter are located at the Public Works Department, 69 Stony Circle, and are in the custody of the City's Director of Public Works.

BE IT FURTHER RESOLVED that within five days after the approval of the project the Public Works Department shall file a Notice of Determination with the County Clerk of the County of Sonoma. A copy of this Notice will also be provided to the State Clearing House.

IN COUNCIL DULY PASSED this 21st day of September, 2010.

AYES: (7) Mayor Gorin, Vice Mayor Wysocky, Councilmembers Bender, Sawyer, Jacobi, Vas Dupre and Olivares

NOES: (0)

ABSENT: (0)

ABSTAIN: (0)

ATTEST: Sandi Bliss, Deputy City Clerk APPROVED: Susan Gorin, Mayor

APPROVED AS TO FORM:

Caroline Fowler, City Attorney

SEP 27 2010

Notice of Determination

This notice was posted on _____ and will remain posted for a period of thirty days until OCT 27 2010

Appendix D

To:

☐ Office of Planning and Research

10-0927-1

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

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

☒ County Clerk
County of: Sonoma
Address: 2300 County Center Drive, Suite B-177
Santa Rosa, CA 95403

From:
Public Agency: City of Santa Rosa
Address: Public Works Department
69 Stony Circle, Santa Rosa, CA 95401
Contact: Noah Housh
Phone: 707-543-4322

Lead Agency (if different from above): _____
Address: _____
Contact: _____
Phone: _____

JANICE ATKINSON, Co. Clerk
BY: Julie Garfia DEPUTY CLERK

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): 2010072004

Project Title: Colgan Creek Restoration and Neighborhood Park

Project Location (include county): Multiple Parcels Santa Rosa, CA Sonoma County See Attached

Project Description:

See Attached

#SD 078434

This is to advise that the City of Santa Rosa has approved the above described project on
☒ Lead Agency or ☐ Responsible Agency

September 21, 2010 (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: 100 Santa Rosa Avenue, Room 3 Santa Rosa, CA 95401

Signature (Public Agency) _____ Title City Planner

Date September 22, 2010 Date Received for filing at OPR _____

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

Revised 2005

401759

Location:
Lower Colgan Creek from just west of Victoria Drive to the under crossing of Bellvue Avenue and two other parcels (totaling approximately 5 acres in size) adjacent to the creek channel. Multiple Parcels in Santa Rosa, Sonoma County, California, APNs: 043-084-023, 043-200-005, 043-200-004, 043-135-002, 043-122-015, 043-122-007, 043-121-007, 134-042-056, 134-042-055, 134-042-057, 134-042-025, 134-042-048, 134-042-032

Project Description:
The Colgan Creek Restoration Project proposes to restore approximately 1.4 miles of Colgan Creek from a modified flood control channel to a healthier seasonal creek ecosystem that includes riffles, pools, and streamside vegetation; Create a new neighborhood park approximately five acres in size to provide green space and parkland in a park deficient area of Santa Rosa. The project also proposes to construct a bicycle and pedestrian pathway along the channel connecting to the existing regional trail systems including the Colgan Creek Trail to the west and Taylor Mountain Regional Park to the east. Preliminary project analysis has indicated that the bridges at Dutton Meadow, East of Burgess Drive, and Burgess Drive itself are undersized for anticipated traffic and creek flows and would also be modified and/or replaced to address both of these discrepancies as a component of the project.

In addition, the project creek channel modifications will increase flood protection of this reach of Colgan Creek from the 25 year to the 100 year storm level and enhance water quality within the reach. These modifications should also contribute to improved environmental conditions for the federally-protected steelhead trout and other aquatic species within the Laguna de Santa Rosa downstream of the project area.

The project implements several regional and city plans, including Santa Rosa's 2035 General Plan, Bike and Pedestrian Master Plan, and Citywide Creek Master Plan.

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

2010 ENVIRONMENTAL FILING FEE ~~CASH~~ RECEIPT

RECEIPT# 401759

STATE CLEARING HOUSE # *(If applicable)* 2010072024

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY

LEAD AGENCY: City of Santa Rosa — DATE: 09/27/2010

COUNTY/STATE AGENCY OF FILING: Sonoma — DOCUMENT NUMBER: 10-0927-1

PROJECT TITLE: Colgan Creek Restoration and Neighborhood Park

PROJECT APPLICANT NAME: City of Santa Rosa Public Works Dpt. — PHONE NUMBER: 707 543 4322

PROJECT APPLICANT ADDRESS: 69 Stony Circle — CITY: Santa Rosa — STATE: CA — ZIP CODE: 95401

PROJECT APPLICANT *(Check appropriate box):*

☒ Local Public Agency ☐ School District ☐ Other Special District ☐ State Agency ☐ Private Entity

CHECK APPLICABLE FEES:

☐ Environmental Impact Report (EIR)	$2,792.25	$
☒ Mitigated/Negative Declaration (ND)(MND) Prev pd FG # 207834 (see attached)	$2,010.25	$ prev pd
☐ Application Fee Water Diversion *(State Water Resources Control Board Only)*	$850.00	$
☐ Projects Subject to Certified Regulatory Programs (CRP)	$949.50	$
☐ County Administrative Fee	$50.00	$ 50.00
☐ Project that is exempt from fees		
☐ Notice of Exemption		
☐ DFG No Effect Determination (Form Attached)		
☐ Other _____		$

PAYMENT METHOD: 00601652

☐ Cash ☐ Credit ☒ Check ☐ Other _____ TOTAL RECEIVED $ 50.00

SIGNATURE: X _____ TITLE: Dep Clerk

WHITE - PROJECT APPLICANT YELLOW - DFG/ASB PINK - LEAD AGENCY GOLDEN ROD - COUNTY CLERK FG 753.5a (Rev. 11/09)

DEPARTMENT OF FISH AND GAME
ENVIRONMENTAL FILING FEE CASH RECEIPT

753.5a (6-01)

02

Agency: City of Santa Rosa Date: 11/22/02

State Agency of Filing: Sonoma County Document No.: 02-1132-1

Project Title: Lower Colgan Creek Channel Restoration Project.

Applicant Name: City of Santa Rosa Public Works Dept. Phone Number: 543-4225

Project Applicant Address: 69 Stony Circle, Santa Rosa CA 95401

Project Applicant (check appropriate box): Local Public Agency [X] School District [ ] Other Special District [ ]
State Agency [ ] Private Entity [ ]

CHECK APPLICABLE FEES:

( ) Environmental Impact Report	$850.00	$
(X) Negative Declaration	$1,250.00	$ 1,250.00
( ) Application Fee Water Diversion (State Water Resources Control Board Only)	$850.00	$
( ) Projects Subject to Certified Regulatory Programs	$850.00	$
(X) County Administrative Fee	$35.00	$ 35.00
( ) Project that is exempt from fees		
	TOTAL RECEIVED	$ 1285.00

02055

Signature and title of person receiving payment: Charles

WHITE-PROJECT APPLICANT YELLOW-DFG/FASB PINK-LEAD AGENCY GOLDENROD-STATE AGENCY OF FILING

SONOMA COUNTY CLERK
2300 COUNTY CENTER DR STE B177
SANTA ROSA CA 95403
707-565-3800

ISSUED TO: CITY OF SANTA ROSA

RECEIPT # 678434
DATE 05/27/2010 05:28:52 AM

DESCRIPTION	FEE
Process Fee	50.00
Total Amount Due	50.00
CHECK 00661652	50.00
F&G 401759	
Total Amount Paid	50.00

THERE IS NO HIGHER CALLING
THAN PUBLIC SERVICE
JOHN F. KENNEDY
Deputy: JGARFIA

provisions of CEQA.

X A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.

3. Mitigation measures X were ____ were not made a condition of the approval of the project.
4. A statement of Overriding Considerations ____ was X was not adopted for this project.
5. Findings ____ were X were not made pursuant to the provisions of CEQA.

This is to certify that the final Negative Declaration with comments and responses and record of project approval is available to the General Public at: The City of Santa Rosa Public Works Department, 69 Stony Circle Santa Rosa, CA 95401

M. Colleen Ferguson 11/22/02

Signature (Colleen Ferguson, Supervising Engineer) Date

Date received for filing at OPR:

Revised October 1989

20234

City of
Santa Rosa
Community Development

Colgan Creek Restoration & Neighborhood Park
Multiple Parcels, Santa Rosa, CA (Sonoma County)
Assessor's Parcel Nos. 043-084-023, 043-200-005, 043-200-004, 043-135-002, 043-122-015, 043-122-007, 043-121-007, 134-042-056, 134-042-055, 134-042-057, 134-042-025, 134-042-048, 134-042-032

Initial Study/Mitigated Negative Declaration

Lead Agency:

City of Santa Rosa
Community Development
100 Santa Rosa Avenue, Rm. 3
Santa Rosa, CA 95404

Contact: Noah Housh, City Planner

Date: August 26, 2010

City of Santa Rosa

DATE: August 26, 2010
TO: Public Agencies, Organizations and Interested Parties

FROM: Noah Housh, City Planner

SUBJECT: **NOTICE OF PUBLIC REVIEW AND INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION**

Pursuant to the State of California Public Resources Code and the "Guidelines for Implementation of the California Environmental Quality Act of 1970" as amended to date, this is to advise you that the Department of Community Development of the City of Santa Rosa has prepared an Initial Study on the following project:

Project Name:
Colgan Creek Restoration & Neighborhood Park

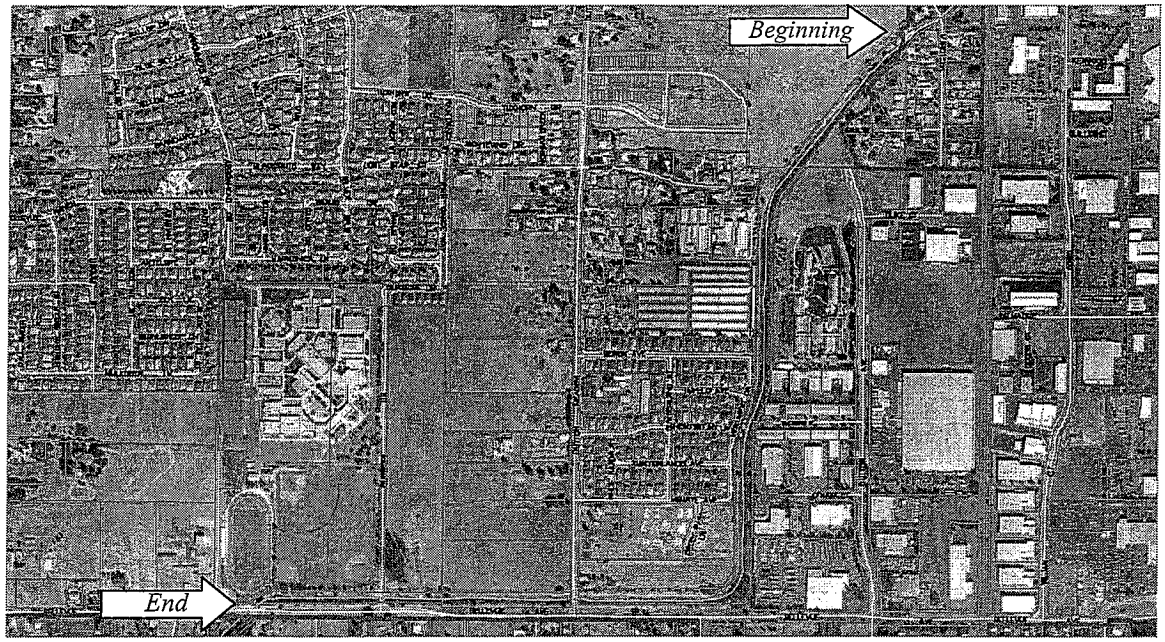
Notice: This document is intended to serve as an update and revision to the previously adopted Mitigated Negative Declaration (Dakin, 2002) for the Colgan Creek Restoration project with supporting information added to address new environmental conditions including a revised Biological Assessment and Cultural Resource Analysis. Additionally, this document is being amended to include potential impacts associated with the development of a neighborhood park adjacent to the proposed creek restoration.

Location:
Lower Colgan Creek from just west of Victoria Drive to the under crossing of Bellvue Avenue and two other parcels (totaling approximately 5 acres in size) adjacent to the creek channel. Multiple Parcels in Santa Rosa, Sonoma County, California, APNs: 043-084-023, 043-200-005, 043-200-004, 043-135-002, 043-122-015, 043-122-007, 043-121-007, 134-042-056, 134-042-055, 134-042-057, 134-042-025, 134-042-048, 134-042-032

Property Description:
Colgan Creek originates in the foothills east of Santa Rosa on the north side of Taylor Mountain, flows northwesterly along Kawana Springs Road until it passes under U.S. 101 near Hearn Avenue, then turns and flows southwesterly until it meets the Laguna de Santa Rosa near the intersection of Todd Road and Highway 116.

With exception of the headwater area and stretches along Kawana Springs Road, Colgan Creek is entirely confined to an artificially straightened flood channel with capacity to carry 25 year storm events. From Petaluma Hill Road to Victoria Drive (south of Hearn Avenue), the channel is mostly constructed of concrete, with a flat bottom. From Victoria Drive to the Llano Road crossing (a distance of roughly four miles, including the project zone), the flood channel has mainly soil banks, supplemented with riprap or concrete in some areas, and has a permeable, semi-natural bottom (i.e. silt or clay streambed, but unnaturally flat and channelized).

Throughout the project zone the stream is almost fully exposed to the sun, although scattered Live Oaks do populate the banks and (immature) valley oaks have been planted along the access road above the channel in some areas. A near-absence of shade persists downstream from the lower end of the project zone at Bellevue Avenue to Llano Road. From Llano Road (and the project area), Colgan Creek continues as an artificially straightened flood channel, but a dense riparian corridor of large, older cottonwood, willow, and other trees has been allowed to remain, both within and above the channel. These trees provide a nearly closed canopy shading the stream, and completely altering the stream habitat in beneficial ways.



Within the project reach, the measured water temperature in Colgan Creek near the Bellevue Avenue bridge has been documented over 80°F on multiple occasions. Higher stream temperatures are expected in mid-summer, where water remains in this reach. The upper lethal thermal limit for steelhead or coho salmon is generally considered to be about 24°C (75°F), so temperature alone rules out any possibility of steelhead or coho juvenile rearing within the project zone under the existing conditions.

In addition to emergent vegetation and weeds, the stream contains large amounts of thick, filamentous green algae, the growth of which is enhanced by the absence of shade, normally provided by riparian trees and shrubs. The streambed throughout most of the project reach is either hard clay or clay overlain by silt. There is no gravel or cobble, and the only boulders appear to be isolated chunks of riprap that have fallen from the banks and been moved downstream at high flows. Aside from these few boulders and occasional shopping carts, there is very little in-stream structure available to provide shelter or living space for aquatic animals.

Two concrete and grouted riprap drop structures within the project reach represent significant barriers to upstream migration by fish, turtles, and other aquatic animals at all but the highest flows. The stream fauna in the project zone are relatively impoverished. Only three species of fish commonly present in the project area (in small numbers) are mosquito fish, threespine stickleback, and Clearlake-Russian River roach. The latter two are native species; the mosquito fish are exotic species introduced to control mosquito larvae. Each of these are small-sized fish, the biggest of which is the roach, which may reach about five inches in length. These species are tolerant of high temperatures and poor water quality, and adapted to hide within algae and submerged vegetation.

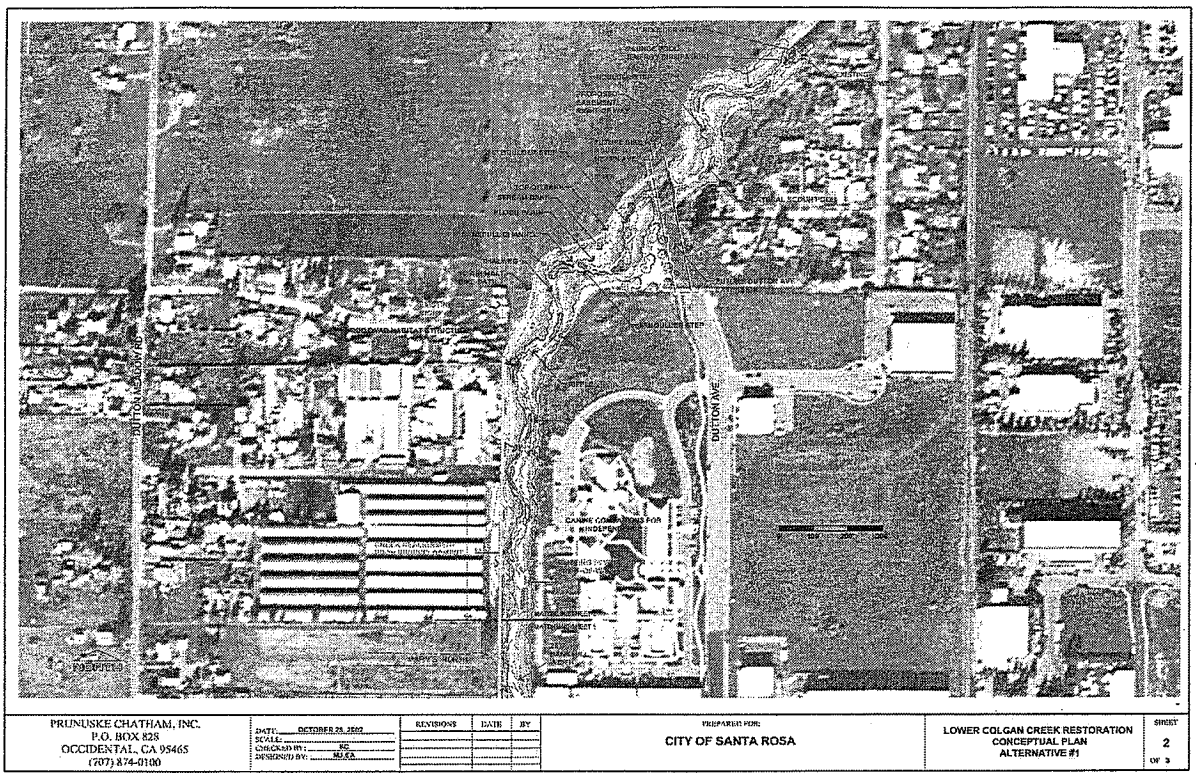
Among the algae and emergent vegetation, invertebrates typical of ponds and sluggish streams have been observed, including dragonfly larvae, dytiscid beetles, water striders, backswimmers, corixids, snails, and a few introduced swamp crawfish. Notable by their absence were the types of insect larvae (stoneflies, caddisflies, mayflies) associated with highly productive, rocky streams. Also absent were flatworms and leeches, which are common in perennial streams in this area, but cannot survive in streams that go dry in summer, and are slow to colonize new areas (unlike flying insects or good swimmers such as fish). Very few water-associated birds were observed during the original field reconnaissance for the project on May 3, 2000 (one green heron, one kildeer, one pair of mallards).

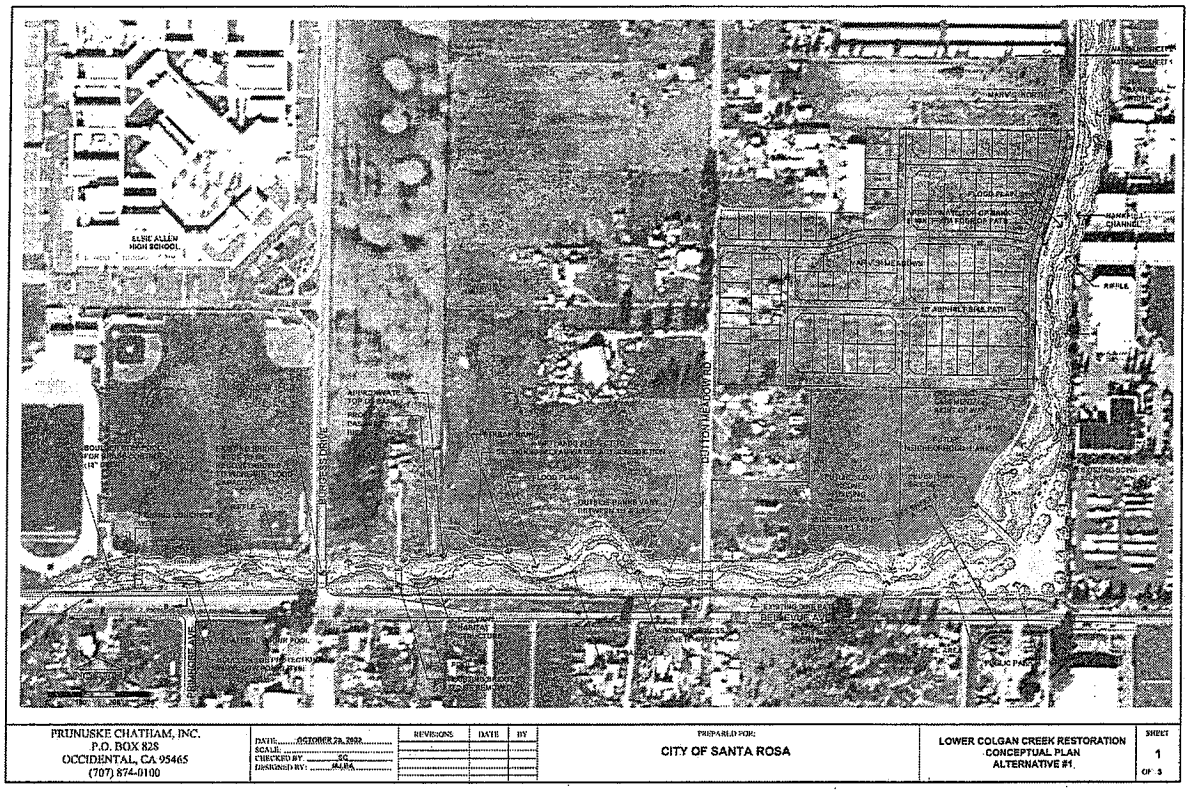
Project Description:
The Colgan Creek Restoration Project proposes to restore approximately 1.4 miles of Colgan Creek from a modified flood control channel to a healthier seasonal creek ecosystem that includes riffles, pools, and streamside vegetation and to create a new neighborhood park approximately five acres in size to provide green space and recreation opportunities in a park deficient area of Santa Rosa. The project also proposes to

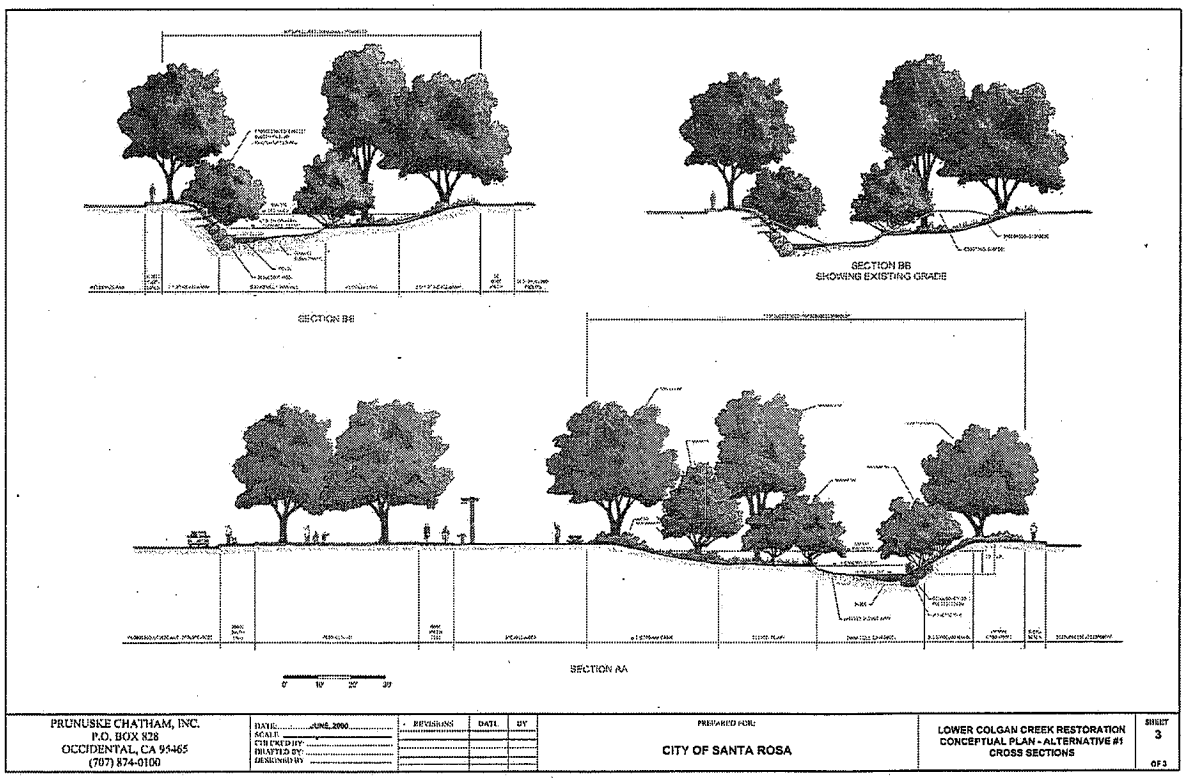
construct a bicycle and pedestrian pathway along the channel, and through out the park ultimately connecting to the existing regional trail systems including the Colgan Creek Trail to the west and Taylor Mountain Regional Park to the east. Preliminary project analysis has also indicated that the bridges at Dutton Meadow, east of Burgess Drive, and Burgess Drive itself are undersized for anticipated traffic and creek flows and may also be modified and/or replaced to address both of these discrepancies as a component of the project.

In addition, the project creek channel modifications will increase flood protection of this reach of Colgan Creek from the 25 year to the 100 year storm level and enhance water quality within the reach. These modifications should also contribute to improved environmental conditions for the federally-protected steelhead trout and other aquatic species within the Laguna de Santa Rosa downstream of the project area.

The project implements several regional and city plans, including Santa Rosa's 2035 General Plan, Bike and Pedestrian Master Plan, and Citywide Creek Master Plan.







Construction of the project may require de-watering of the creek channel, by damming or diverting to accommodate construction and restoration activities proposed within the creek bottom. If necessary, this de-watering will be done using standards and procedures established by the Department of Fish and Game to minimize any impacts to existing wildlife.

The proposed new channel stream length after restoration is 7,281 linear feet vs. the existing pre-project length of 6,523 linear feet.

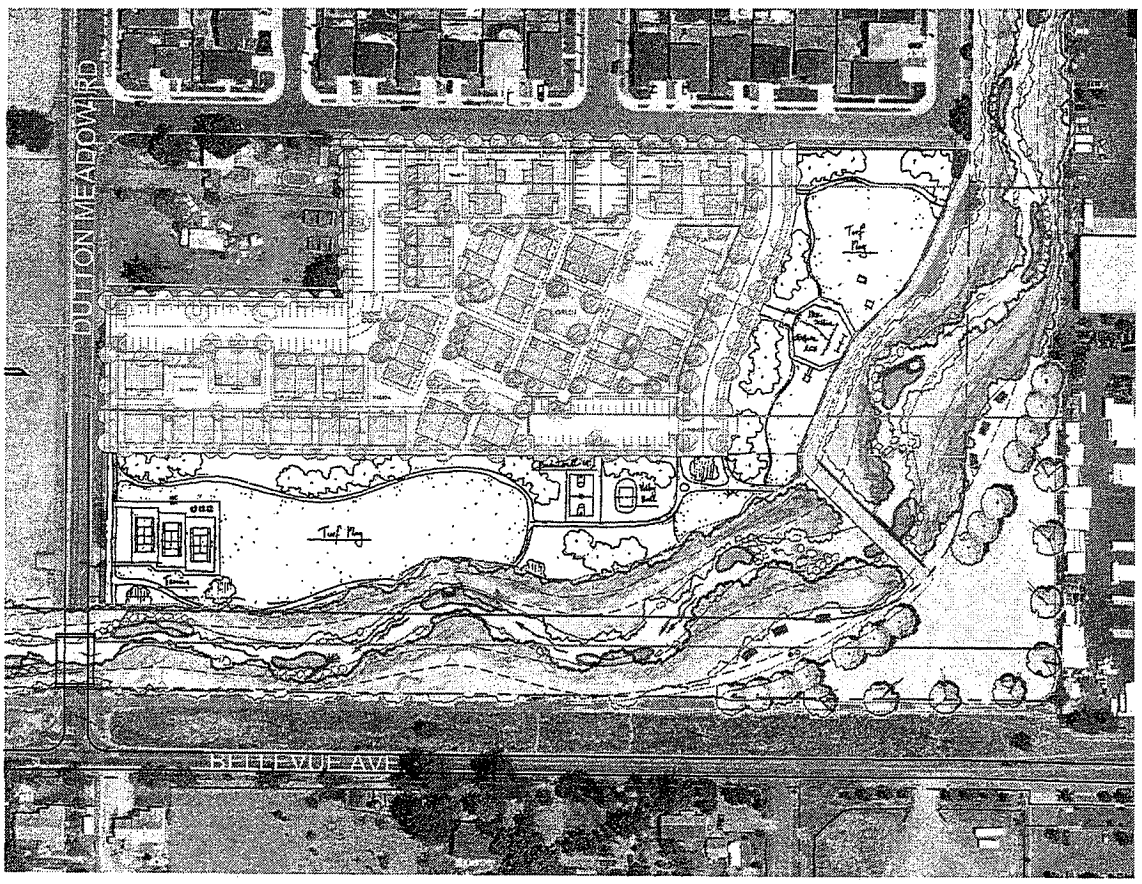
Channel and Habitat Features

The project plan includes the installation of boulder bank protection, drop structures, vanes, and woody debris habitat structures as implementation of the restoration project. The design assumes all 1:1 bank slopes will have vegetated boulder armoring to bankfull flow elevations and vegetated fabric reinforced earth fills above. 2:1 slopes on outside bends may need boulder toe protection or biotechnical bank protection and any slope 3:1 or flatter will be protected by the proposed native plant reforestation. Boulder armor at outside bends will be designed to enhance aquatic habitat.

Proposed Park Features

The proposal includes a Neighborhood Park which is discussed in the City of Santa Rosa2035 general Plan as "located within about ½ mile of the residents they serve, are between 2-10 acres in size, and typically include picnic and play areas as park amenities. Amenities proposed for this park are anticipated to include up to eight ball courts for various sporting activities possibly including tennis, basketball, bocce, and volley ball. Approximately four covered picnic areas through out the park site, playing areas for children including (approximately) three separate play structures typical of other park facilities in and around Santa Rosa.

These amenities would be accessed by pedestrian/bicycle paths through out the site that also connect to the pedestrian/bicycle path proposed along the Colgan Creek channel. While Neighborhood parks typically are accessed by neighboring residents walking to the facility, parking areas for 12-15 cars will also be provided on site to accommodate disabled or other patrons wishing to drive to the park. Garbage collection facilities will be provided at parking areas, picnic areas, and along paths through out the park itself.



LOWER COLGAN CREEK PARK AND PRESERVE

Environmental Issues:

The proposed project would result in potentially significant impacts in Aestheics, Biologic Resources, Air Quality, Cultural Resources, Geology & Soils, Hydrology & Water Quality, Noise, Recreation, Transportation & Traffic, and Utilities and Service Systems. The project impacts would be mitigated to a less-than-significant level through implementation of recommended mitigation measures or through compliance with existing Municipal Code requirements or City standards. Recommended measures are summarized in the attached Mitigation Monitoring and Reporting Plan (MMRP) and Initial Study/Mitigated Negative Declaration. The Initial Study/Mitigated Negative Declaration document has been prepared in consultation with local, and state responsible and trustee agencies and in accordance with Section 15063 of the California Environmental Quality Act (CEQA). Furthermore, the Initial Study/Mitigated Negative Declaration will serve as the environmental compliance document required under CEQA for any subsequent phases of the project and for permits/approvals required by a responsible agency.

A thirty-day (30-day) public review period shall commence on **August 26, 2010**. Written comments must be sent to the City of Santa Rosa, Community Development Department, Planning Division, 100 Santa Rosa Avenue, Room 3, Santa Rosa CA 95402 by **September 27, 2010.** The City of Santa Rosa City Council will hold a public hearing on the Initial Study/Mitigated Negative Declaration and project merits on or after **October 5, 2010 in the Santa Rosa City Council Chambers at City Hall (address listed above). Correspondence and comments can be delivered to Noah Housh, project planner, phone: (707) 543-4322, email: nhoush@srcity.org**

MITIGATION MONITORING AND REPORTING PROGRAM
Colgan Creek Restoration & Neighborhood Park

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring / Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
I. AESTHETICS **Mitigation Measure I c.:** Creek corridors would continue to be monitored by creek stewards as part of the Creek Stewardship Program, which also organizes volunteer creek clean-ups. Garbage cans must be provided throughout the park site and are recommended to be provided at trailheads, parking facilities, picnic areas and street crossings. City and County personnel would report vandalism and other maintenance issues that affect the appearance and condition of the creeks and the park shall incorporate signage indicating to members of the public the location of trash facilities and how to report issues associated with trash and debris. **Mitigation Measure I. d.:** Path and park lighting must be minimal to reflect the day use intent of the facility, incorporate cutoff lenses, and be shielded downward to minimize spillage of light and glare onto surrounding properties and disturbance of wildlife.	Incorporate into contract language when awarding bids to contractors.	Public Works Department	Incorporate as a component of project design and construction contracts. Public Works Department incorporates aesthetic measures into project construction and requires these be implemented through any contractual agreements to construct the project	Stop construction in vicinity of potential impacts until compliance has been verified	
III. AIR QUALITY **Mitigation Measure III. a., c., & d.**-Implementing the following measures (as specified by the 1996 BAAQMD CEQA Guidelines) would reduce construction-related air quality impacts to an insignificant level. • Water all active construction areas including unpaved access roads, parking	Incorporate into contract language when awarding bids to contractors.	Public Works Department	Incorporate as a component of project design and construction contracts. Public Works Department incorporates air quality	Stop construction in vicinity of potential impacts until compliance has been verified	

MITIGATION MONITORING AND REPORTING PROGRAM
Colgan Creek Restoration & Neighborhood Park

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring / Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
areas and staging areas at construction sites at least twice daily. • Cover all trucks hauling soil, sand and other loose materials, or require trucks to maintain at least two feet of freeboard. • Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites. • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.			measures into project construction and requires these be implemented through any contractual agreements to construct the project		

MITIGATION MONITORING AND REPORTING PROGRAM
Colgan Creek Restoration & Neighborhood Park

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring / Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
IV. BIOLOGICAL RESOURCES **Mitigation Measure IV a.-f. - Implement Conditions as Required by Regulatory Agencies** These measures will be specified at the time of permit issuance.	Incorporate into contract language when awarding bids to contractors.	Public Works Department	Incorporate as a component of project design and construction contracts.	Stop construction in vicinity of potential impacts until compliance has been verified	
Mitigation Measure IV. a., b., c., & f. – Compensate for the Loss of Seasonal Wetlands The Colgan Creek Restoration project may cause the fill or alteration of the jurisdictional seasonal wetlands between Dutton Meadows Dr. and Burgess Dr. (APN 043-121-07). Mitigate at a 2:1 ratio for both restoration and preservation of existing seasonal wetland habitat unless different ratios are require by permitting agencies. Such mitigation could occur onsite or offsite as directed by permitted agencies. Preservation requirements could be waived given the restoration goal of the project. The specific requirements will be specified as part of the permit condition with the regulatory agencies.	Project sponsor to obtain all necessary approvals from appropriate agencies prior to beginning construction.		Public Works Department incorporates biological resources measures into project construction and requires these be implemented through any contractual agreements to construct the project		
Mitigation Measure IV. a., b., & f. - Potential CTS Impacts Any aestivation habitat for the California tiger salamander must be compensated for per the specifications of commenting and regulatory agencies. The specific mitigation measures will be determined through consultation with CDFG and USFWS, but is expected to be 2:1.					

MITIGATION MONITORING AND REPORTING PROGRAM
Colgan Creek Restoration & Neighborhood Park

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring / Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
Mitigation Measure IV. a., b., c., & d. - Install Erosion and Siltation Controls Appropriate erosion and siltation controls must be installed and maintained during all phases of construction, and all exposed soil and other fills must be permanently stabilized at the earliest practicable date. Erosion control should be established by 1) an erosion control blanket, 2) hydroseeding with a mix of native grasses, forbs, and wildflowers, 3) surface irrigation of the hydroseeded area to establish the plants prior to the start of the rainy season, and 4) placement of rocks/boulders against the toe of the outside bank. The intent of these mitigations is not only to preserve biologic habitat but also to meet the requirements of the North Coast Regional Water Quality Control Board (NCRWQCB) General Construction Permit for maintaining water quality. All water exiting the project site is required to document compliance with the requirements of the NCRWQCB water quality standards. Recommended elements of erosion and sedimentation control are as follows: 1. Allow work only when stream flows are low and are routed around the work area. 2. Multiple phased construction periods control exposed work zone size.					

MITIGATION MONITORING AND REPORTING PROGRAM
Colgan Creek Restoration & Neighborhood Park

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring / Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
3. Dewater/sedimentation tank system 4. Dewatering zones are separated by sedimentation dams with controlled overflows. Sedimentation dams are dry weather features only and contain failure of dewatering system or possible breach of the bypass system/cofer dam. 5. All exposed graded slopes not rearmored, will receive high quality erosion control blankets installed in a timely manner. All areas of restored creek below the 100-year water surface, will receive its' ultimate surface treatment prior to the October 15 end of work period. 6. Re-vegetation of the creek zone should be expected concurrent with all phases. Hydroseeding, mulching or other common organic methods of erosion control should be included for all phases. 7. All ultimate planted areas will have erosion blankets over top soils and erosion mats in grassed areas. Revetment or other high velocity armoring systems will be blanketed with soil filter fabrics to reduce soil loss.					
<u>Mitigation Measure IV. a., b., d., & f.</u> - Protect & Remove Aquatic Life to the Greatest Extent Possible In order to minimize the potential for disruption and harm to aquatic life indigenous to the waterbody,					

MITIGATION MONITORING AND REPORTING PROGRAM
Colgan Creek Restoration & Neighborhood Park

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring / Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)

including western pond turtles, the following measures should be implemented:

1. Prior to channel disturbance activity, fish and amphibians will be removed from the project area and placed upstream or downstream depending on the species.
2. Work will only occur during the dry season as permitted by the Department of Fish and Game, NCRWQCB and the Corps. Any water flowing toward the project area will be diverted around the project area during construction so turbid water disturbed by the construction activity will not flow downstream into the Laguna de Santa Rosa.
3. During construction, a biological monitor will be on site when construction takes place in aquatic habitat. If necessary, the project area will be dewatered prior to construction activities.

Mitigation Measure IV. a., b., d., & f – Special Status Animal Species

1. Any western pond turtles and tiger salamanders that are living within the project area will be relocated with approval from CDFG and USFWS to a secure location prior to construction activity.
2. Trapping and relocation of CTS, or installation of an exclusionary ramp/fence system would occur prior to construction.

MITIGATION MONITORING AND REPORTING PROGRAM
Colgan Creek Restoration & Neighborhood Park

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring / Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
Mitigation Measure IV. e. -Tree Removal All efforts are to be made to maintain existing mature trees within the restoration area of the project. Special focus shall be made to maintain established oak species on the southern side of the creek channel as they currently provide some shading of the creek channel and will help to maintain habitat as the restoration plantings get established. Any Heritage Trees removed as an aspect of the project must be mitigated per the City of Santa Rosa Tree Ordinance which requires 1 15-gallon tree be planted for every 6'' (diameter) of tree growth removed.					
V. CULTURAL RESOURCES **Mitigation Measure V. a.** –Construction barriers shall be erected to create a (minimum) five foot buffer around both of the historic structures (Greek Revival Home and Brick Outbuilding) adjacent to the project area to minimize the projects potential to impact these historic structures.	Incorporate into contract language when awarding bids to contractors.	Public Works Department	Incorporate as a component of project design and construction contracts.	Stop construction in vicinity of potential impacts until compliance has been verified	
Mitigation Measure V. b. -If archaeological remains are uncovered, work at the place of discovery should be halted immediately until a qualified archaeologist can evaluate the finds (§15064.5 [f]).			Public Works Department incorporates cultural measures into project construction and requires these be implemented through any contractual agreements to construct the project		
Mitigation Measure V. d. -If human remains are					

MITIGATION MONITORING AND REPORTING PROGRAM
Colgan Creek Restoration & Neighborhood Park

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring / Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission.					
VI. GEOLOGY & SOILS **Mitigation Measure VI. e. & g.** - All constructed aspects of the project are to be built according to the requirements of the California Uniform Building Code (CUBC) for Seismic Zone 4. **(LS)**	Incorporate into contract language when awarding bids to contractors.	Public Works Department	Incorporate as a component of project design and construction contracts.	Stop construction in vicinity of potential impacts until compliance has been verified	
Mitigation Measure VI. f. – The intent of these mitigations is not only to minimize erosion but also to meet the requirements of the North Coast Regional Water Quality Control Board (NCRWQCB) General Construction Permit for maintaining water quality. All water exiting the project site is required to document compliance with the requirements of the NCRWQCB water quality standards. As a component of this, the following mitigation measures must be incorporated: (a)Project construction will occur during the dry season, generally April 15th - October 15th. (b) Best Management Practices (BMP's) including	Project sponsor to obtain all necessary approvals from appropriate agencies prior to beginning construction.		Public Works Department incorporates geology & soils measures into project construction and requires these be implemented through any contractual agreements to construct the project		

MITIGATION MONITORING AND REPORTING PROGRAM
Colgan Creek Restoration & Neighborhood Park

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring / Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
the use of erosion control methods would be required for all construction and maintenance projects and activities to minimize erosion. (c) Bio-engineering and soft erosion control methods such as armoring of banks with willows and other plants would be used in the project area. Additional bank protection from the placement of rocks and other materials would be provided at locations where tributaries or culverts enter creeks or significant meanders are determined to need armoring to prevent erosion. (d) Streambed Alteration Agreements would be obtained from the California Department of Fish and Game for projects resulting in potential impacts to stream zones. **(LS)**					
VIII. HYDROLOGY & WATER QUALITY **Mitigation Measure VIII. a. & c.** - Install native vegetation and armoring boulders as needed prior to winter rains to help stabilize newly configured banks. Bioengineering techniques should also be used to stabilize banks. Geo-fabric, straw waddles, and other erosion prevention methods shall be used as needed to minimize erosion.	Incorporate into contract language when awarding bids to contractors.	Public Works Department	Incorporate as a component of project design and construction contracts.	Stop construction in vicinity of potential impacts until compliance has been verified	
Mitigation Measure VIII. a. & c. - The staging of all equipment and materials must be maintained outside of the creek channel and away from any					

MITIGATION MONITORING AND REPORTING PROGRAM
Colgan Creek Restoration & Neighborhood Park

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring / Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
slopes which may allow sediment transfer into the channel itself. **Mitigation Measure VIII. a., c., e., & f.-** Project design must attempt to capture (through infiltration and/or re-use) 100 percent of volume of runoff generated by the 85th percentile of a 24 hours storm event as calculated using the "Urban Hydrology for Small Watersheds" TR-55 Manual. If this is not achievable, the project must treat 100 percent of the flow generated by the 85th percentile 24 hour storm event, as calculated using the Rational Method and a known intensity of 0.92 inches per hour. In addition, the project must capture (through infiltration and/or reuse) the increase in volume of storm water due to development of impervious surfaces generated by the 85th percentile of a 24 hour storm event, calculated using the "Urban Hydrology for Small Watersheds" TR-55 Manual. **Mitigation Measure VIII. f.** - Use of equipment in the creek channel and on the banks shall follow North Coast Regional Water Quality Control Board's BMP procedures and protocols for the use of equipment within riparian areas. **Mitigation Measure VIII. f**. - Water quality monitoring should be conducted on a periodic basis to identify any increases in soil and/or contaminant load. Additional plantings should be installed, as	Project sponsor to obtain all necessary approvals from appropriate agencies prior to beginning construction.		Public Works Department incorporates hydrology & water quality measures into project construction and requires these be implemented through any contractual agreements to construct the project		

MITIGATION MONITORING AND REPORTING PROGRAM
Colgan Creek Restoration & Neighborhood Park

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring / Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
needed, to provided additional stabilization on slopes if increases in sediment are observed.					
XI. NOISE **Mitigation Measure XI a-d** - Locate construction staging area as far as possible from existing residences to minimize exposure of un-necessary construction equipment noise during the construction process.	Incorporate into contract language when awarding bids to contractors.	Public Works Department	Incorporate as a component of project design and construction contracts.	Stop construction in vicinity of potential impacts until compliance has been verified	
Mitigation Measure XI a-d - Specifically limit idling of all diesel vehicles to a maximum of 5 minutes during periods of inactivity. **Mitigation Measure XI a-d** - Hours of construction are specifically limited to 7 am to 7 pm Monday thru Saturday with no construction to take place on Sundays or Holidays.			Public Works Department incorporates noise measures into project construction and requires these be implemented through any contractual agreements to construct the project		
XV. TRANSPORTATION & TRAFFIC **Mitigation Measure XV. d. & g.**- Provide dedicated bicycle access from Bellvue Avenue onto Burgess Drive to provide a delineated access route for cyclists accessing Elsie Allen High School. This may be accomplished by roadway striping and/or a dedicated bridge or pathway to from Bellvue Avenue to Burgess Drive.	Incorporate into contract language when awarding bids to contractors.	Public Works Department	Incorporate as a component of project design and construction contracts.	Stop construction in vicinity of potential impacts until compliance has been verified	
Mitigation Measure XV. f. Provide a minimum of 10 parking spaces or more as recommended by the			Public Works Department incorporates transportation & traffic measures into project construction and		

MITIGATION MONITORING AND REPORTING PROGRAM
Colgan Creek Restoration & Neighborhood Park

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring / Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
City of Santa Rosa Traffic Engineering Department and gain ultimate approval of the number of approved spaces from the review authority approving the project. It is recommended that the location of these spaces be split up to accommodate the use of the park from multiple access points.			requires these be implemented through any contractual agreements to construct the project		
Engineering Department and gain ultimate approval of the number of approved spaces from the review authority approving the project.					

ENVIRONMENTAL CHECKLIST

1. Project Title:	Colgan Creek Restoration & Neighborhood Park
2. Lead Agency Name & Address:	City of Santa Rosa Community Development Department Planning Division 100 Santa Rosa Avenue, Room 3 Santa Rosa, California 95404
3. Contact Person & Phone Number:	Noah Housh, City Planner Phone number: (707) 543-4322 Email: nhoush@srcity.org
4. Project Location:	The site is located in the City of Santa Rosa, Sonoma County, California on multiple parcels, Assessor's Parcel Nos. 043-084-023, 043-200-005, 043-200-004, 043-135-002, 043-122-015, 043-122-007, 043-121-007, 134-042-056, 134-042-055, 134-042-057, 134-042-025, 134-042-048, 134-042-032 (Refer To No. 9 Surrounding Land Uses and Settings for Parcel Map).
5. Project Sponsor's Name & Address:	City of Santa Rosa Public Works Department 69 Stony Circle Santa Rosa, CA 95401 Sponsor's Representative David Montague, Supervising Engineer, City of Santa Rosa Public Works Department
6. General Plan Designation:	Multiple-Low Density Residential, Industrial, Medium Density Residential (with a park symbol) overlay, and Public Institutional
7. Zoning:	County, Planned Development, Light Industrial, R-3-18, & Public Institutional

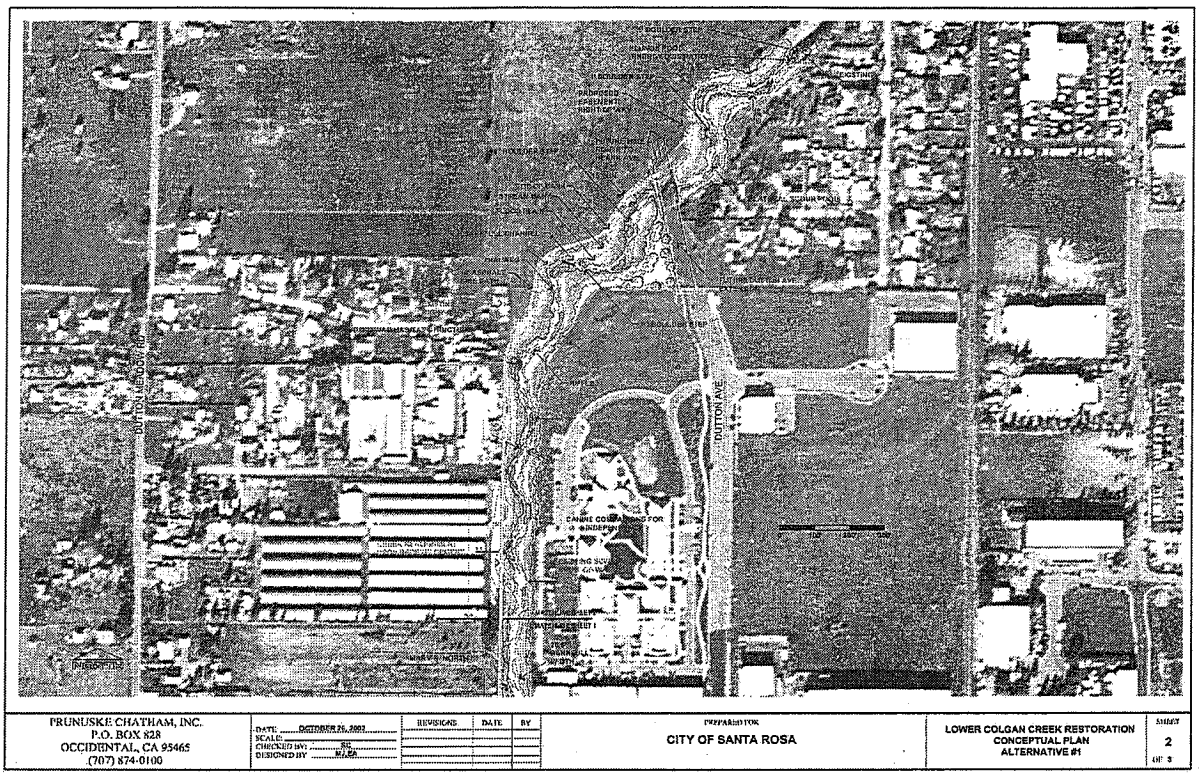
8. Description of Project:

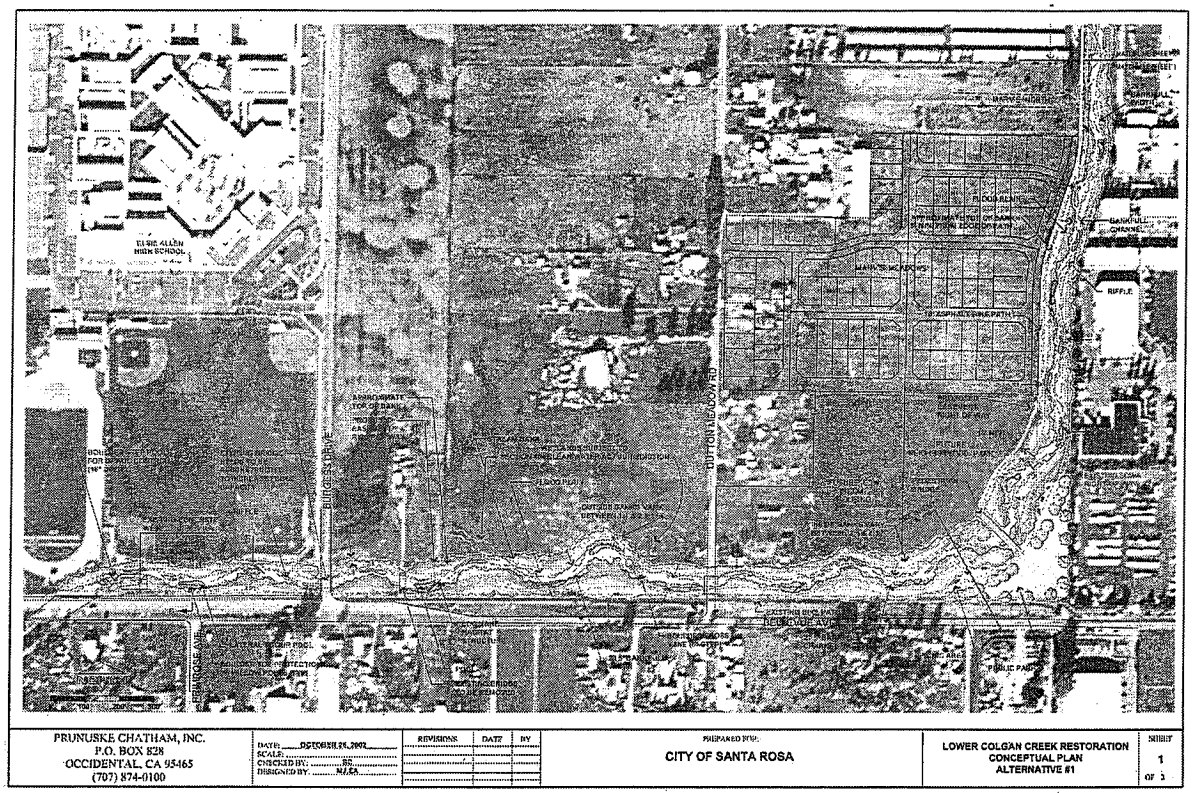
The Colgan Creek Restoration Project proposes to restore approximately 1.4 miles of Colgan Creek from a modified flood control channel to a healthier seasonal creek ecosystem that includes riffles, pools, and streamside vegetation and to create a new neighborhood park approximately five acres in size to provide green space and recreation opportunities in a park deficient area of Santa Rosa. The project also proposes to construct a bicycle and pedestrian pathway along the channel, and through out the park ultimately connecting to the existing regional trail systems including the Colgan Creek Trail to the west and Taylor Mountain Regional Park to the east. Preliminary project analysis has also indicated that the bridges at Dutton Meadow, east of Burgess Drive, and Burgess Drive itself are undersized for anticipated traffic and creek flows and may also be modified and/or replaced to address both of these discrepancies as a component of the project.

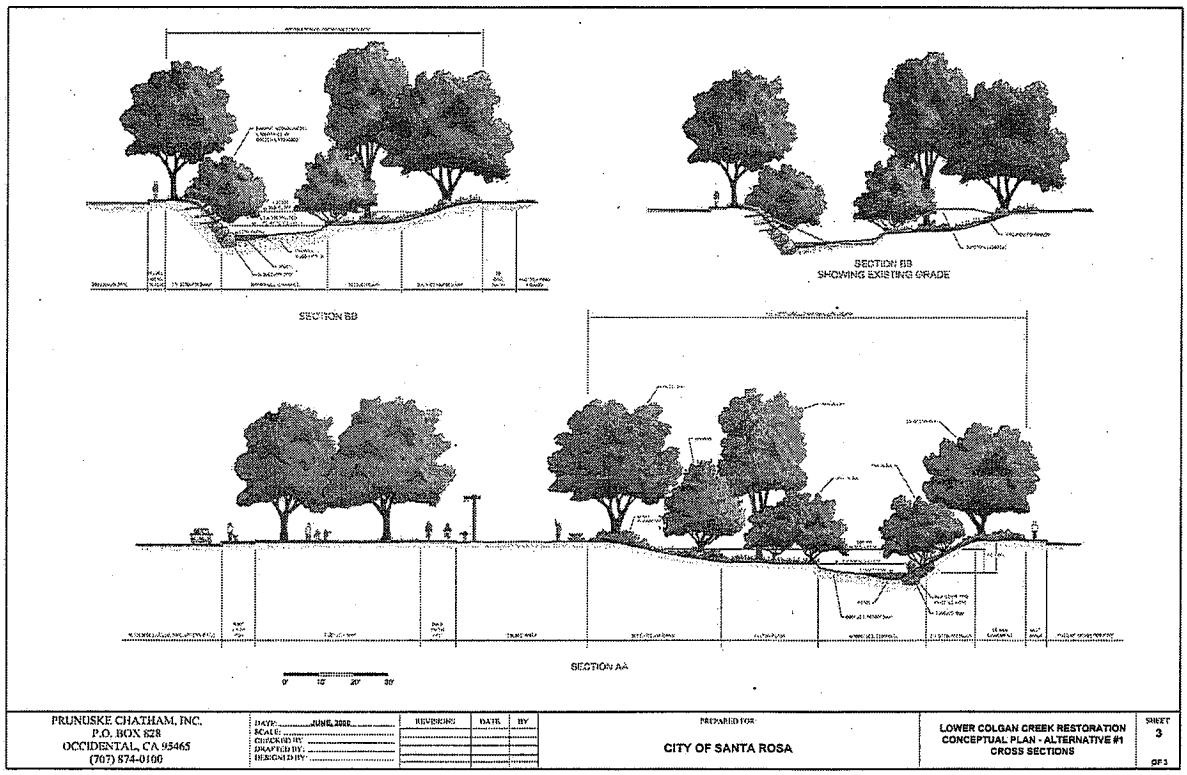
In addition, the project creek channel modifications will increase flood protection of this reach of Colgan Creek from the 25 year to the 100 year storm level and enhance water quality within the reach. These modifications

should also contribute to improved environmental conditions for the federally-protected steelhead trout and other aquatic species within the Laguna de Santa Rosa downstream of the project area.

The project implements several regional and city plans, including Santa Rosa's 2035 General Plan, Bike and Pedestrian Master Plan, and Citywide Creek Master Plan.







Construction of the project may require de-watering of the creek channel, by damming or diverting to accommodate construction and restoration activities proposed within the creek bottom. If necessary, this de-

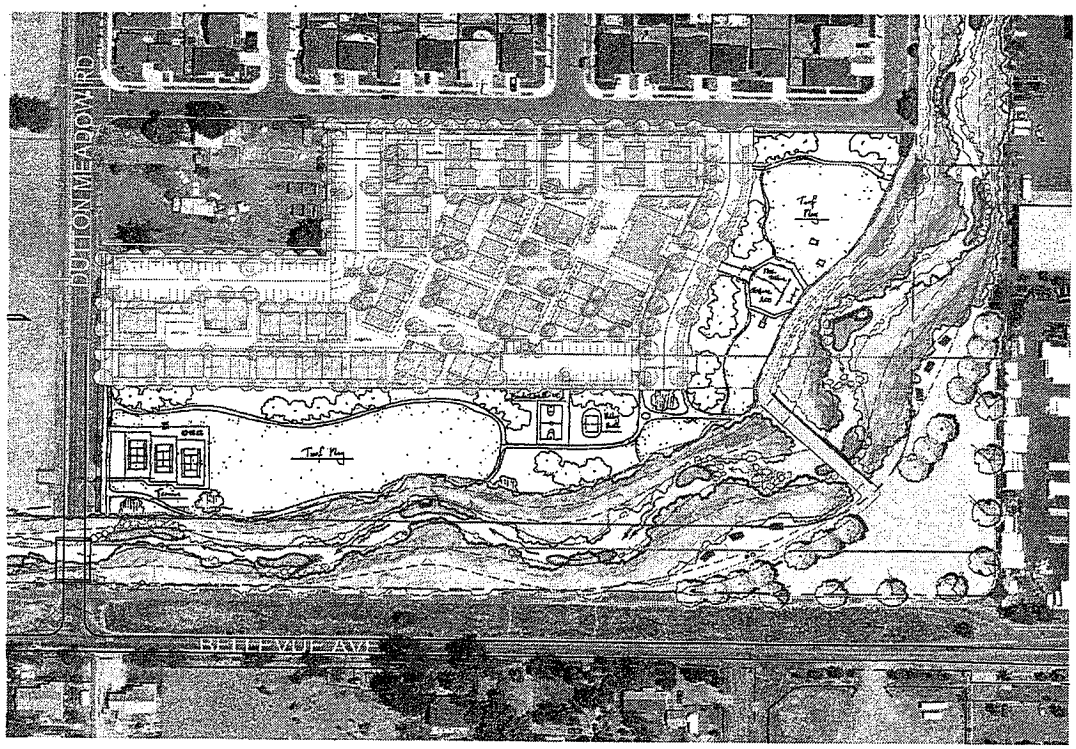
watering will be done using standards and procedures established by the Department of Fish and Game to minimize any impacts to existing wildlife.

The proposed new channel stream length after restoration is 7,281 linear feet vs. the existing pre-project length of 6,523 linear feet.

Channel and Habitat Features
The project plan includes the installation of boulder bank protection, drop structures, vanes, and woody debris habitat structures as implementation of the restoration project. The design assumes all 1:1 bank slopes will have vegetated boulder armoring to bankfull flow elevations and vegetated fabric reinforced earth fills above. 2:1 slopes on outside bends may need boulder toe protection or biotechnical bank protection and any slope 3:1 or flatter will be protected by the proposed native plant reforestation. Boulder armor at outside bends will be designed to enhance aquatic habitat.

Proposed Park Features
The proposal includes a Neighborhood Park which is discussed in the City of Santa Rosa2035 general Plan as "located within about ½ mile of the residents they serve, are between 2-10 acres in size, and typically include picnic and play areas as park amenities. Amenities proposed for this park are anticipated to include up to eight ball courts for various sporting activities possibly including tennis, basketball, bocce, and volley ball. Approximately four covered picnic areas through out the park site, playing areas for children including (approximately) three separate play structures typical of other park facilities in and around Santa Rosa.

These amenities would be accessed by pedestrian/bicycle paths through out the site that also connect to the pedestrian/bicycle path proposed along the Colgan Creek channel. While Neighborhood parks typically are accessed by neighboring residents walking to the facility, parking areas for 12-15 cars will also be provided on site to accommodate disabled or other patrons wishing to drive to the park. Garbage collection facilities will be provided at parking areas, picnic areas, and along paths through out the park itself.

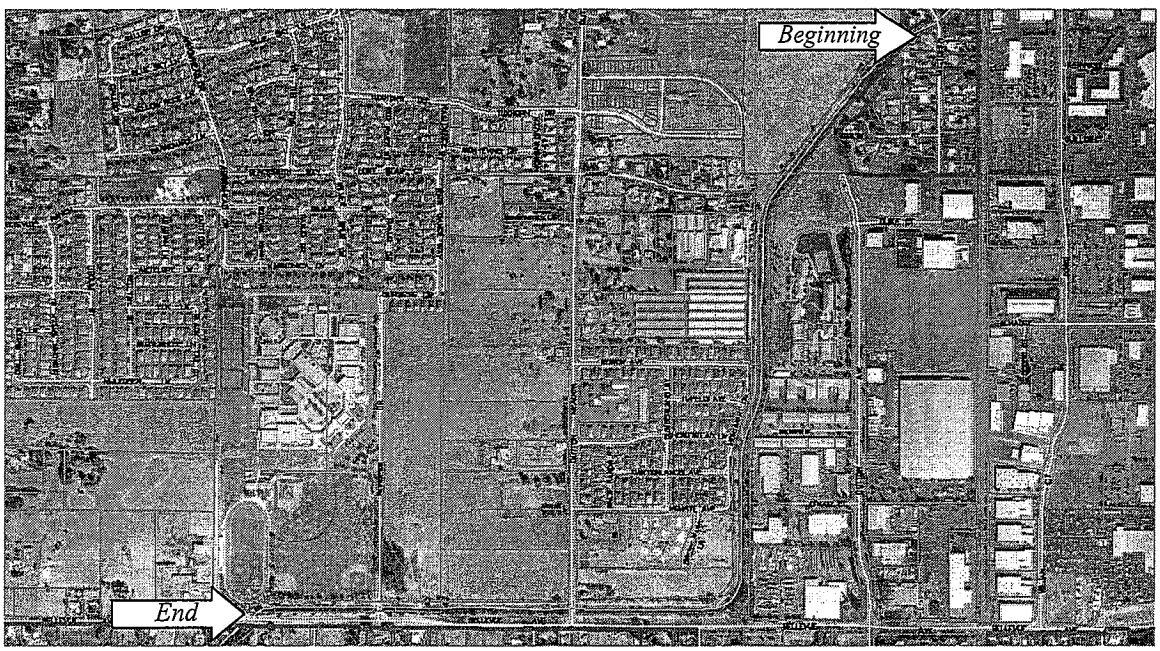


LOWER COLGAN CREEK PARK AND PRESERVE

9. Surrounding Land Uses and Setting:
Colgan Creek originates in the foothills east of Santa Rosa on the north side of Taylor Mountain, flows northwesterly along Kawana Springs Road until it passes under U.S. 101 near Hearn Avenue, then turns and flows southwesterly until it meets the Laguna de Santa Rosa near the intersection of Todd Road and Highway 116.

With exception of the headwater area and stretches along Kawana Springs Road, Colgan Creek is entirely confined to an artificially straightened flood channel with capacity to carry 25 year storm events. From Petaluma Hill Road to Victoria Drive (south of Hearn Avenue), the channel is mostly constructed of concrete, with a flat bottom. From Victoria Drive to the Llano Road crossing (a distance of roughly four miles, including the project zone), the flood channel has mainly soil banks, supplemented with riprap or concrete in some areas, and has a permeable, semi-natural bottom (i.e. silt or clay streambed, but unnaturally flat and channelized).

Throughout the project zone the stream is almost fully exposed to the sun, although scattered live oaks do populate the banks and (immature) valley oaks have been planted along the access road above the channel in some areas. A near-absence of shade persists downstream from the lower end of the project zone at Bellevue Avenue to Llano Road. From Llano Road (and the project area), Colgan Creek continues as an artificially straightened flood channel, but a dense riparian corridor of large, older cottonwood, willow, and other trees has been allowed to grow within and above the channel. These trees provide a nearly closed canopy shading the stream, and completely altering the stream habitat in beneficial ways.



Within the project reach, the water temperature in Colgan Creek near the Bellevue Avenue bridge on has been documented over 80°F on multiple occasions. Higher stream temperatures are expected in mid-summer, where water remains in this reach. The upper lethal thermal limit for steelhead or coho salmon is generally considered to be about 24°C (75°F), so temperature alone rules out any possibility of steelhead or coho juvenile rearing within the project zone under the existing conditions.

In addition to emergent grasses and weeds, the stream contains large amounts of thick, filamentous green algae, the growth of which is enhanced by the absence of shade, normally provided by riparian trees and shrubs. The streambed throughout most of the project reach is either hard clay or clay overlain by silt. There is little gravel or

cobble, and the only boulders appear to be isolated chunks of riprap that have fallen from the banks and been moved downstream at high flows. Aside from these few boulders and occasional shopping carts, there is very little in-stream structure available to provide shelter or living space for aquatic animals.

Two concrete and grouted riprap drop structures within the project reach represent significant barriers to upstream migration by fish, turtles, and other aquatic animals at all but the highest flows. The stream fauna in the project zone are relatively impoverished. Only three species of fish commonly present in the project area (in small numbers) are mosquito fish, threespine stickleback, and Clearlake-Russian River roach. The latter two are native species; the mosquito fish are exotic species introduced to control mosquito larvae. Each of these are small-sized fish, the biggest of which is the roach, which may reach about five inches in length. These species are tolerant of high temperatures and poor water quality, and adapt to hide within algae and submerged vegetation.

Among the algae and emergent vegetation, invertebrates typical of ponds and sluggish streams have been observed, including dragonfly larvae, dytiscid beetles, water striders, backswimmers, corixids, snails, and a few introduced swamp crawfish. Notable by their absence were the types of insect larvae (stoneflies, caddisflies, mayflies) associated with highly productive, rocky streams. Also absent were flatworms and leeches, which are common in perennial streams in this area, but cannot survive in streams that go dry in summer, and are slow to colonize new areas (unlike flying insects or good swimmers such as fish). Very few water-associated birds were observed during the original field reconnaissance for the project on May 3, 2000 (one green heron, one kildeer, one pair of mallards) conducted by Golden Bear Biostudies Staff.

10. Other Public Agencies Whose Approval Is Required:

California Department of Fish & Game (CDFG)
NOAA Fisheries and/or US Fish & Wildlife Service (NOAA/USFWS)
Army Corps of Engineers (USACE)
Sonoma County Water Agency (SCWA)
North Coast Regional Water Quality Control Board (NCRWQCB)

EXHIBITS

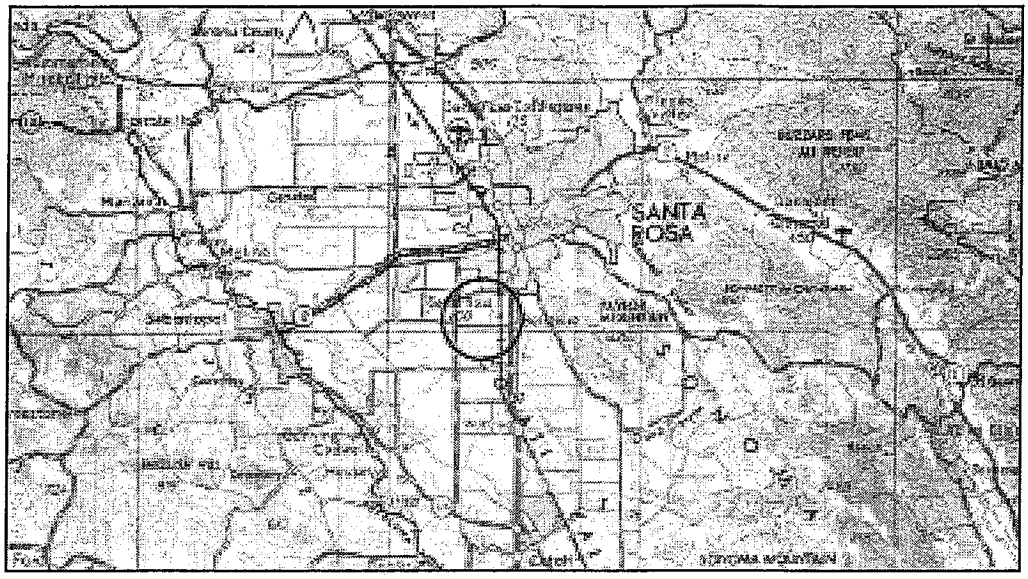


Figure 1. Project vicinity (adapted from the 1970 Santa Rosa 1:250,000-scale USGS map).

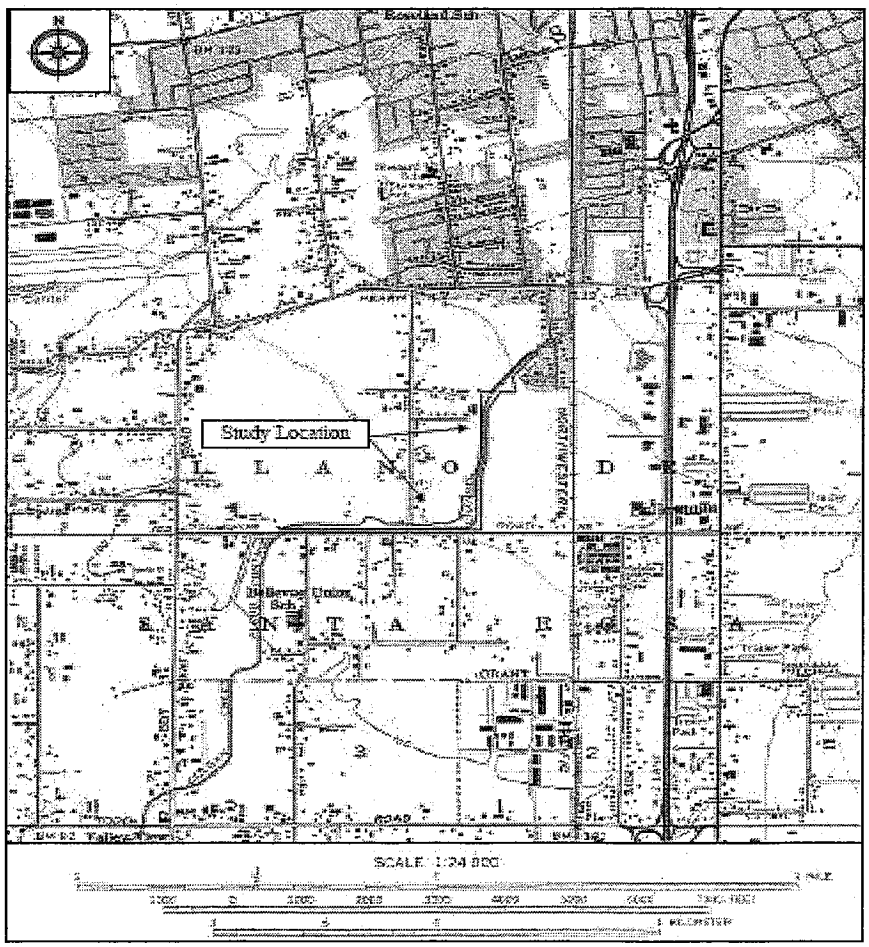


Figure 2. Study location (adapted from the 1980 USGS Santa Rosa 7.5' topographic map).

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒ Aesthetics	☐ Agriculture Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Geology /Soils
☐ Hazards & Hazardous Materials	☒ Hydrology / Water Quality	☐ Land Use / Planning
☐ Mineral Resources	☒ Noise	☐ Population / Housing
☐ Public Services	☒ Recreation	☒ Transportation / Traffic
☒ Utilities / Service Systems	☒ Mandatory Finding of Significance	

DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at lest one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an EARLIER EIR or NEGATIVE DECLARATION pursuant to applicable legal standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Noah Housh

Signature

08/25/10

Date

Noah Housh, City Planner

EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8) The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance

*Note: Instructions may be omitted from final document.

	Potentially Significant Impact	**Less-Than-Significant With Mitigation Incorporation**	**Less-Than-Significant Impact**	**No Impact**

I. AESTHETICS

Would the project:

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
	Potentially Significant Impact	**Less-Than-Significant With Mitigation Incorporation**	**Less-Than-Significant Impact**	**No Impact**
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☒	☐	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

Discussion:

Existing Views of Santa Rosa Plain and Surrounding Mountains

The project site is located in southwest Santa Rosa on level ground and has a backdrop of foothills and upland grassland to the east leveling out into the Santa Rosa Plain to the west of the project site. The visual character of the project surroundings are characterized by landscaping in the form of street trees, parks and riparian corridors. Apart from buildings, the Sonoma Mountain foothills to the east create the dominant visual features, with Taylor Mountain and Bennett Mountain visible to the southeast. The project site is not located on a State Scenic Highway.

Existing Riparian Corridor

Most of the creeks in Santa Rosa, including Colgan Creek originate on the eastern side of the City, and drain to the west toward the Laguna de Santa Rosa. Portions of lower Colgan Creek support riparian vegetation and habitat (*plant communities on the banks of rivers and other water courses*) and portions of the creek have been completely channelized for flood control with little to no riparian vegetation. Service roads were installed with the channelization to provide access to approximately 1 mile of the northern portion of the project area. Some existing paths, such as along Colgan Creek near Elsie Allen High School, also provide limited access to the channelized reaches and/or riparian environment.

Regulatory Framework

The City of Santa Rosa General Plan, the Santa Rosa Zoning Code, and the Santa Rosa Design Guidelines are the primary tools for protecting and enhancing the City's visual quality.

Santa Rosa 2035 General Plan

General Plan goals and policies relating to visual quality associated with creeks include, but are not limited to, the following:

UD-A Preserve and enhance Santa Rosa's scenic character, including its natural waterways, hillsides and distinctive districts.

UD-E-1 Provide for new open space opportunities throughout the City, especially in neighborhoods that have less access to open spaces. This includes exploring potential for creek corridors, bicycle and pedestrian ways, as well as new pocket parks and conservation areas.

UD-E-2 Provide an open space network that is linked by pedestrian and bicycle paths, and that preserves and enhances Santa Rosa's visual and natural resources.

Santa Rosa Zoning Code
The City of Santa Rosa Zoning Ordinance (Section 20-30.040 (D)) (December 2004), requires creek buffers of 50' from the top of the highest bank on each side of the channel for new structures. Where the stream bank is not defined, the 50-foot boundary is measured from the projection of the 2.5:1 slope from the toe of the stream bank to its intersection with ground level, plus 50 feet. These buffers are designed to protect and enhance riparian vegetation.1

Santa Rosa Design Guidelines
The City of Santa Rosa adopted Design Guidelines in September, 2002. The Guidelines establish goals and guidelines for creek corridor preservation. The 'Creeks and Riparian Corridor' Guidelines pertaining to aesthetics include the following:

Preserve waterways in their natural state (No. 1).

Place streets parallel to creeks in order to bring the corridors into the pubic realm (No. 3).

Standards of Significance
Significant impacts to aesthetics and visual quality would occur if implementation of the Colgan Creek Restoration results in:

Substantial change in urban visual character due to proposed project components; Degradation of existing visual quality and/or views to surrounding foothills; Damage to scenic resources along Colgan Creeks and adjacent Roadways; and, A new source of light or glare that substantially impacts the creek environment.

Setting and Impacts
Implementation of the Colgan Creek Restoration would result in the following impacts related to aesthetics and visual quality. Mitigation measures that have been identified to avoid impacts, or reduce them to less-than-significant levels, are indicated below.

Impact I. c. (*Litter/Garbage*): Allowing greater public access to waterways, including the construction of a park facility adjacent to the restored creek channel would result in additional litter and other refuse. (S)

Allowing greater public access to waterways and constructing a public park adjacent to that waterway increases the potential for park and trail users to leave behind their refuse and therefore increases the need for garbage cans and plastic bags available for dog excrement. Garbage cans would be provided and maintained at all picnic areas and parking facilities within the park site, as well as adjacent to trails throughout the park which would be adjacent to the restoration area. Some types of garbage will increase such as paper and plastic from food containers associated with use of the park, as well as dog excrement from animals brought to use the park facility. However, garbage that is associated with illegal dumping, pedestrians walking along the existing access road and Bellvie Avenue, and homeless encampments is likely to decrease, due to greater public use and surveillance, as well as park facilities maintenance. The combination of provided and maintained trash receptacles, signs

regarding the location of these facilities, and less dumping of garbage is expected to result in less garbage overall and less than significant impacts.

Impact I. d. (*Light and Glare*): Installation of path lighting would result in some light and glare along waterways. (S)

Path lighting (such as that already installed along the Prince Memorial Greenway) would be installed along paths and some amenities within the proposed park site and along portions of the path that boarder Bellevue Avenue, where substantial public and private lighting already exists in the vicinity. Path lighting would not be installed along the majority of the path, or to light the entire park area as it is intended as a day use facility. Any lighting installed would incorporate cut off lenses and be downward facing minimizing any impacts to the surrounding properties.

Recommended Mitigation Measures

Mitigation Measure I c.: Creek corridors would continue to be monitored by creek stewards as part of the Creek Stewardship Program, which also organizes volunteer creek clean-ups. Garbage cans must be provided throughout the park site and are recommended to be provided at trailheads, parking facilities, picnic areas and street crossings. City and County personnel would report vandalism and other maintenance issues that affect the appearance and condition of the creeks and the park shall incorporate signage indicating to members of the public the location of trash facilities and how to report issues associated with trash and debris.

Mitigation Measure I. d.: Path and park lighting must be minimal to reflect the day use intent of the facility, incorporate cutoff lenses, and be shielded downward to minimize spillage of light and glare onto surrounding properties and disturbance of wildlife.

Beneficial Impacts Related to Visual Quality and Aesthetics

Implementation of the Colgan Creek Restoration would result in a wide range of beneficial impacts related to aesthetics and visual quality. Vegetation would be enhanced along the creek channel allowing Colgan Creek to become a dominant visual feature for the immediate environment and surrounding neighborhood. Bands of riparian vegetation soften the appearance of the urban landscape and provide visual interest in many locations. Re-contouring portions of the creek channel—and adding hydraulic features such as pools, riffles and low-flow areas— would also contribute to visual interest within the waterway. In addition, increasing public use of the channel would tend to reduce the amount of graffiti and creek dumping found along some reaches. Further, as public use the creek corridor increases, vandalism opportunities becomes less prevalent and neighborhood vigilance of the creek channel becomes more common.

(Sources: 1, 2)

II. AGRICULTURE

Would the project: *(In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland.)*				
a. Convert Prime Farmland, Unique Farmland,	☐	☐	☐	☒

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☒	☐

Discussion:

The majority of agricultural resources located on the Santa Rosa Plain are located at the western edge of the City of Santa Rosa, extending to the Laguna de Santa Rosa. Within the Santa Rosa Planning Area, notable areas of 'Prime Farmland' are present however these lands are located significant distances from the project location. Some 'Farmland of Statewide Importance' is located in southwest Santa Rosa outside the Urban Boundary. Another patch of land identified as 'Farmland of Statewide Importance' is located along Peterson Creek, west of Fulton Road, but within the Urban Boundary.

Only very small patches of Prime Agricultural land remain within the Urban Boundary. One parcel is located along Santa Rosa Creek west of North Dutton Street (Imwalle Gardens); another patch is located east of the confluence of Oakmont Creek with Santa Rosa Creek (near the junction of Los Alamos Road with Hwy. 12). Scattered parcels designated as 'Farmland of Local Importance' are located within the Urban Boundary, but many were planned for development, as part of the Southwest and Southeast Area Plans. In the Santa Rosa 2035 General Plan, the 'Agriculture' classification is applied only to sites outside the Urban Boundary. This classification includes orchards and cropland, grasslands, livestock and related processing and distribution facilities.

Within the Urban Boundary, scattered parcels of agricultural land designated as Farmland of Local Importance are located in the vicinity of creeks including along the Colgan Creek Channel. A small portion of Farmland of Local Importance is in the project area and is located north of Bellevue Avenue and west of Dutton Meadow. Any other sections of Farmland of Local Importance along Colgan Creek is located along the upper reaches, east of Petaluma Hill Road a significant distance from the project area. These parcels have been designated for low and medium density residential development by the City of Santa Rosa 2035 General Plan.

Open Space Resources in the Urban Boundary and in Proximity to Creeks

The City of Santa Rosa currently has 180 acres of open space designated within the City's Urban Boundary. Open space areas within the Urban Boundary generally include undeveloped lands usually containing wildlife habitat or natural resources. Creek corridors, open space pockets within residential neighborhoods, and wetland areas are often included within this designation. Key open space resources located in proximity to the City's creeks include the FEMA site along Roseland Creek and the Paulin Creek Preserve along the upper reaches of Paulin Creek (off of Chanate Avenue near Sutter Hospital). No properties within the project area have been designated as "open space" by the City of Santa Rosa 2020 General Plan.

Regulatory Framework

Important Farmlands Mapping

The Department of Conservation, Land Resource Protection Division, Department of Farmland Mapping and Monitoring Program identifies farmland. The Sonoma County Important Farmland Map was prepared in 1996 and updated in 2004. This map identifies farmland according to the following categories: Prime Farmland; Farmland of Statewide Importance; Unique Farmland; and Farmland of Local Importance. These maps are used by jurisdictions throughout the State to help make land use decisions that minimize loss of farmland.

The only properties with a Farmland designation within the project area are to the western end of the project site north of Colgan Creek and west of Dutton Meadow. These properties are approximately 5.31 acres (3011 Dutton Meadow), 3.85 acres (312 Dutton Meadow), and 12.92 acres (134-042-025) in size however only portions of this total acreage are designated as farmland. The entire parcel at 3011 Dutton Meadow is designated as Farmland of Local Importance and the southern (approximately) 20 percent of the parcel 134-042-025 has this same designation. Both of these parcels are designated by the City of Santa Rosa 2035 General Plan as residential parcels and no agricultural uses beyond hay production are currently underway on these parcels.

Williamson Act

The Williamson Act of 1965 (California Land Conservation Act, Government Code Section 51200 et seq.) is intended to discourage the unnecessary and premature conversion of agricultural land to non-agricultural uses by taxing land according to the income-producing value, rather than its "highest and best use". Under contract, farmers agree not to develop their land for 10 years in exchange for the lower tax rate; contracts are automatically renewed each year. Land under a Williamson Act contract is designated as an agricultural preserve, which can be used for agricultural uses, open space, and managed habitat, or scenic highway corridor. No properties within, or adjacent to the project site have Williamson Act contracts.

Sonoma County Agricultural Commissioner

The Agricultural Division of the Sonoma County Agricultural Commissioner's office is mandated to promote and protect the agricultural industry and the environment of the county through enforcement of local, State and federal regulations. It is also responsible for the protection of agricultural worker health and safety.

Sonoma County Agricultural Preservation and Open Space District

Sonoma County Agricultural Preservation and Open Space District (SCAPOSD) has recently updated its Acquisition Plan (*revision 2005 – Connecting Communities and the Land* Adopted by the Board of Supervisors, July, 25, 2006). The revision Plan does not identify any property within the project site as 'Priority Riparian Corridors' or open space.

Sonoma County Permit and Resource Management Department

The Sonoma County Permit and Resource Management Department (PRMD) is responsible for all zoning and land use decisions and actions outside of the Santa Rosa City limits but within the Urban Boundary. In addition, Sonoma County has land use authority over all unincorporated areas that remain within the City of Santa Rosa such as the Roseland area. One portion of the project area is within an unincorporated area and therefore their jurisdiction. The first (approximately) 250 feet of the Colgan Creek Restoration project, from Victoria Drive west to the City of Santa Rosa boundary, are within the jurisdiction of the County of Sonoma PRMD. They have been involved in the planning process of this restoration project and their full cooperation with the implementation of the project is anticipated.

Sonoma County Farm Bureau
The Farm Bureau is an independent, non-governmental, voluntary organization of farm and ranch families. In Sonoma County, it was established in 1917. The Farm Bureau analyzes problems affecting farmers and ranchers and works to find solutions. It describes itself at the 'voice of agricultural producers at all levels'. No involvement from the Sonoma County Farm Bureau is needed or expected as an aspect of this project.

Santa Rosa 2035 General Plan
The following General Plan policies address protection of open space and agricultural resources:

Open Space
OSC-A: Maximize the benefits of open space.

OSC-A-1: Cooperate with various public and private entities to create new public access trails to parks, open spaces and drainage ways within the City, as well as to trail systems outside of the UGB. Priorities for trail access outside of the UGB should include:

Joe Rodota Trail (from Santa Rosa to Sebastopol);
Bay Area Ridge Trail;
Santa Rosa Creek Trail;
Laguna Trail;
Roseland Creek Trail;
***Colgan Creek Trail**; and*
Paulin Creek Trail.

OSC-A-8: Coordinate with public and private entities to link open spaces with a network of paths and trails, including Sonoma County Water Agency access roads and the Bay Area Ridge Trail.

OSC-B: Conserve the City's open spaces and significant natural features.

Agricultural Resources
OSC-C-3: Preserve and enhance agriculture within the Planning Area as a component of the economy and as part of Santa Rosa's environmental quality.

Setting and Impacts
Significant impacts to agriculture and open space resources would occur if implementation of the Colgan Creek Restoration Project results in:

Conversion of open space or agricultural areas to non-agricultural use;

Implementation of the Colgan Creek Restoration & Park Project would result in the following impacts related to agricultural resources and open space:

Impact II. a.- (*Conversion of Agricultural Land to Riparian Habitat and Park Faclities*): Colgan Creek Restoration & Park Project has the potential to convert some agricultural land to riparian & creek habitat and a neighborhood park.

Restoration of the Colgan Creek channel and development of the park would primarily utilize existing Water Agency right-of way, access roads, and channels to allow for a wider channel and planned meanders however, portions of the restoration and park project will utilize the parcels at 3011 & 3012 Dutton Meadow and parcel

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact

134-042-025 (no address available) converting them from available agricultural use. This conversion is needed to accommodate widening of the creek channel to incorporate meanders (less than one half of an acre being converted to riparian habitat) and to allow the construction of the park at this site. An existing service road on the northern side of the channel would be used for access and some restoration activities in that area. As this property is presently used by Water Agency Officials for access and right-of-way and no agriculture uses are present on the site currently. Additionally, due to the semi-urban setting of the area, the development of the surrounding properties, and the designation of the site for residential development by the City of Santa Rosa 2035 general Plan, likelihood of any farmland and/or agricultural use of the site is almost non-existent.

Because this parcel has been designated for residential development by the City of Santa Rosa 2020 and 2035 General Plans, impacts to the agricultural uses of these identified parcels have been analyzed and mitigation measures put in place to address the future conversation of land use. Mitigation measures identified in the City of Santa Rosa 2020 and 2035 General Plan have mitigated these potential impacts to levels less than significant.

Recommended Mitigation Measures
None.

(Sources: 1, 2)

III. AIR QUALITY

Would the project: (*Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.)*				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c. Result in a cumulatively considerable net increase any criteria pollutant for which the project region is non – attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Greenhouse Gas Emissions
A new set of questions on greenhouse gas emissions has been added to the Initial Study Checklist as follows:

Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact

a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?* Less than Significant Impact

b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?* Less than Significant Impact

Discussion:

Motor vehicles are the primary source of ambient air pollution in the Santa Rosa area (as in the rest of California). Other local sources of air pollution include industry, residential heating by burning wood and natural gas, and agricultural practices. Small miscellaneous sources such as lawn mowers, coffee roasters, char broilers, dry cleaners, gasoline stations, and many other small business operations also contribute air pollutants.

Santa Rosa, is a sub-region of the San Francisco Bay Area Air Basin. The climate of the Bay Area is determined largely by a high-pressure system that is almost always present over the Pacific Ocean. In the winter, the Pacific high pressure system shifts southward, allowing storms to pass through the area. As marine air travels east from the Pacific, it splits into northward and southward paths along the Santa Rosa Plain. The northward path contributes to Santa Rosa's prevailing winds from the south and southeast. However, when the ocean breeze is weak, strong winds from the east can predominate, carrying pollutants from the Central Valley and the Carquinez Strait. During these periods, up-valley flows can carry polluted air from the central valley as far north as Santa Rosa. In summer, afternoon winds blow contaminants toward inland areas.

Temperatures in the Santa Rosa area generally range from mid-20s on winter mornings to the mid-90s in late summer afternoons with warmest temperatures occurring in August and September.

Regulatory Framework

Criteria Pollutants

Criteria air pollutants are the select air contaminants for which State and federal ambient air quality standards have been established to protect public health and welfare. Ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter and lead are called "criteria air pollutants" as they are more pervasive in the environment. The Bay Area Air Quality Management District (BAAQMD) operates a regional monitoring network (including a monitoring station in Santa Rosa) that measures the ambient concentrations of these six criteria pollutants. Monitored ambient air pollutant concentrations reflect the number and strength of emission sources and the influence of topographical and meteorological factors. Existing and probable future levels of air quality can be generally inferred from ambient air quality measurements conducted by the BAAQMD.

Toxic Air Pollutants

The Toxic Air Contaminants (TAC) is a large group of compounds known to cause cancer or acute health effects. They are generally less pervasive in the urban atmosphere than the criteria pollutants, but they are linked to short-term (acute) or long-term (chronic) adverse health effects. A few, such as diesel exhaust, are common in urban areas and near major highways. The current list of toxic air contaminants includes approximately 200 compounds. According to the BAAQMD, diesel combustion emissions are the TAC responsible for most excess cancer deaths in the Bay Area and these emission levels are greatest within 100 feet of freeway corridors.

Existing Pollution Levels

Santa Rosa currently has one automated monitoring station that operates 24 hours per day, every day, measuring criteria air pollutants. This station which is located on Fifth Street, measures ozone, carbon monoxide, nitrogen dioxide, lead, sulfates, and particulates 10 microns or smaller (PM10), and fine particulates 2.5 microns or smaller

(PM2.5). PM2.5 is a subcategory of PM10. Particulates are sampled on a special filter according to a national schedule every sixth day.

Readings from 2000 through 2004 indicate that Santa Rosa has exceeded state standards once for ozone, and four times for PM10. However, because PM10 is sampled every sixth day—actual days over the standard can be estimated to be six times this number, or a total of 24 during this 5-year period. The Bay Area is a non-attainment area for State ozone and particulate matter standards. Carbon monoxide, a product of incomplete combustion, was formerly a problem for the City of Santa Rosa; but, with improved motor vehicles and fuels, Santa Rosa air easily meets State and federal standards with regards to this pollutant.

Greenhouse Gases

Greenhouse gas (GHG) emissions refer to a group of emissions that are believed to affect global climate conditions. GHGs such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) keep the average surface temperature of the Earth close to a hospitable 60 degrees Fahrenheit. However, excessive concentrations of GHGs in the atmosphere can result in increased global mean temperatures, with associated adverse climatic and ecological consequences.

GHGs include CO_2, CH_4, O_3, water vapor, N_2O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6) with Carbon dioxide being the most abundant GHG. These other GHGs while less abundant, have higher global warming potential than CO_2. Thus, emissions of other GHGs are frequently expressed in the equivalent mass of CO_2, denoted as CO_2e. Forest fires, decomposition, industrial processes, landfills, and consumption of fossil fuels for power generation, transportation, heating, and cooking are the primary sources of GHG emissions. According to the California Energy Commission (CEC), emissions from fossil fuel consumption represent approximately 81 percent of all GHG emissions while transportation sources create 41 percent of all GHG emissions in the United States.

In response to growing scientific and political concern with global climate change (GCC), California has recently adopted a series of laws to reduce emissions of GHGs to the atmosphere from commercial and private activities within the State. In September of 2006, Governor Arnold Schwarzenegger signed the California Global Warming Solutions Act of 2006, also known as Assembly Bill (AB) 32, into law. AB 32 focuses on reducing GHG emissions in California, and requires the CARB, the State agency charged with regulating statewide air quality, to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020.

As an initial step, California Air Resources Board (CARB) was required to implement regulations that require the reporting and verification of statewide GHG emissions by January 1, 2008. These newly adopted regulations require emissions reporting for classes of facilities that collectively account for 94 percent of the stationary source emissions in California, including cement plants, oil refineries, electric generating facilities/providers, co-generation facilities, hydrogen plants, and other stationary combustion sources that emit more than 25,000 metric tons per year of CO_2e emissions.[1]

Simultaneously, CARB directed staff to pursue early actions for reducing GHG emissions under AB 32, such as a Low Carbon Fuel Standard, guidance and protocols for local governments to facilitate GHG reductions, and green

1 *California Air Resources Board, December 6, 2007c, Proposed Regulation for the Mandatory Reporting of California Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions Act of 2006 (AB 32), available at http://www.arb.ca.gov/cc/ccei/reporting/GHGReportBoardSlides12_06_07.pdf (proposed regulations were approved by CARB on December 6, 2007).*

ports. Suggestions for early actions were also provided by several stakeholders and internal staff at a meeting held in June of 2007. All of these measures need to be in place and operative by January 1, 2012.

Air Quality regulation of the project site is under the jurisdiction of the Bay Area Air Quality Management District's (BAAQMD) Air Quality Management Plan (AQMP). The air quality goals and policies identified in the AQMP are based on land use projections from local general plans and population growth projections; thus, projects that are consistent with local general plans are considered consistent with the AQMP. Trip length and trip generation from site development are consistent with air quality planning objectives presented in the most recent AQMP prepared by BAAQMD, the Association of Bay Area Governments (ABAG), and the Metropolitan Transportation Commission (MTC).

In the fall of 2009 the BAAQMD began holding public workshops to gather input prior to their implementation of specific GHG regulations. While these thresholds have not been adopted and therefore are not formally incorporated as CEQA thresholds of significance, on December 7, 2009, the BAAQMD released their proposed CEQA significance thresholds for project related Green House Gas impacts. Since their release, these proposed thresholds for assessing individual projects GHG impacts have been used in CEQA analysis by the City of Santa Rosa Community Development Department. A project would be considered a substantial contributor to an existing air quality violation if project-related emissions exceeded the identified emissions-based BAAQMD significance thresholds.

The BAAQMD GHG recommended CEQA thresholds are intended to serve as the interim levels during the implementation of the AB 32 Scoping Plan and SQ 375, which will occur over time. Until AB 32 has been fully implemented in terms of adopted regulations, incentives, and programs, and until SB 375 required plans have been fully adopted, or the California Air Resources (ARB) adopts a recommended threshold, the BAAQMD recommend that the local agencies in the Bay Area apply the thresholds identified in their December 7, 2009 CEQA Guidelines Update (http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/Proposed%20Thresholds%20of%20Significance%20Dec%207%2009.ashx).

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance
December 7, 2009

Table 1 – Proposed Air Quality CEQA Thresholds of Significance		
Pollutant	**Construction-Related**	**Operational-Related**
GHGs **Stationary Sources**	None	10,000 MT/yr
Risks and Hazards (Individual Project) **Staff Proposal**	Same as Operational Thresholds*	**All Areas:** Siting a New Source or Receptor Compliance with Qualified Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 $\mu g/m^3$ annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor
Risks and Hazards (Individual Project) **Board Option 1** **Tiered Thresholds**	Same as Operational Thresholds*	**Impacted Communities:** Siting a New Source Compliance with Qualified Risk Reduction Plan OR Increased cancer risk of >5.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.2 $\mu g/m^3$ annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor
	Same as Operational Thresholds*	**Impacted Communities:** Siting a New Receptor **All Other Areas:** Siting a New Source or Receptor Compliance with Qualified Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 $\mu g/m^3$ annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor
Risks and Hazards (Individual Project) **Board Option 2** **Quantitative Thresholds**	Same as Operational Thresholds*	**All Areas**: Siting a New Source or Receptor Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 $\mu g/m^3$ annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance
December 7, 2009

Table 1 – Proposed Air Quality CEQA Thresholds of Significance		
Pollutant	**Construction-Related**	**Operational-Related**
Risks and Hazards (Cumulative Thresholds)	Same as Operational Thresholds*	<u>**All Areas**: Siting a New Source or Receptor</u> Compliance with Qualified Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 1.0 Hazard Index (from all local sources) (Chronic or Acute) $PM_{2.5}$: > 0.8 $\mu g/m^3$ annual average (from all local sources) <u>Zone of Influence</u>: 1,000-foot radius from fence line of source or receptor
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant.
Odors	None	Screening Level Distances and Complaint History
Plan-Level		
Criteria Air Pollutants and Precursors (Regional and Local)	None	1. Consistency with Current Air Quality Plan control measures 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase
GHGs	None	Compliance with Qualified Climate Action Plan (or similar criteria included in a General Plan) OR 6.6 MT CO2e/ SP/yr (residents + employees)
Risks and Hazards/Odors	None	1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas) and odors 2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways
Accidental Release of Acutely Hazardous Air Pollutants	None	None

Notes: CO = carbon monoxide; CO_2e = carbon dioxide equivalent; GHGs = greenhouse gases; lb/day = pounds per day; MT = metric tons; NO_X = oxides of nitrogen; $PM_{2.5}$= fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM_{10} = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ppm = parts per million; ROG = reactive organic gases; SO_2 = sulfur dioxide; SP = service population; TACs = toxic air contaminants; TBP = toxic best practices; tons/day = tons per day; tpy = tons per year; yr= year.

* Note: The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.

An analysis of the projects potential GHG production and impacts was done using the Urbemis Environmental Management Software. This analysis indicated the project had the potential to create 575.23 tons of CO2 emissions during the construction of the project and 2.68 tons of CO2 per year after construction of the project has been completed. Even though the proposed significance thresholds do not include emissions from construction, the total emissions created from this project (including construction) are expected to be less than the 1100 metric tons per year threshold proposed by the BAAQMD. Based on this analysis and the proposed significance thresholds, the project's CO2 impacts to air quality are expected to be less than significant.

Additionally, the project's total emissions for all other criteria pollutants are expected to be less than significant based on the low level of emissions and limited time of the construction, the areas distance from any known 'sensitive receptors', and the minimal emission levels expected to occur (from maintenance) after construction has been completed.

Sensitive Receptors
For an analysis of air quality, 'sensitive receptors' are land uses or individuals that are most sensitive to adverse air quality impacts including dust and emissions from projects. Sensitive receptors in the vicinity of creeks would generally include residential development, schools, and Care Homes for the elderly.

Bay Area Air Quality Management District (BAAQMD)
The BAAQMD is the regional agency responsible for implementing National and State Air Quality Standards.

2000 Clean Air Plan
The 2000 Clean Air Plan establishes implementing standards to comply with the federal Clean Air Act. The Bay Area 2005 Ozone Strategy has been prepared to comply with State Standards, as described below.

Bay Area 2005 Ozone Strategy
The BAAQMD, in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments prepared the 2005 Ozone Strategy. The Ozone Strategy describes how the Bay Area will fulfill the California Clear Air Act planning requirements for the State one-hour ozone standard and transport mitigation requirements through the proposed control strategy. This strategy includes stationary source control measures to be implemented through Air District regulations; mobile source control measures to be implemented through incentive programs and other activities; and transportation control measures to be implemented through transportation programs in cooperation with MTC, local governmental agencies and others.

Santa Rosa 2035 General Plan
Some General Plan policies related to air quality include the following:

LUL-L-M: Create pedestrian friendly environments and provide convenient connections to the transit facility for all modes of transportation.

LUL-M: Ensure new development and streetscape projects provide pedestrian and bicycle circulation improvements.

OSC-G: Take appropriate actions to help Santa Rosa and the larger Bay Area region achieve and maintain all ambient air quality standards.

OSC-F-2: Cooperate with various public and private entities to create new public access trails along creeks to parks and open spaces within the Urban Growth Boundary, as well as connections to regional trail systems.

Setting and Impacts

Significant impacts to air quality would occur if implementation of the Santa Rosa Citywide Creek Master Plan results in:

Increased criteria air pollutant or toxic air contaminant levels exceeding air quality standards, particularly close to sensitive receptors;
Exceed proposed thresholds for GHG production; or
Conflict or obstruction of implementation of the 2000 Clean Air Plan.

Implementation of projects in accordance with the Citywide Creek Master Plan and 2035 General Plan would result in the following air quality impacts. Mitigation measures are available to reduce these potential impacts to less-than-significant levels.

Impact III. a., c., & d. (*Construction Impacts - Dust and Equipment Emissions*)- Implementation of projects in accordance with the Citywide Creek Master Plan would result in short-term construction impacts to air quality including generation of dust and equipment emissions.

This significant impact would be reduced to a less-than-significant level with the following mitigation measure:

Recommended Mitigation Measures

Mitigation Measure III. a., c., & d.-Implementing the following measures (as specified by the 1996 BAAQMD CEQA Guidelines) would reduce construction-related air quality impacts to an insignificant level.

- Water all active construction areas including unpaved access roads, parking areas and staging areas at construction sites at least twice daily.
- Cover all trucks hauling soil, sand and other loose materials, or require trucks to maintain at least two feet of freeboard.
- Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

Beneficial Impacts Related to Air Quality

Implementation of the project would result in a number of beneficial impacts to air quality. The proposed trail would provide linkages between neighborhoods, schools, and shopping centers, further reducing automobile trips. Additionally, the trail and park would be a recreation resource, allowing many more residents and visitors to access recreation amenities by trail instead of by automobile. This provision of convenient recreation would also reduce some automobile travel to more distant locations for recreation. By enlarging the network of paths available for alternative transportation, implementation of projects in accordance with the Creek Master Plan have been identified as supporting the goals, policies, and actions set forth in the 2000 Clean Air Plan and the Bay Area 2005 Ozone Strategy.

The broader bands of mature riparian vegetation, over time, would have a cooling effect along the streams; the cooler microclimates would be beneficial for fish and wildlife as well as residents and visitors using the trail network. Additionally the newly planted vegetation would have CO2 sequestration benefits as the trees and other vegetation mature along the restored riparian corridor.

(Sources: 1 ,3, & 4)

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES				
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☒	☐	☐

Discussion:

Through out the history of Santa Rosa many creeks were channelized to minimize the potential for flooding. In the process, peak flows were increased and the majority of riparian vegetation was lost. The loss of riparian vegetation resulted in reduced habitat available for wildlife, loss of filtering capacity for pollutants entering waterways, increased temperature of waterways, and a decrease in groundwater infiltration and recharge. This

restoration project will attempt to alleviate the adverse biological effects from the historical "channelization" of Colgan Creek.

The Colgan Creek Restoration & Park Project is located in Southwest Santa Rosa between Victoria Drive and the under-crossing of Colgan Creek with Bellevue Avenue. The portion of Colgan Creek being restored is shown on the Santa Rosa 15-min. Quadrangle parallel to Bellevue Avenue. It flows south to southwest running directly in front of Elsie Allen High School. With exception of the headwater area above and along Kawana Springs Road, Colgan Creek is entirely confined to an artificially straightened flood channel. Most of the flood channel has soil banks, supplemented with rip-rap or concrete in some areas, and a permeable, semi-natural bottom (i.e., silt or clay streambed, but not unnaturally flat). In the area of the proposed restoration effort, the stream is almost fully exposed to the sun, as there is essentially no functioning riparian tree corridor, although immature valley oaks and some other small trees and shrubs have been planted between the stream channel and access/maintenance roads.

The proposed project consists of the restoration of a portion of lower Colgan Creek and the construction of a neighborhood park. The project proposes to create a more natural meandering pattern for the channel including aquatic habitat features such as pools and riffles. Widening of the existing channel will accommodate a 100-year storm event, and restore and enhance the riparian corridor. Some of the proposed modifications extend beyond the existing Sonoma County Water Agency (SCWA) right-of-way onto the park parcels to create a more natural stream channel and wider swath of riparian vegetation along the channel. The project would involve removal of some or all of the engineered slopes of the existing channel and one of the adjacent maintenance roads.

As identified above, included with the channel restoration effort, a neighborhood park approximately 5 acres in size would be developed north of Bellevue Avenue adjoining the existing residential development. This park development will convert existing grassland adjacent to the creek channel to park and recreation facilities. The grassland parcels are within the Santa Rosa Plain Conservation area, are within the California Tiger Salamander Habitat, and contain wetland habitat as well.

Setting and Impacts

The project area is in Southwest Santa Rosa which is home to several protected species and numerous vernal pools and wetlands. Southwest Santa Rosa is characterized by a mixture of dense residential, industrial, and commercial development interspersed with large undeveloped areas which have traditionally been used for agriculture and grazing. The existing vegetation along Colgan Creek is primarily grasses and shrubs with some invasive species such as Himalayan Blackberry located along the bank and Sonoma County Water Agency access road/right-of-way boundaries. A few mature eucalyptus, walnut, cottonwood, and oak tree varieties are also located along this right-of-way with a majority of these trees located near the vicinity of the proposed park adjacent to Bellvue and near Elsie Allen High School. A variety of birds are also known to frequent the area including quail, ducks, hawks, swallows, and song birds.

The streambed throughout most of the project reach is either hard clay or clay overlain by silt. Some gravel is present, and the only cobble and boulders on the stream bed appear to be isolated chunks of rip-rap that have fallen from the banks and been moved downstream at high flows. Aside from the few boulders, scattered algae, emergent plants, and some terrestrial grasses trailing in the water, there is very little in-stream structure to provide shelter or living space for aquatic animals.

No special status species were observed during the field surveys conducted on April 9, 2002 by Golden Bear Biostudies or during the field surveys conducted March 22, 2010, and May 10, 2010 by City of Santa Rosa biologists. Most special status plants and animals in the Santa Rosa Plains (in which the project occurs) are associated with vernal pools. Although several seasonal wetlands occur along the north bank of Colgan Creek (at

the parcel located at the northwestern corner of Bellevue Avenue and Dutton Meadow Road) in the area of the proposed restoration effort and park site, they do not provide habitat for special status species.

Riparian wetland plant communities are confined to the channel bottom. The only extensive wetland community present at the site was the seasonal, intermittent aquatic habitat of the channel bottom. It was essentially all sediment (some gravel) with small areas of annual weeds on gravel bars or bank sides. Typical plants are mostly weedy species, including nut-sedge (*Cyperus eragrostis*), curly dock (*Rumex crispus*), willow-herb (*Epilobium ciliatum*), and Bermuda grass (*Cynodon dactyloides*). This area is subject to periodic maintenance measures that prevent the accumulation of woody vegetation.

Seasonal Wetlands
Several small seasonal wetlands are located in the area of the proposed restoration project and parks site (at the parcel located at the northwestern corner of Bellevue Avenue and Dutton Meadow Road). The most common species observed were perennial ryegrass (*Lolium perenne*), nut sedge (*Cyperus eragrostis*), and curly dock (*Rumex crispus*). These wetlands have been identified as subject to Corps jurisdiction on a wetland delineation prepared by Charles Patterson dated March 7, 2001; Corps Field # 21147N for APN 043-121-07.

Non-Native Annual Grassland
Annual grassland is the most extensive plant community in the study area. This community is located along the channel banks above the ordinary high water mark of the channel and extends up to the road surface. It occurs on the outside edge of the road up to the right-of-way fence. Non-native grasses and forbs such as perennial ryegrass, Harding grass (*Phalaris aquatica*), wild geranium (*Geranium dissectum*), wild radish (*Raphanus sativa*), bristly ox-tongue (*Picris* echioides), common groundsel (*Senecio vulgaris*), poison hemlock (*Conium maculatum*) and teasel (*Dipsacus fullonum*) are the most common species.

Trees
Single trees and clumps occur along the reach of Colgan Creek within the project limits. These trees extend from the upper bank to the top of the bank in the area between the road and the edge of water agency right-of-way. Typical tree species were valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*), and non-native pines (*Pinus spp.*). Most of these trees were hand planted at the time the channel was constructed. Others, especially many of the oak seedlings and saplings, have become established incidentally via natural propagation. Willows and other typical riparian vegetation are largely absent from the channel bottom due to the periodic maintenance measures.

Wildlife
The stream fauna in the project zone is relatively impoverished. It is likely the most common native species of fish would be the three-spine stickleback and the Clearlake-Russian River roach. These species are tolerant of high temperatures and poor water quality, and are adapted to hide within algae and submerged vegetation, although it is doubtful that any significant water will remain in this reach by mid-summer. The only other aquatic vertebrates likely to occur would be the Pacific chorus frog (formerly Pacific treefrog) and Bullfrog larvae. Among algae and emergent vegetation, invertebrates typical of ponds and sluggish streams, such as dragonfly larvae, dytiscid beetles, water striders, backswimmers and corixids, snails, and introduced swamp crayfish can be found. Insect larvae (stoneflies, caddisflies, mayflies) associated with perennial, rocky streams are not likely to occur. Heron, mallards and egrets are waterfowl commonly seen in the project area.

In summary, the creek within the project zone lacks structural habitat diversity. It is un-shaded and subject to large fluctuations in temperature, probably dries up in the summer, and is relatively unproductive (lacks nutrients provided by decomposing leaves and twigs, which usually serve as the base of the food chain in small streams). As a result of these current factors, aquatic life is poorly represented.

No special status plants were found within the project area. The Biological Assessment includes a table of special status species that have the potential to occur, and provides results and discussions of why they were not found in the project study area.

Regulatory Framework

A Biological Assessment (BA) including a floristic survey of the project area was prepared as an element of the CEQA documentation by Environmental Specialist Intern Betsy Black. This document was an update of the BA prepared by Golden Bear Biostudies in 2002. It was written to aid the permitting and regulatory agencies in assessing biological value of existing habitats and the potential impacts associated with the project on these habitats. This BA presented the findings of reconnaissance surveys for special status plant and animal species at the proposed project site and makes recommendations to mitigate potential impacts to a level less than significant.

"Special Status Plants" is a broad term used to refer to all the plant taxa inventoried by the California Department of Fish and Game's (CDFG) Natural Diversity Database (NDDB), regardless of their legal or protection status.

Special Plant taxa are species, subspecies, or varieties that fall into one or more of the following categories:

- Officially listed by California or the Federal Government as Endangered, Threatened, or Rare;
- A candidate for state or federal listing as Endangered, Threatened, or Rare;
- Taxa which meet the criteria for listing, even if not currently included on any list, as described in section 15380 of the CEQA Guidelines;
- A Bureau of Land Management, U.S. Fish and Wildlife Service, or U.S. Forest Service Sensitive Species;
- Taxa listed in the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California
- Taxa that are biologically rare, very restricted in distribution, or declining throughout their range but not currently threatened with extirpation;
- Population(2) in California that may be peripheral to the major portion of taxon's range but are threatened with extirpation in California; and
- Taxa closely associated with habitat that is declining in California at an alarming rate (e.g., wetlands, riparian, old growth forests, desert aquatic systems, native grasslands, valley shrubland habitats, vernal pool, etc.

Field surveys were conducted in a manner to locate any rare or endangered species that may be present (CDFG, 1984). The flora was assessed on April 9, 2002 (by Golden Bear Biostudies) and again on March 22, 2010 and May 5, 2010 (by City Staff). These surveys were conducted at the time of year when rare or endangered species are both "evident" and identifiable, i.e. they were scheduled (1) to coincide with known flowering periods, and/or (2) during periods of phenological development that are necessary to identify the plant species of concern (Table 3). The surveys were floristic in nature and not based on the occurrence of habitat or other physical features. The surveys were conducted using systematic field techniques in all habitats of the site to ensure a reasonably thorough coverage of potential impact areas. A meandering pattern was walked through each habitat to ensure that all areas were viewed. Every species notes in the field were identified to the level necessary to ascertain whether they were "special status species."

Species of Concern
Existing literature was reviewed for information regarding sensitive resources that have the potential to occur in the project area (Waaland, 1989; Patterson et al, 1994; CH2M Hill et al, 1995). The Electronic Inventory of Rare and Endangered Vascular Plants of California (Skinner and Pavlik, 1997) was queried for a list of all plant species reported from the Santa Rose USGS 15 minute quadrangle and all those surrounding it. This initial review of potential species that could occur in the Santa Rosa Plains resulted in a list of special status plant species (Table 1).

Potentially Occurring Special Status Species
A special-status animal species is defined as one of the following:

- Officially listed by CDFG and or USFWS as threatened or endangered;
- Is a federal candidate for listing as threatened or endangered;
- And/or is a species of concern

Based on the presence of aquatic habitat in Colgan Creek (albeit highly degraded), the following special status species could have the potential to occur in streams of the Santa Rosa Plains, provided suitable existed: California freshwater shrimp, California tiger salamander, red-legged frog, yellow-legged frog, northwestern pond turtle and steelhead. It should be noted that the riparian habitat in which any of these species could potentially utilize for nesting and/or breeding is absent in the project area and no impacts would be expected.

Special Status Animals
Animals that had the potential to occur in wetlands are addressed below. Other species may make use of the project reach, but the project will not have adverse impacts on them if they did. Otherwise, the restoration will encourage the utilization of the project area by special status species.

Actinemys marmorata marmorata "Northwestern Pond Turtle"
The northwestern pond turtle is a federal and state species of concern. Their range extends from San Francisco Bay northward. The northwestern pond turtle is an aquatic species typically found in slow moving aquatic habitat, including ponds, marshes, rivers and streams with rocky or muddy substrates and extensive aquatic and emergent vegetation. Female turtles can migrate as much as a quarter mile from water sources in order to lay eggs. The species usually deposits its eggs within 15 to 200 yards from water in search of suitable sandy banks or open grassy fields. The Northwestern pond turtle has been observed in upper reaches of Colgan Creek (Aquatic surveys performed by Dr. Fawcett, Spring 2002). There is no potentially suitable habitat in the reach of Colgan Creek proposed for restoration or the adjacent property proposed for park development. Prior to initiation of the restoration effort, surveys should be conducted to relocate any turtles from the project area.

Ambystoma californiense "Tiger Salamander"
The Sonoma County Distinct Population Segment (DPS) of the California tiger salamander is an endangered species under the federal Endangered Species Act and a candidate endangered species under the California Endangered Species Act with an expected listing in March, 2010. Critical habitat for the Sonoma County DPS of the California tiger salamander was proposed August 2009.

Vernal pools in the Santa Rosa Plains are known to provide habitat for the California tiger salamander. However, the seasonal wetlands at the site do not appear to provide the sustained ponding tiger salamanders require for breeding. Additionally, it is not likely that they could survive in the creek due to seasonal high flows, predatory fish, and bullfrogs. Burrows, another necessary element for tiger salamanders, were not observed in the adjacent lands proposed for the park site either.

Although there is some potential, it is unlikely this species is present at this site due to lack of suitable habitat. However, according to the U.S. Fish and Wildlife Service Programmatic Biological opinion, Enclosure 1, the

project is in an area designated as "likely to adversely affect CTS" (USFWS 2007) and adequate mitigation measures to address potential impacts will be required.

Dendroica petechia "Yellow Warbler"
The yellow warbler is a California species of concern but has no federal status. It occurs throughout Califonia except in desert regions. They breed in riparian woodlands as well as other brushy forest or woodlands below 8,000 feet. In recent decades, breeding pairs have declined greatly in lowland habitats throughout the state including Sonoma County. Nesting pairs are known to occur along the Russian River near the confluence with Dry Creek and south of Healdsburg. There is no potentially suitable habitat in Colgan Creek due to the absence of riparian woodland. This species is not subject to impacts as a result of this restoration project.

Icteria virens "Yellow-breasted Chat"
The yellow-breasted chat is a California species of concern but has no federal status. It is an uncommon summer resident and migrant in the foothills or the Coast Range and Sierra Nevada. They prefer dense riparian cover with a thick understory near water. In recent decades, breeding pairs have declined greatly in lowland habitats throughout the state including Sonoma County. Nesting pairs are known along the Russian River near the confluence of Dry Creek and south of Healdsburg. There is no potentially suitable habitat in Colgan Creek of the adjacent property due to the absence of riparian woodland. This species is not subject to impacts as a result of this project.

Linderiella occidentalis "California Fairy Shrimp"
The California linderiellia (Linderiella occidentalis), or California Fairy Shrimp, is listed as a federal species of concern. They are found primarily in vernal pools and wetlands, and although several small seasonal wetlands are present near the north bank of Colgan Creek on or adjacent to the property proposed for park development, they were highly degraded and do not provide suitable habitat. This species is not subject to impacts as a result of this project.

Rana aurora draytonii "California Red-legged Frog"
The California red-legged frog is listed as a federally threatened species and a California species of concern. Critical habitat designation for this species includes Sonoma County. Although there is debate as to whether the species from the area are actually a more common subspecies, the level of review from the resource agencies treats all subspecies as though threatened until proven otherwise. These frogs are found in the hills and valleys of the Coast Ranges and the Sierra Nevada. It requires permanent sources of water such as perennial streams and marshes. Nonetheless, it is chiefly a pond frog. There is no potentially suitable habitat in Colgan Creek or the adjacent properties because it is a seasonal stream. This species is not subject to impacts as a result of this project.

Rana boylii "Foothill Yellow-legged Frog"
The California yellow-legged frog is a federal species of concern (formerly a Category 2 candidate for listing as threatened or endangered). It is a California species of concern. These frogs are found in the streams and rivers of the coast ranges and the Sierra Nevada, usually in forest, woodland or chaparral habitat. This species is very unlikely to occur at the site because the creek is completely dry for several months in late summer and early fall. There is no potentially suitable habitat in Colgan Creek or the adjacent properties because of its intermittent nature. This species is not subject to impacts as a result of this project.

Oncorhynchus mykiss "Steelhead"
Listing Status. Steelhead in the project vicinity are included in the Central California Coast Evolutionary Significant Unit (ESU) and are listed as threatened under the federal Endangered Species Act (NMFS 2005). Steelhead have no State listing status.

Critical Habitat. The Russian River and Mark West Creek are designated critical habitat for steelhead; Santa Rosa Creek is excluded (NMFS 2006). Critical habitat includes the streambed and water, with a lateral extent defined by the ordinary high water mark. If the ordinary high water mark has not been defined, the lateral extent is defined by the bank-full elevation

Distribution. Currently, there is no potentially suitable habitat in Colgan Creek because it is a seasonal stream and there is no upstream spawning habitat (Waaland, 2002). Additionally in the early spring, water temperature in Colgan Creek near the project reach was 25°c (77°F)(Waaland, 2002). Much higher stream temperatures are expected in the project reach by mid-May, if any water remains in this reach. The upper lethal thermal limit for steelhead or coho salmon in generally considered to be about 24°C(=75°F), so temperature alone rules out any possibility of steelhead or coho juvenile rearing within the project zone under the existing conditions. Therefore, this species is not subject to impacts as a result of this restoration project.

Oncorhynchus kisutch "Coho Salmon"

Listing Status. Coho Salmon (Oncorhynchus kisutch) in the project vicinity are included in the Central California Coast ESU for this species and are listed as endangered under the federal Endangered Species Act (NMFS 2005). Coho are also listed under California Endangered Species Act as an endangered species (CNDDB 2008).

Critical Habitat. Designated critical habitat includes all accessible reaches of the Russian River and tributaries downstream of Warm Springs Dam and Coyote Dam (NMFS 1999). Critical habitat includes the streambed, water, banks and adjacent riparian and upland areas. The adjacent riparian area is the area adjacent to a stream that provides shade, sediment and nutrient reduction and regulation, streambank stability, and input of large woody debris or organic matter. Thus, the stream, streambed, banks, and riparian areas considered in this Biological Assessment are part of critical habitat for coho.

Distribution. Currently, there is no potentially suitable habitat in Colgan Creek because it is a seasonal stream and there is no upstream spawning habitat (Waaland, 2002). Additionally in the early spring, water temperature in Colgan Creek near the project reach was 25°c (77°F)(Waaland, 2002). Much higher stream temperatures are expected in the project reach by mid-May, if any water remains in this reach. The upper lethal thermal limit for steelhead or coho salmon in generally considered to be about 24°C(=75°F), so temperature alone rules out any possibility of steelhead or coho juvenile rearing within the project zone under the existing conditions. Therefore, this species is not subject to impacts as a result of this restoration project.

Oncorhynchus tshawytscha "Chinook Salmon"

Listing Status. Chinook salmon (Oncorhynchus tshawytscha) in the project region are included in the California Coastal ESU (NMFS 2005) and are listed as threatened under the federal Endangered Species Act. Chinook have no State listing status.

Critical Habitat and Essential Fish Habitat. Critical habitat for California Coastal Chinook is defined in the same way as it is for Central California Coast steelhead (above), except that Mark West Creek is excluded from critical habitat for Chinook (NMFS 2005). However, the Laguna de Santa Rosa watershed, because it is accessible to salmon and is part of the USGS Hydrological Unit 18010110 (Russian River), is included by definition in EFH for Pacific Salmon, including Coho and Chinook (PFMC 1999).

Distribution. Currently, there is no potentially suitable habitat in Colgan Creek because it is a seasonal stream and there is no upstream spawning habitat (Waaland, 2002). Additionally in the early spring, water temperature in Colgan Creek near the project reach was 25°c (77°F)(Waaland, 2002). Much higher stream temperatures are expected in the project reach by mid-May, if any water remains in this reach. The upper lethal thermal limit for chinook salmon in generally considered to be about 24°C(=75°F), so temperature alone rules out any possibility of chinook juvenile rearing within the project zone under the existing conditions. Therefore, this species is not subject to impacts as a result of this restoration project.

Syncaris pacifica "California Freshwater Shrimp"

California freshwater shrimp are listed as endangered under both the federal and California Endangered Species Acts however critical habitat has not been designated.
The shrimp are currently known to occur in only 17 stream segments located in Marin, Sonoma, and Napa counties. Many of these streams are isolated by barriers, dewatered areas, and low quality habitat. This species is typically found in low gradient, low elevation reaches of perennial streams with undercut banks, emergent vegetation, exposed live roots of trees, or overhanging woody debris or vines trailing in the water, all which are lacking in this reach of Colgan Creek. Therefore, this species is not subject to impacts as a result of this restoration project.

Strix occidentalis caurina "Northern Spotted Owl"
The northern spotted owl is listed as a federally threatened species. Critical habitat was designated (USFWS 2008), but does not include the project vicinity. The bird is threatened by habitat loss and forest fragmentation. The owl's preferred habitat is montane forests, particularly multi-layered old growth forests, although the species is not limited to old growth forests. The age of the forest is not the critical parameter, but the capacity of the vegetation cover to provide the proper thermal insulation from summer heat. Northern spotted owls would not be expected in the vicinity of the project site because of the lack of suitable habitat.

Setting and Impacts
The project's effect on biological resources would be considered significant if the project results in:
- Alteration of unique characteristics of the area, such as sensitive plant communities and habitats (i.e. serpentine habitats, wetlands, riparian habitats); or
- Adverse impacts to special status species; or
- Adverse impacts to important or vulnerable resources as determined by scientific opinion or resource agency concerns (i.e. wetlands); or
- Interferes with migratory routes or animals.

The project will not have any adverse impacts on special status species. However, it will affect the wetlands and aquatic habitat of the Colgan Creek channel and potentially any wetlands located on the adjacent property proposed for park development. These wetlands are "waters of the U.S." and subject to regulatory jurisdiction and permitting, even though the net biological effect will be positive.

The determination of significance of impacts to biological resources involves an evaluation of the context in which the impact may occur and the intensity and extent of the impact's effect. The significance of potential impacts is assessed at a site-specific scale and in the larger regional context.

Potential Adverse Impacts
The project has the potential for adverse biological impacts because it will disturb a regulated resource subject to agency permit authority: i.e. the Colgan Creek Flood Control Channel. Additionally, it will eliminate adjacent seasonal wetlands, which are also subject to agency permit authority. None of these wetlands are considered to be high quality habitat.

The project also has the potential to have adverse impacts to western pond turtles and tiger salamanders, both special status species.

There will be no adverse impacts to any other special status plant or animal species. Although the project affects wetlands and the creek, impacts in the channel are temporary and those to the existing wetlands will be mitigated to a level less than significant through the incorporation of recommended mitigation measures listed below. The project will not alter unique characteristics of the area, such as sensitive plant communities and habitats, since the

channel and seasonal wetlands are not high quality riparian habitats or vernal pools. The project will not interfere with migratory routes of salmonids, since none are present in Colgan Creek.

Impact IV. a., b., c., d.- Temporary impacts to the regulated aquatic habitat of the Colgan Creek Channel
The proposed restoration project requires modifications to the Colgan Creek channel which could require de-watering of portions of the creek and relocation of special status species. The aquatic habitat in the Colgan Creek Channel is regulated under Section 404 of the Clean Water Act (CWA) by the Corps of Engineers, Section 401 of the CWA by the North Coast Regional Water Quality Control Board (NCRWQCB) and Fish and Game Codes 1600-1603 by CDFG. Although the restoration project will result in net positive biological effects, permits from these agencies will be required and conditions will have to be complied with.

Impact IV. a., b., c., & f.- Elimination of seasonal wetlands
The seasonal wetlands present between Dutton Meadows and Burgess Drive appear to be in the path of the meanders planned for the project as well as the area proposed for park development. Although the project will result in net positive biological effects, permits from the Corps and NCRWQCB will be required and mitigation for the wetland impacts will be required to be these impacts to a level less than significant.

Impact IV. a., b., & f. - Impacts to Western Pond Turtles, Tiger Salamanders or other aquatic life.
If pools of aquatic habitat remain during construction, western pond turtles and tiger salamanders could be present and could be harmed. Upland aestivation habitat for tiger salamanders would be affected. Consultation with both the CDFG and USFWS will be necessary and specific mitigation measures will be required to bring these potential impacts to a level less than significant.

Recommended Mitigation Measures

Mitigation Measure IV a.-f. - Implement Conditions as Required by Regulatory Agencies
These measures will be specified at the time of permit issuance.

Mitigation Measure IV. a., b., c., & f. – Compensate for the Loss of Seasonal Wetlands
The Colgan Creek Restoration project may cause the fill or alteration of the jurisdictional seasonal wetlands between Dutton Meadows Dr. and Burgess Dr. (APN 043-121-07). Mitigate at a 2:1 ratio for both restoration and preservation of existing seasonal wetland habitat unless different ratios are require by permitting agencies. Such mitigation could occur onsite or offsite as directed by permitted agencies. Preservation requirements could be waived given the restoration goal of the project. The specific requirements will be specified as part of the permit condition with the regulatory agencies.

Mitigation Measure IV. a., b., & f. - Potential CTS Impacts
Any aestivation habitat for the California tiger salamander must be compensated for per the specifications of commenting and regulatory agencies. The specific mitigation measures will be determined through consultation with CDFG and USFWS, but is expected to be 2:1.

Mitigation Measure IV. a., b., c., & d. - Install Erosion and Siltation Controls
Appropriate erosion and siltation controls must be installed and maintained during all phases of construction, and all exposed soil and other fills must be permanently stabilized at the earliest practicable date. Erosion control should be established by 1) an erosion control blanket, 2) hydroseeding with a mix of native grasses, forbs, and wildflowers, 3) surface irrigation of the hydroseeded area to establish the plants prior to the start of the rainy season, and 4) placement of rocks/boulders against the toe of the outside bank.

The intent of these mitigations is not only to preserve biologic habitat but also to meet the requirements of the North Coast Regional Water Quality Control Board (NCRWQCB) General Construction Permit for maintaining water quality. All water exiting the project site is required to document compliance with the requirements of the NCRWQCB water quality standards.

Recommended elements of erosion and sedimentation control are as follows:

8. Allow work only when stream flows are low and are routed around the work area.
9. Multiple phased construction periods control exposed work zone size.
10. Dewater/sedimentation tank system
11. Dewatering zones are separated by sedimentation dams with controlled overflows. Sedimentation dams are dry weather features only and contain failure of dewatering system or possible breach of the bypass system/cofer dam.
12. All exposed graded slopes not rearmored, will receive high quality erosion control blankets installed in a timely manner. All areas of restored creek below the 100-year water surface, will receive its' ultimate surface treatment prior to the October 15 end of work period.
13. Re-vegetation of the creek zone should be expected concurrent with all phases. Hydroseeding, mulching or other common organic methods of erosion control should be included for all phases.
14. All ultimate planted areas will have erosion blankets over top soils and erosion mats in grassed areas. Revetment or other high velocity armoring systems will be blanketed with soil filter fabrics to reduce soil loss.

Mitigation Measure IV. a., b., d., & f. - Protect & Remove Aquatic Life to the Greatest Extent Possible

In order to minimize the potential for disruption and harm to aquatic life indigenous to the waterbody, including western pond turtles, the following measures should be implemented:

4. Prior to channel disturbance activity, fish and amphibians will be removed from the project area and placed upstream or downstream depending on the species.
5. Work will only occur during the dry season as permitted by the Department of Fish and Game, NCRWQCB and the Corps. Any water flowing toward the project area will be diverted around the project area during construction so turbid water disturbed by the construction activity will not flow downstream into the Laguna de Santa Rosa.
6. During construction, a biological monitor will be on site when construction takes place in aquatic habitat. If necessary, the project area will be dewatered prior to construction activities.

Mitigation Measure IV. a., b., d., & f – Special Status Animal Species

3. Any western pond turtles and tiger salamanders that are living within the project area will be relocated with approval from CDFG and USFWS to a secure location prior to construction activity.
4. Trapping and relocation of CTS, or installation of an exclusionary ramp/fence system would occur prior to construction.

Mitigation Measure IV. e. -Tree Removal

All efforts are to be made to maintain existing mature trees within the restoration area of the project. Special focus shall be made to maintain established oak species on the southern side of the creek channel as they currently provide some shading of the creek channel and will help to maintain habitat as the restoration plantings get established. Any Heritage Trees removed as an aspect of the project must be mitigated per the City of Santa Rosa Tree Ordinance which requires 1 15-gallon tree be planted for every 6'' (diameter) of tree growth removed.

Beneficial Biological Impacts

The proposed project will restore the stream and riparian corridor to a more natural, biologically diverse and aesthetically pleasing state, while maintaining the designed 100-year flood capacity of the channel. The two

components of the restoration effort are the stream corridor and the riparian zone. One of the common effects of restoring a functional stream and riparian corridor of a denuded seasonal stream is that perennial flow may return.

Once the proposed restoration project is accomplished, its success and perceived value as enhanced wildlife habitat in the "public's eye" might encourage other landowners or agencies to work on restoring other reaches of Colgan Creek.

The result of this project will be a more natural stream with a meandering channel that allows currents at high flows to scour out deep pools in some areas, to undercut banks, and to deposit sediments in other areas as sand or gravel bars. Rocks, rootwads, and woody debris provide shelter from predators for fish and other animals, and hard surfaces required for abundant production of insects and other invertebrates. The rootwads and trunks of trees within the restored channel will make the aquatic habitat much more diverse and valuable to aquatic life as opposed to that which currently exists within the project zone.

Positive Impacts in the Riparian Corridor
Another positive impact of the project will be a functioning riparian corridor of native plants along the top of the stream banks, as well as along the slope of the stream banks down to the edge of the water at the low flow mark. A corridor of riparian trees provides essential resources to the stream, e.g., nutrients (leaves, twigs, terrestrial insects) and woody debris, and serves essential functions, such as cooling the water and reducing evaporation, stabilizing stream banks and reducing erosion, and slowing the rate of groundwater discharge into the stream. These improved functions, in combination with the cooling effect of shade, may allow surface stream flow to persist through the summer.

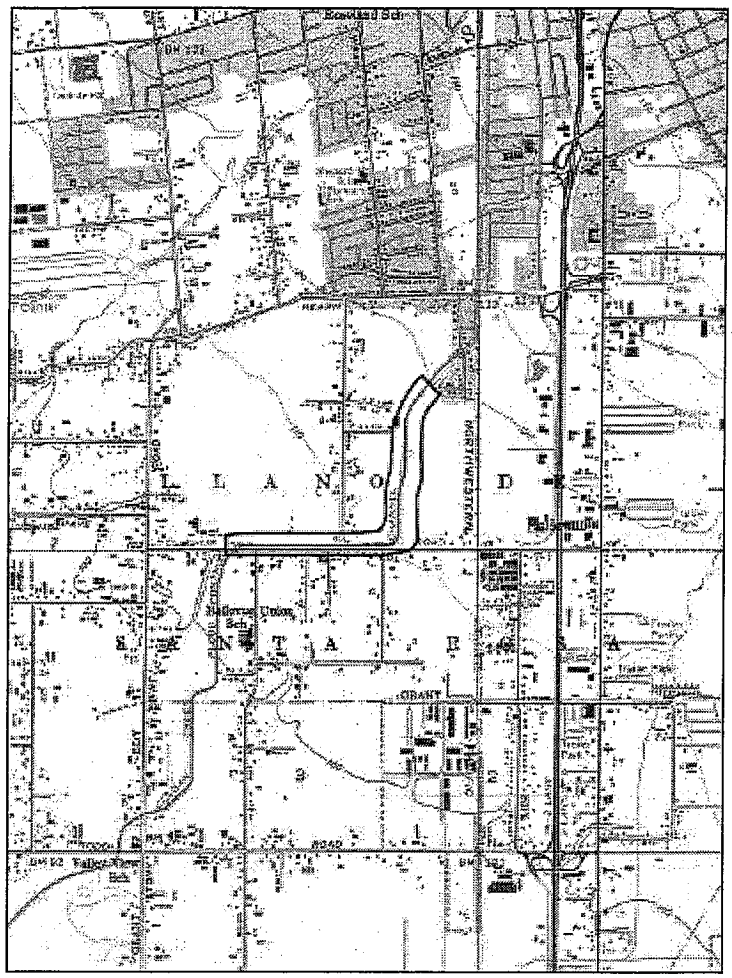
(Sources: 1, 2, 5, 6, & 10)

V. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Discussion:
This section describes a cultural resources survey conducted for the Colgan Creek Restoration & Neighborhood Park Project in southwest Santa Rosa, Sonoma County, California. The study area is located in central Sonoma County, about two miles south-southwest of downtown Santa Rosa. The project proposes to restore a 6,400-foot, channelized reach of Colgan Creek and add features to the area such as a bike/pedestrian path and neighborhood park adjacent to the restored creek channel. To satisfy requirements of the California Environmental Quality Act

(CEQA) and Section 106 of the National Historic Preservation Act, a cultural resources study was conducted by Tom Origer & Associates (File No. 09-88S) after referral to the Northwest Information Center identified the site as having the potential to contain cultural and historic resources.



Study area (adapted from the 1980 USGS Santa Rosa 7.5' topographic map).

Cultural Setting

Archaeological evidence indicates that human occupation of California began at least 10,000 years ago (Moratto 1984:71). Early occupants appear to have had an economy based largely on hunting, with limited exchange, and social structures based on the extended family unit. Later, milling technology and an inferred acorn economy were introduced. This diversification of economy appears to be coeval with the development of sedentism and population growth and expansion. Sociopolitical complexity and status distinctions based on wealth are also observable in the archaeological record, as evidenced by an increased range and distribution of trade goods (e.g., shell beads, obsidian tool stone), which are possible indicators of both status and increasingly complex exchange systems. At the time of European settlement, the study area was situated in an area controlled by the Southern Pomo (Barrett 1908; McLendon and Oswalt 1978).

The Southern Pomo were hunter-gatherers who lived in rich environments that allowed for dense populations with complex social structures (Barrett 1908; Kroeber 1925). They settled in large, permanent villages about which were distributed seasonal camps and task-specific sites. Primary village sites were occupied throughout the year and other sites were visited in order to procure particular resources that were especially abundant or available only

during certain seasons. Sites often were situated near fresh water sources, such as the project area, and in ecotones where plant life and animal life were diverse and abundant.

Historically, this portion of Sonoma County was once part of the 13,316-acre Rancho Llano de Santa Rosa granted to Joaquin Carrillo in 1844. Carrillo was the son of Maria Carrillo, grantee of the Rancho Cabeza de Santa Rosa, whose family had the first permanent nonnative residence in the area. The residential focus of the Llano de Santa Rosa grant centered on present-day Sebastopol where Carrillo's adobe house was located.

Regulatory Framework

This study adhered to requirements of Section 106 of the National Historic Preservation Act (hereafter, Section 106) and of the California Environmental Quality Act (CEQA). Under Section 106, when a federal agency is involved in an undertaking, it must take into account the effects of the undertaking on historic properties (36CFR Part 800). Compliance with Section 106 requires that agencies make an effort to identify historic properties that might be affected by a project, and gather information to evaluate their eligibility for inclusion on the National Register. Similarly, CEQA mandates that cultural resources be considered as part of the environmental review process by making an inventory of resources within a study area and assessing the potential that important cultural resources could be affected by a project.

Significance Criteria

For purposes of the National Register, the importance of a historic resource is evaluated in terms of criteria put forth in 36CFR60, as follows:

A. That are associated with events that have made a significant contribution to the broad patterns of our history;or

B. That are associated with the lives of persons significant in our past; or

C. That embody the distinct characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded or may be likely to yield, information important in prehistory or history. Under CEQA, a resource may be important if it is already listed on the National Register or a local register of historical resources, or if it meets any one of the criteria below:

1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
2. Is associated with the lives of persons important to local, California, or national history.
3. Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of a master, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important to the prehistory or history of the local area, California or the nation. In addition to meeting one or more of the above criteria, eligibility requires that a resource retains sufficient integrity to convey a sense of its significance or importance. Seven elements are considered key in considering a property's integrity: location, design, setting, materials, workmanship, feeling, and association.

Study Procedures

Native American Contact

A letter was sent to the State of California's Native American Heritage Commission seeking information from the sacred lands files, which track Native American cultural resources, and the names of Native American individuals and groups that would be appropriate to contact regarding this project. The Native American Heritage Commission replied with a letter dated January 4, 2010, in which they indicated that the sacred land file has no information about the presence of Native American cultural resources in the immediate project area. Letters were also sent to the Federated Indians of Graton Rancheria. A letter was received from Nick Tipon of the Federated

Indians of Graton Rancheria on January 14, 2010. Mr. Tipon's letter is included in the report appendix, along with a log of contact efforts and copies of correspondence.

Archival Study Procedures
Archival research included examination of the library and project files at Tom Origer & Associates. A review (NWIC File No. 09-0783) was completed of the archaeological site base maps and records, survey reports, and other materials on file at the Northwest Information Center (NWIC), Sonoma State University, Rohnert Park. Sources of information included but were not limited to the current listings of properties on the National Register of Historic Places (National Register), California Historical Landmarks, California Register of Historical Resources (California Register), and California Points of Historical Interest as listed in the Office of Historic Preservation's Historic Property Directory (OHP 2009). The Office of Historic Preservation has determined that structures older than 45 years should be considered potentially important historical resources, and former building and structure locations could be potentially important historic archaeological sites.

Setting and Impacts
Significant impacts related to cultural resources would occur if implementation of the Colgan Creek Restoration Project:

Causes a substantial adverse change in the significance of a historical or archaeological resource as defined in §15064.5 or,

Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature or,

Disturbs any human remains, including those interred outside of formal cemeteries.

The project area is located in central Sonoma County, about two miles south-southwest of Santa Rosa's civic center, as shown on the Santa Rosa, California 7.5' USGS topographic map (Figure 2). It includes a 6,400-foot corridor along Colgan Creek that commences near Victoria Drive and ends where the creek crosses under Bellevue Avenue just beyond Primrose Avenue as well as adjacent parcels (primarily) north of the creek channel totaling approximately 4.5 acres in size. This channelized portion of Colgan Creek is owned by the Sonoma County Water Agency (SCWA), whose right-of-way ranges from 90 to 120 feet wide centered on Colgan. In addition, there are locations adjacent to the SCWA right-of-way where improvements are planned on private land.

The study area consists of flat and channeled land on the Santa Rosa Plain. Soils mapped for the study area are of the Clear Lake and Wright series (Miller 1972:Sheet 89). Clear Lake soils are found on plains and flat basins and are poorly drained clays. Annual and perennial grasses are the chief vegetation supported by Clear Lake soils, and parcels with these soils have been used primarily for growing fodder (Miller 1972:23-24). Wright soils are poorly and moderately well-drained loams where annual and perennial grasses and scattered oaks are found growing when the soil is uncultivated. Parcels comprised of Wright loam have been used historically for pasture and occasionally as prune orchards (Miller 1972:86).

Archival Study Findings
Archival research found that portions of the study area were surveyed previously. Beard (2000) surveyed the SCWA right-of-way for a planned pedestrian path along this stretch of Colgan Creek, and this stretch of the creek and an additional 18 acres were surveyed in 2001 for a Citywide creek restoration project (Loyd and Origer 2001). Additionally, the Bellevue Avenue corridor was surveyed in 1999 (Beard 1999). No archaeological resources were found during those studies.

There are two known historical sites within a one-quarter mile radius of the study area and several recorded historic buildings. None extend into the current study area. The remains of a farm were recorded as site CA-

SON-1786H on a parcel adjacent to the west end of the study area. No archaeological materials were observed in that area during the current survey. There are no reported ethnographic sites in the vicinity (Barrett 1908). Review of historical maps found no buildings or historic features in the proximity of the study area on nineteenth century map (Bowers 1867; GLO 1859, 1864; Reynolds and Proctor 1898; Thompson 1877). By 1916 buildings are depicted north of Bellevue Avenue along the present-day route of Colgan Creek (USGS 1916). The channelized creek is first depicted on the 1954 USGS Santa Rosa map.

Field Survey Procedures
A field survey was completed by Tom Origer's Office on December 29, 2009. A portion of the project area could not be examined because owner access was not granted. The un-surveyed portion is north of the SCWA property fence. It begins 210 feet east of Dutton Meadows and extends along the channel for about 800 feet. The remainder of the survey area was examined intensively by walking in a zigzag pattern within corridors about 15 meters wide. Visibility was fair to poor, with vegetation the chief hindrance. A hoe was used to clear small patches, as needed, so that the ground could be inspected.

Based on the distribution of known cultural resources and their environmental settings, it was anticipated that prehistoric archaeological sites could be found within the study area. Prehistoric archaeological site indicators expected to be found in the region include but are not limited to: obsidian and chert flakes and chipped stone tools; grinding and mashing implements such as slabs and handstones, and mortars and pestles; bedrock outcrops and boulders with mortar cups; and locally darkened midden soils containing some of the previously listed items plus fragments of bone, shellfish, and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

Field Survey Findings
Archaeology
No prehistoric or historical archaeological sites were found within the study area. The inaccessible portion of the study area was examined previously and no cultural resources were found at that time (Loyd and Origer 2001).

Built Environment
Other than the creek channel itself, there are no historical buildings or structures within the study area. Immediately adjacent to the study area is an early twentieth century house and outbuilding. The house is a vernacular building with elements of Greek Revival architecture. The outbuilding is a brick structure with a very steeply pitched roof. The architecture of this building is unique for the Santa Rosa area.

Archaeology
No prehistoric or historical archaeological sites were found within the study area, and no resource-specific recommendations are made however the is the possibility of an accidental discovery of cultural or historic resources.

Built Environment
Based on map evidence, the Colgan Creek channel appears to be older than 50 years; however, it is unlikely that the creek channel would be eligible for inclusion on the California Register and no further study is recommended. The adjacent house and outbuilding are old enough to warrant consideration as important historical resources. Additionally, the architecture of the outbuilding is unique for this area. An evaluation of these buildings is in process and will be reported in a separate document after access to the parcel is granted. However, as no modifications to either of these structures are proposed, no impacts to these structures are anticipated. Mitigation measures should be required to ensure no impacts from the construction of the project will occur.

Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact

Construction of the Colgan Creek Restoration project would result in the following impacts related to cultural resources:

Accidental Discovery

Impact V. a ., b., & d. There is the possibility that buried archaeological deposits and/or human remains could be present, and accidental discovery could occur. In keeping with the CEQA guidelines, if archaeological remains are uncovered, work at the place of discovery should be halted immediately until a qualified archaeologist can evaluate the finds (§15064.5 [f]). Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils.

The following actions are promulgated in Public Resources Code 5097.98 and Health and Human Safety Code 7050.5, and pertain to the discovery of human remains. If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

Recommended Mitigation Measures

Mitigation Measure V. a. –As no modifications or adjustments to the structures located within the project areas are proposed, construction barriers shall be erected to create a (minimum) 10 foot buffer around both of the historic structures (Greek Revival Home and Brick Outbuilding) within the project area to minimize the projects potential to impact these historic structures.

Mitigation Measure V. b. -If archaeological remains are uncovered, work at the place of discovery should be halted immediately until a qualified archaeologist can evaluate the finds (§15064.5 [f]).

Mitigation Measure V. d. -If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission.

(Sources: 1, 7)

VI. GEOLOGY AND SOILS

Would the project:

e. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
a. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State	☐	☐	☒	☐

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
b. Strong seismic ground shaking?	☐	☒	☐	☐
c. Seismic related ground failure, including liquefaction?	☐	☒	☐	☐
d. Landslides?	☐	☐	☒	☐
f. Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
g. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on, or off, site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
h. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
i. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Discussion:

The City of Santa Rosa is subject to geological hazards related primarily to seismic events (earthshaking) due to presence of active faults. The proposed project is not located in the Alquist-Priolo Fault Zone or in an area identified as subject to violent ground shaking during an earthquake on the Rodgers Creek Fault. There has been no evidence of any geologic activities such as faulting and land sliding associated with the project area.

The City of Santa Rosa General Plan Geologic and Seismic Hazards graphic (figure 12-3) does not identify the project location as within the proximity of a Landslide Complex (as a location of a previous hillside failure) or an identified area of (relatively) unstable rock. While the project site is in close proximity to the Alquist-Priolo Fault Zone and other areas designated as subject to violent ground shaking with the potential for landslides, this site is not included in these designated areas by the City of Santa Rosa General Plan. The project site is within close proximity to a potentially active fault with displacement occurring within the last 2 million years.

The project site itself is essentially stream bed, access road, and alluvial plain running through Southwest Santa Rosa. The surrounding properties are a mix of small and relatively large residential, commercial, and industrial lots developed with single family homes, commercial, and industrial structures and facilities.

The proposed project is located within close proximity to faults identified in both the City of Santa Rosa General Plan 2035 as well and as the County of Sonoma General Plan. The project area, and most of Southwest Santa Rosa is subject to high to moderate ground shaking and potential for liquefaction. Additionally as the project involves grading within the channel and close proximity to Colgan Creek, there is also potential for erosion and soil loss.

Environmental Setting
Santa Rosa occupies a portion of the Cotati Valley along the eastern edge of the Santa Rosa Plain and can be characterized by three distinct topographic features: gently sloping alluvial plain, upland foothills, and low valleys. Creeks drain westward from the Sonoma Mountains toward the Laguna de Santa Rosa. The natural drainage system is responsible for forming the Santa Rosa Plain, which slopes gently west, away from the uplands, toward the lowest elevations of the Cotati Valley. Elevations of downtown Santa Rosa are between 120 and 200 feet mean sea level (msl), with gentle slopes of approximately 5%. The project site is located within southwest Santa Rosa and is relatively flat.

Faults/Areas of Violent Ground-shaking
The Santa Rosa Plain and foothills are within the seismically active Bay Area. The closest faults are the Rodgers Creek Fault which runs along the western edge of the Sonoma Mountains, directly through the City of Santa Rosa, and the San Andreas Fault, which runs close to the coast near Bodega Bay, approximately 20 miles to the west, and then extends south through Tomales Bay and Stinson Beach. An additional 'Potentially Active Fault' with displacement occurring within the last 2 million years' runs from the vicinity of Piner Road in the northwest to Mountainview Avenue southeast of the City limits.

Large portions of the City of Santa Rosa, east of U.S. Highway 101, are subject to 'Very Violent Groundshaking' during an earthquake on the Rodgers Creek Fault, and approximately 2/3 of the City is subject to 'Violent Groundshaking' during an earthquake on the Rodgers Creek Fault. An Alquist Priolo Study Zone encompasses the Rodgers Creek Fault Zone; its width encompasses an area of approximately 1,000 feet (500 feet on both sides of a major active fault). The project site is located approximately 5 miles from the Rogers Creek Fault line with the only portions of Colgan Creek crossing the Fault Line being the headwaters located on the slopes of Taylor Mountain.

Soils/Liquefaction
Soils of the Santa Rosa Plain are primarily alluvial. These soils consist of very recent depositions of gravel, sand, and silt alluvium along major streams and their tributaries. Gravel bars make up the majority of these areas within creek beds, although a portion of the Colgan Creek Restoration site (the first approximately 250 feet of channel to be restored) has been channalized in a concrete and grouted rip rap channel. During floods, alluvial areas are subject to repeated deposition, erosion and shifting of transported material. Smaller creeks running across the Santa Rosa Plain, like Colgan Creek, have creekbeds that are primarily composed of the soils they are passing through. Most of the Santa Rosa Plain is subject to liquefaction in the event of an earthquake or other seismic activity. Erosion is moderate throughout most of the City.

Regulatory Framework
All projects in the seismically active Bay Area are subject to the requirements of California Building Code for Seismic Zone 4 as well as Title 24 of the California Code of Regulations.

Setting and Impacts
Significant impacts related to geology, soils and seismicity would occur if implementation of the Colgan Creek Restoration Project results in:

Loss, injury, or death involving rupture of a known earthquake fault, ground shaking, liquefaction, or landslides; or

Development on unstable or expansive soils, thereby resulting in erosion, landslide, lateral spreading, subsidence, liquefaction or collapse.

Construction of the Colgan Creek Restoration project would result in the following impacts related to geology, soils and seismicity:

Impact VI. e. & g. - *(Seismic Groundshaking)* The Project Area Would be Subject to Severe Ground Shaking for the life of the Project.
All construction components of the project need to be designed withstand severe ground shaking and potential liquefaction in the event of a major earthquake. Bridges that span the creek would be particularly subject to this condition. Mitigation measures identified below would bring this potentially significant impacts to a level less than significant.

Impact VI. f. - *(Erosion)* Project Construction and Ongoing Maintenance Activities With the potential to Result in Erosion Along the Waterway.
Over the short-term, implementation of the restoration project could result in increases in erosion and associated sediment load in the channels; over time, however, enhancement of riparian vegetation and maintence of the adjacent properties would result in less erosion and sedimentation due to bank stabilization and improved filtration of water flowing through the channel. This potentially significant impact would be reduced to a less-than-significant level with the mitigation measures identified below:

Recommended Mitigation Measures

Mitigation Measure VI. e. & g. - All constructed aspects of the project are to be built according to the requirements of the California Uniform Building Code (CUBC) for Seismic Zone 4. **(LS)**

Mitigation Measure VI. f. –
The intent of these mitigations is not only to minimize erosion but also to meet the requirements of the North Coast Regional Water Quality Control Board (NCRWQCB) General Construction Permit for maintaining water quality. All water exiting the project site is required to document compliance with the requirements of the NCRWQCB water quality standards.

As a component of this, the following mitigation measures must be incorporated:

(a)Project construction will occur during the dry season, generally April 15th - October 15th.

(b) Best Management Practices (BMP's) including the use of erosion control methods would be required for all construction and maintenance projects and activities to minimize erosion.

(c) Bio-engineering and soft erosion control methods such as armoring of banks with willows and other plants would be used in the project area. Additional bank protection from the placement of rocks and other materials would be provided at locations where tributaries or culverts enter creeks or significant meanders are determined to need armoring to prevent erosion.

(d) Streambed Alteration Agreements would be obtained from the California Department of Fish and Game for projects resulting in potential impacts to stream zones. **(LS)**

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact

Beneficial impacts Related to Geology, Soils and Seismicity

Implementation of the proposed project would enhance riparian vegetation along the lower reach of Colgan Creek. Riparian vegetation reduces erosion by providing greater bank stability along channels, slowing runoff, and trapping sediment in the leaf litter; riparian vegetation thereby reduces the overall amount of sediment entering waterways.

(Sources: 1)

VII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g. Impair implementation of or physically	☐	☐	☒	☐

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
interfere with an adopted emergency response plan or emergency evacuation plan?				
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Discussion:
The construction of the proposed Colgan Creek Restoration and Neighborhood Park project will not involve routine transport, handling, or disposal of hazardous materials or emit significant levels of hazardous emissions. During construction, equipment may be used requiring various types of fuel, including diesel and gasoline, however the project does not involve hazardous substances and should have no affect on an emergency evacuation plan. The project site is not within airport land use plan boundaries. The proposed project will have no impact to any emergency response plan or emergency evacuation plan as construction will be coordinated with local first responders and emergency personnel. Alternative routes for emergency and evacuation response are readily available.

The potential for wild land fires exist when an area has access to fuel such as heavy vegetation (live and dead), oxygen, and heat. The risk of impact increases based on topography and topographical features such as rivers or creeks which create funnels that generate an increase in wind speed. As this site is primarily a relatively flat grassland and a creek channel with little vegetation and development surrounds a majority of the project area, there is little possibility for topographic or vegetation to increase the risk or severity of fire. That being the case, any structures built as an aspect of the project will comply with all California Building Code construction requirements for fire safety and protection.

Setting and Impacts
The project site is not listed on any sites maintained by the State of California (Regional Water Control Board, Department of Toxic Substances Control, and Integrated Waste Management Board) as known locations of hazardous materials or contamination. The project site is located less than one third of a mile Meadow View Elementary School and Midrose High School and less than 1000 feet from Elsie Allen High School. However the project is not expected to emit or transport any hazardous waste and therefore will not create a significant impact to schools, children, or other sensitive receptors. The proposed restoration of this portion of Colgan Creek and the proposed construction and routine use the park is not expected to result in significant emissions or storage of hazardous materials.

The proposed construction of the project will not include the use or storage of hazardous materials. The project site is not located within two miles of the Sonoma County Airport. Emergency access will be maintained through out construction via the existing street network surrounding the project area. While the project area is not in a designated high fire severity zone, the project is not located in an area containing significant wildland vegetation, as it is a developed residential neighborhood. No impacts associated with hazards or hazardous materials are expected to occur as a result of the proposed project.

Recommended Mitigation Measures
None.

(Sources: 1)

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY				
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☐
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off- site?	☐	☒	☐	☐
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
f. Otherwise substantially degrade water quality?	☐	☒	☐	☐
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion:

The construction of the project includes modifications and grading to the existing creek channel, and banks with an entirely new channel being created to incorporate meanders and riffles more in keeping with the shape and flow of natural creeks and riparian areas. Additionally, approximately 4.5 acres of the adjacent grass field is required to be graded to construct the proposed neighborhood park adjacent to the creek channel. This work will lead to potential impacts to 'Hydrology and Water Quality' and the analysis of these impacts is discussed below.

Channel Geometry

Bankfull geometries and indicators for the stream channel design were determined from field measurements of several stream reaches in the Santa Rosa Plain. In addition, Dunne and Leopold's regional curve for the San Francisco Bay region at 30 inches annual precipitation was consulted to determine an appropriate range for bankfull width, depth, and cross sectional area. Plan view geometries were measured from historic aerial photographs of the Santa Rosa Plain from 1942 and these measurements were used to develop acceptable ranges for meander length, amplitude, belt width and radius of curvature and fell mostly within the ranges reported throughout the United States by Leopold in "A View of the River."

Bankfull Hydrology

Bankfull flows were analyzed during preliminary design work for the project using several methods for the specific reach of Colgan Creek proposed for restoration. The first method was the intensity formula from Plate No. B-2 of the SCWA Flood Control Design Criteria manual for the 1.4 year storm that resulted in 675 cubic feet per second (cfs) at the Bellevue Avenue bridge. The second method was Dunne and Leopold's equation from "Water in Environmental Planning," page 616, for the San Francisco Bay region for bankfull discharge to drainage area. This gave a bankfull flow of 185 cfs at the Bellevue Avenue Bridge. U.S. Geological Survey's "Magnitude and Frequency of Floods in California" by Summary Report October 28, 2002 Waananen and Crippen for the 2-year storm computed to 535 cfs at the Bellevue Avenue bridge with much higher flows using the urbanization factors. A near bankfull storm occurred on February 13, 2000 during which time velocity and cross section were measured on site. A flow of 228 cfs was calculated for that event. Bankfull flow rates used for the conceptual design were determined based on this available information.

Bankfull Hydraulics

Once bankfull geometry ranges and hydrology were developed for the project reaches, Manning's equation was used to analyze channel hydraulics and develop conceptual bankfull channel design dimensions. Bankfull cross-sections were developed for four reaches with bankfull widths of 29.5 feet (Sta. 204+87 to 205+90), 28.5 feet (Sta. 205+90 to 224+21), 27.5 feet (224+21 to 233+30) and 26.5 feet (Sta. 233+30 to 269+40). Shear stress and bed material mobilization using the modified Shields curve were also considered. Further refinement will be made in the final design phase including detailed analysis of streambed core (core samples) and streambed surface composition. The Manning's roughness used for the bankfull channel hydraulic calculations was 0.032.

Floodplain Hydrology and Hydraulics

Floodplain analysis was done for the 10, 25 and 100-year storms using SCWA flood control hydrology and by using the Manning's equation on the reaches with 28.5 feet and 26.5 feet bankfull widths. Numerous cross section and flood plain dimensions were analyzed. Minimum floodplain widths were developed that would contain the

100-year storm, with a minimum freeboard of 2 feet. The floodplain widths vary throughout the design where room permits. A Manning's roughness of 0.060 was used for vegetated floodplain and banks above bankfull.

An additional 100-year storm analysis was conducted using an over-estimated Manning's roughness of 0.060 for the bankfull channel and 0.150 for the vegetated floodplain and banks above bankfull. The analysis showed the 100- year storm still passed through the project area with 0.5 foot of freeboard. Philip Williams & Associates, Ltd. performed a hydraulic analysis for Colgan Creek as part of the restoration concept plan project. Their report is titled Lower Colgan Creek: Hydraulic Analysis and dated May 14, 2001. The analysis assessed the hydraulic capacity of the channel with the implementation of the concept plan, including the effects with and without existing bridge street crossings in place.

The report concluded that under the proposed restoration and park concept plan, with the assumption of reasonable vegetation management in the enlarged channel, removal of a private driveway bridge and replacement of the Dutton Meadow bridge, channel conveyance in the study reach will increase to carry the 100-year, ultimate development condition peak flow. Any new hydrologic flood flow data available for the 10, 25 and 100-year storms should be used for modeling in the final design phase.

Channel Gradient
For purposes of this conceptual design, an average stream slope (riffle crest to riffle crest) of 0.002 ft/ft was used. This is a simplification of the existing channel gradient variations. The channel gradient of 0.002 ft/ft used between boulder drop structures works for the conceptual design as one possible scenario. It may not be the finished gradient used for the final design phase. For example, the average gradient could be steeper through the upper reaches where the channel is confined by development. Achieving the 0.002 ft/ft gradient in the lower reaches will require modifying the 3 feet concrete drop control structure at the bottom of the site to an 18-inch drop. This allows additional flood conveyance through the laterally constricted lower reaches along Bellevue Avenue and keeps the channel bottom below storm drain outlets.

Regulatory Framework
As a result of the North Coast Regional Water Quality Control Board's (Regional Board) adoption of the Santa Rosa area's NPDES storm water permit (Order No. R1-2009-0050) the regulations relating to storm water have changed. This permit regulates both storm water and non-storm water discharges into the Santa Rosa municipal storm drain system with the intent to reduce storm water pollution and protect the water quality of local creeks and waterways and continue to promote groundwater recharge.

Effective January 1st, 2010 the City of Santa Rosa prioritized Low Impact Development (LID) Best Management Practices (BMPs) for all new development and re-development projects requiring post-construction storm water treatment BMPs. The new LID Prioritization requirement applies to all new development and re-development projects (post January 1, 2010). Such projects that propose the use of non-LID BMPs, such as structural separator units or traditional detention, will also be required to meet with Regional Board staff to discuss the feasibility of incorporating LID BMPs into the site design and to ensure compliance with storm water regulations.

Projects that have not received approval (or equivalent) by June 1, 2010 fall under the new sizing threshold requirements. After June 1, 2010 projects that create or replace 10,000 square feet of impervious area, which this project proposes to do, require post-construction storm water BMPs and fall under the SUSMP requirements to incorporate LID treatment of all post construction storm water created from the construction of additional impervious surfaces. This project is required to meet these standards, and incorporate LID storm water treatment, as the proposed date of the adoption of the CEQA document is in September 2010.

All projects are required to submit Standard Urban Stormwater Management Plan (SUSMP) worksheets and documents to verify that the project does not contribute negatively toward (storm) water quality. The SUSMP requirements are part of the Storm Water Management Plan that is an enforceable part of the municipal storm water National Pollutant Discharge Elimination System (NPDES) permit for the City of Santa Rosa, the County of Sonoma, and the Sonoma County Water Agency issued by the State Water Quality Control Board. SUSMP provides technical guidelines for design, implementation, and ultimate goals of LID measures to mitigate negative effects on water quality due to development of impervious surfaces and these measures are required to be installed on every project that has the potential to contribute impacted water to the City of Santa Rosa creeks and storm drain systems.

Setting and Impacts

The current channel is a trapezoidal shape with a concrete channel located just south of the bridge crossing of Victoria Drive. As the creek flows south, it is boarded by a mixture of developed and undeveloped residential properties interspersed with developed commercial properties and a few industrial properties. There are Sonoma County Water Agency access roads along both sides of the creek which vary from paved road to gravel along the project reach.

Vegetation in the area is primarily low grasses and weed and invasive species such as blackberry with the occasional oak tree located on the top of bank along either side of the channel. Portions of the roadway, vegetation, and some trees will be required to be removed to facilitate restoration efforts. The channel itself will be re-contoured to improve and create habitat and simulate the natural flow of a riparian corridor. Large boulders will be placed within the channel and along the banks to provide habitat structures and armoring for the newly contoured channel. This re-contouring will require the use of heavy equipment in the creek channel and along the banks and will result in grading and vegetation removal in a majority of the restoration area.

Due to the soil and vegetation disturbance associated with the projects implementation it has the potential to impact water quality standards, alter the existing drainage pattern of the site and area, and to otherwise degrade water quality. To minimize these impacts, mitigation in compliance with the development requirements of the National Pollutant Discharge Elimination System as well as the MS4 Storm Water Permit and General Construction Permit are required. These permit requirements specify LID treatment mechanisms as well as standard erosion control measures be incorporated into all projects with the potential to impact storm water quality. Additionally, the project has been required to incorporate construction Best Management Practices (BMP's) and minimize water quality impacts under separate environmental impact categories (See Section VI. Geology and Soils, for additional mitigation measures and language).

The project will not deplete existing groundwater supplies, alter existing drainage patterns to create flooding, create or contribute runoff in excess of the storm water systems capacity or create new sources of polluted runoff, expose people or structures to any substantial risk associated with flooding, or inundation by seiche, tsunami, or mudflow.

In addition to grading the adjacent undeveloped parcel to develop a park site, the project proposes to reconfigure the existing Colgan Creek channel to return it to a more natural form. The general grading activities as well as the reconfiguring and widening of the banks have the potential to result in some sedimentation until the banks and neighboring flat lands are stabilized with vegetation and/or armoring. While the impacts related to water quality have the potential to be beneficial over the long term, short term impacts would require the following mitigation measures to reduce impacts to a level less than significant.

Impact VIII. a. & c. - The project will potentially degrade water quality through erosion from grading and excavation activities.

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact

Impact VIII. a., c., e., & f.- The project will potentially degrade water quality by constructing additional impervious surfaces from which pollutant materials may be washed into adjacent waterways and storm drains or otherwise degrade water quality.

Recommended Mitigation Measures
Comply with all specifications of Mitigation Measures identified in Section VI. of this Initial Study.

Mitigation Measure VIII. a. & c. - Install native vegetation and armoring boulders as needed prior to winter rains to help stabilize newly configured banks. Bioengineering techniques should also be used to stabilize banks. Geo-fabric, straw waddles, and other erosion prevention methods shall be used as needed to minimize erosion.

Mitigation Measure VIII. a. & c. - The staging of all equipment and materials must be maintained outside of the creek channel and away from any slopes which may allow sediment transfer into the channel itself.

Mitigation Measure VIII. a., c., e., & f.- Project design must attempt to capture (through infiltration and/or re-use) 100 percent of volume of runoff generated by the 85th percentile of a 24 hours storm event as calculated using the "Urban Hydrology for Small Watersheds" TR-55 Manual. If this is not achievable, the project must treat 100 percent of the flow generated by the 85th percentile 24 hour storm event, as calculated using the Rational Method and a known intensity of 0.92 inches per hour. In addition, the project must capture (through infiltration and/or reuse) the increase in volume of storm water due to development of impervious surfaces generated by the 85th percentile of a 24 hour storm event, calculated using the "Urban Hydrology for Small Watersheds" TR-55 Manual.

Mitigation Measure VIII. f. - Use of equipment in the creek channel and on the banks shall follow North Coast Regional Water Quality Control Board's BMP procedures and protocols for the use of equipment within riparian areas.

Mitigation Measure VIII. f. - Water quality monitoring should be conducted on a periodic basis to identify any increases in soil and/or contaminant load. Additional plantings should be installed, as needed, to provided additional stabilization on slopes if increases in sediment are observed.

(Sources: 1)

IX. LAND USE AND PLANNING

Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c. Conflict with any applicable habitat conservation plan or natural community	☐	☐	☐	☒

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact

conservation plan?

Discussion:
The Colgan Creek channel is an existing creek channel flowing through Southwest Santa Rosa. The adjacent park lands are in the area identified in the City of Santa Rosa 2035 General Plan as a future Neighborhood Park.

Setting and Impacts
The proposal to restore portions of Lower Colgan Creek and construct a City park with a pedestrian bridge over the creek near Bellvue Avenue connecting to the creek path/access road is identified in both the City of Santa Rosa 2035 General Plan and the City of Santa Rosa Creek Master Plan. The proposed location of the park implements the City of Santa Rosa 2035 General Plan Figure 6-1 Parks and Recreation which identifies the location of a park in the area of the project site. Additionally, the project will restore an existing creek channel and expand the flood capacity of this channel to the 100 year flood capacity.

This project is not expected to divide any community as the channel is already in place, all bridges currently crossing the creek will be replaced and/or repaired to accommodate the 100 year flood levels, and an additional pedestrian bridge is proposed to be built in conjunction with the park. As all aspects of this project have been identified as needed and desired by multiple City of Santa Rosa land use documents, and the project must obtain approvals from multiple agencies with jurisdiction, no conflicts with these documents are anticipated. The project is implementing an established City of Santa Rosa Creek Master Plan and incorporating habitat improvements and additional recreation opportunities as aspects of the design.

Recommended Mitigation Measures
None.

(Sources: 1, 2)

X. MINERAL RESOURCES

Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion:
There are no known mineral resources of local importance or value in the City of Santa Rosa.

Setting and Impacts
The project would have no impact on the availability of any known mineral resources.

Recommended Mitigation Measures
None.

(Sources: 1)

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
XI. NOISE				
Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	☐	☒	☐	☐
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion:

As prescribed by the City's Noise Element of the General Plan, exterior noise limits of 60 dBA DNL (a measure of day/night noise level averages) are normally considered acceptable for residential uses and/or neighborhoods. Interior noise levels for residential units are limited to 45 dBA DNL. Noise Element policies call for noise assessments for projects that may violate these standards, and for developer inclusion of noise design measures in project proposals to reduce impacts from noise. Existing residents in the area may be subjected to temporary increases in noise related to the operation of equipment used to construct the project. The project site is not located near a public or private airport, and therefore would not be subject to air-traffic related noise impacts.

Setting and Impacts

The proposed project is not expected to expose people to noise levels in excess of General Plan standards or create substantial increases in background noise above existing levels. The project site is not within an airport land use plan area or the vicinity of any private airstrip. Any significant noise generated by this project will be temporary and limited to noise associated with construction/grading of the project. These temporary increases in noise will be during daylight hours while area traffic flows are typically higher and a majority of residents are not home. Any temporary increases in noise levels due to the construction of the project will not create noise impacts

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact

above levels associated with typical traffic noise and are not expected to have any significant impacts on surrounding neighborhoods or residents. The linear nature of the creek channel and the length of the proposed project along this channel is expected to further limit the noise impacts to surrounding properties as the construction equipment will not be located within one location for extensive periods of time.

The additional use of the proposed City park may increase the existing ambient noise levels for the neighborhood. While this does have the potential to impact surrounding properties, the impacts of this property being used as a City of Santa Rosa City Park have been analyzed in separate environmental documents (City of Santa Rosa 2035 General Plan, etc.). This document strictly focuses on the impacts associated with the construction of the park at this site. Additionally, a majority of properties that abut the project site are developed and occupied with commercial and/or industrial land uses and the noise impacts associated with recreational activities on this site are not expected to exceed those generated by these surrounding uses. Furthermore, a majority of the restoration and park construction activities will take place significant distances from residential land uses (100' +). The combination of all of these factors, combined with the standard mitigation measures identified below is expected to keep noise levels at or below those allowed by the City or Santa Rosa 2035 General Plan and Noise Ordinance.

Recommended Mitigation Measures

Mitigation Measure XI a-d - Locate construction staging area as far as possible from existing residences to minimize exposure of un-necessary construction equipment noise during the construction process.

Mitigation Measure XI a-d - Specifically limit idling of all diesel vehicles to a maximum of 5 minutes during periods of inactivity.

Mitigation Measure XI a-d - Hours of construction are specifically limited to 7 am to 7 pm Monday thru Saturday with no construction to take place on Sundays or Holidays.

(Sources: 1)

XII. POPULATION AND HOUSING

Would the project:

a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion:

The project proposes the widening of Colgan Creek and the construction of a City park with a pedestrian bridge over the creek to improve access and circulation for pedestrians and bicyclists and it is not anticipated to increase

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact

the number of residents in the area, or allow for increased construction of homes in the area. The project is primarily geared toward improving the existing water quality and riparian corridor along lower Colgan Creek, expanding the existing flood capacity from the 25 year to the 100 year event, and increasing the recreational opportunities for residents in Southwest Santa Rosa.

The project would not induce substantial or unplanned levels of residential growth. The area surrounding the project site was duly considered for the designated levels of residential density as part of the update to the City's General Plan and the construction of the restoration project and City Park will not permit development beyond levels analyzed as a part of the General Plan EIR.

Setting and Impacts
As no residential development is proposed as a part of this project, no additional residences will be added to the project site area therefore there are no identified population impacts associated with this project.

The project site's General Plan designations support the proposed park and creek corridor uses. Any future addition of residential units in the area must comply with the underlying General Plan land use and density designation and will come under the provisions of the City's Zoning Code and Growth Management program. No residential development will occur on the project site as the property is a riparian area and proposed park site protected by specific creek setbacks.

The existing residences located adjacent to the project boundaries would not be demolished to facilitate development. Development and construction of the project is not seen as a mechanism for introducing any population growth to the area. Construction of the project will not displace any existing housing units or residents.

Recommended Mitigation Measures
None.

(Sources: 1)

XIII. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a. Fire protection?	☐	☐	☐	☒
b. Police protection?	☐	☐	☐	☒
c. Schools?	☐	☐	☐	☒

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
d. Parks?	☐	☐	☒	☐
e. Other public facilities?	☐	☐	☒	☐

Discussion:
The project proposes to restore a portion of lower Colgan Creek, install a bike and pedestrian path along the west side of the channel, and construct a (approximately) five acre park north of the creeks confluence with Bellvue Avenue which will include a pedestrian bridge connecting from the park area on the Bellvue Avenue side of the street to the pedestrian/bicycle path on the west side of the creek.

Setting and Impacts
The proposal is not anticipated to cause any adverse physical impacts to government facilities, service ratios, response times, or any other performance objectives for public services. This proposal is not expected to add any impacts to police, fire, or school services as there are no additional housing units proposed. As the project proposes to construct a new park, impacts to existing park facilities and services may go down as there will be more options for recreation and park use for the existing residents of Southwest Santa Rosa. The section of Colgan Creek is currently included in the Citywide creek maintenance program and the restored channel may even result in the need for less maintenance as the flood capacity will be increased as a result of the project.

Recommended Mitigation Measures
None.

(Sources: 1, 2)

XIV. RECREATION

Would the project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☒	☐	☐

Discussion:
The project proposes to restore a portion of lower Colgan Creek, install a bike and pedestrian path along the west side, and construct a five acre park near the creeks confluence with Bellvue Avenue which will include a pedestrian bridge connecting from the park to the pedestrian/bicycle path on the west side of the creek.

Setting and Impacts
The proposal is not anticipated to cause any adverse physical impacts to existing parks or other recreational facilities. As the project proposes to construct a new park, impacts to existing park facilities and services may go down as there will be more options for recreation and park use for the residents of Southwest Santa Rosa.

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact

The project does include the construction of a five acre city park which might have an adverse physical effect on the environment. The potential impacts associated with the construction of this park have been reviewed and analyzed as a part of this document. Several environmental studies have been conducted to determine the significance of these potential impacts with the results being that the projects impacts to the environment will be mitigated to a level less than significant.

Recommended Mitigation Measures
None. Mitigation Measures required by other sections within this document will address potentially significant impacts associated with the construction of the five acre park proposed as a part of this project.

(Sources: 1-11)

XV. TRANSPORTATION/TRAFFIC

Would the project:				
a. Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☐
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☐
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e. Result in inadequate emergency access?	☐	☐	☒	☐
f. Result in inadequate parking capacity?	☐	☒	☐	☐
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☒	☐

Discussion:

The project is located along the existing lower Colgan Creek channel between the Victoria Court over-crossing and where the creek goes under Bellvue Avenue as it flows southwest toward the Laguna de Santa Rosa. Bellvue Avenue is identified as a Transitional/Collector Street by the City of Santa Rosa General Plan. Bellvue Avenue provides connections to multiple other collector and arterial streets including Stony Point Road and Santa Rosa, Avenue. The project proposes no modifications to the existing street network but will incorporate a bike and pedestrian path between Bellvue Avenue and Colgan Creek for the east west portion on the creek just west of the proposed park location. This may ultimately alleviate congestion and improve overall area circulation by providing an extension of the existing bike and pedestrian path network.

The project is not expected to result in significant increases in vehicle traffic along local roadways as the restoration of the creek is not a trip generating destination or location and the creation of the (five acre) Neighborhood Park is not a use typically seen as increasing the use of the existing vehicular network significantly. Users of Neighborhood Parks typically reside within a half mile of the park, and most are expected to access the facilities by means other than driving.

Setting and Impacts

While the project may increase the number of vehicles traveling along Bellvue Avenue and the connecting regional traffic network, the volumes of traffic associated with the project would not result in a significant increase in overall area traffic. The traffic generated by the project will not contribute to a cumulative impact on the City's arterial and collector street system as the project is not expected to significantly increase the total number of Vehicle Miles Traveled (VMT) on the City of Santa Rosa street network. By increasing the amount of recreational land in Southwest Santa Rosa and improving the circulation opportunities for pedestrians and bicycles through the extension of existing infrastructure, overall traffic on City streets should not significantly increase and may actually experience a slight decrease do to the improvements in alternative transportation opportunities and closer recreation opportunities.

The City Traffic Engineering Division has also reviewed the proposed project and has determined that it would not generate a significant amount of traffic or present adverse impacts to traffic along local streets. Additionally this lcoation has been identified by the City of Santa Rosa 2035 General Plan as a location for a future park.

While the restoration, path construction, and park installation are not expected to generate excessing parking demands, it is expected that some park user will drive automobiles to access the facilities. Section 20-36.040 of the City of Santa Rosa Zoning Code addresses parking standards by land use. While no specific numbers of parking sapces are required for park facilites, the number of needed parking spaces is left up to the review authority approving the project. Parking for the City park will be needed and a lack of parking could result in a potentially significant impact to the existing street network and surrounding neighborhood.

Impact XV. f.- Park users may drive to the proposed park and a lack of adaquate parking may drive these users to park in surrounding private parking facilities impacting their land use.

The project is not located near a public or private airport, and would not impact air traffic patterns or safety.

Recommended Mitigation Measures

Mitigation Measure XV. d. & g.- Provide dedicated bicycle access from Bellvue Avenue onto Burgess Drive to provide a delineated access route for cyclists accessing Elsie Allen High School. This may be accomplished by roadway striping and/or a dedicated bridge or pathway to from Bellvue Avenue to Burgess Drive.

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact

Mitigation Measure XV. f. Provide a minimum of 10 parking spaces or more as recommended by the City of Santa Rosa Traffic Engineering Department and gain ultimate approval of the number of approved spaces from the review authority approving the project. It is recommended that the location of these spaces be split up to accommodate the use of the park from multiple access points.

(Sources: 1, 12)

XVI. UTILITIES AND SERVICE SYSTEMS

Would the project:

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒	☐	☐
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion:

The project area and surroundings were duly considered for the designated levels of development as part of the update to the City's 2035 General Plan and the existing land use regulations will not permit any development beyond levels analyzed as a part of the General Plan EIR. As no additional residential, commercial, or industrial

development is proposed with the project, little impact to drinking and wastewater treatment facilities, solid waste facilities, or landfill capacity are expected as a result of the proposed construction of the proposed path, five acre park, and restoration of a portion of Colgan Creek. Very minor increases in the drinking and wastewater treatment needs may occur from the installation of restrooms at the park site however these impacts are far from significant and the park land use at this site has been analyzed by the City of Santa Rosa 2035 General Plan.

Storm water drainage infrastructure will be constructed as a component of the project as needed based on SUSMP analysis to comply with local, state, and federal regulations. As the park proposes little impervious surface construction, this infrastructure is expected to be very minimal in size and scope. The proposed infrastructure will be required to gain approval from the North Coast Regional Water Quality Control Board prior to construction. The construction of this infrastructure is not expected to cause significant environmental impacts beyond those analyzed and mitigated. Typical BMP construction of storm water treatment facilities would necessitate Low Impact Development (LID) water collecting and on-site treatment features such as "vegetated swales" buffering any impervious surfaces constructed as an aspect of the park and or creek restoration. These onsite, landscape based storm water treatment features would provide initial treatment of storm water and would be intercept and stop any untreated storm water from flowing directly into the creek from constructed impervious surfaces such as the proposed pathway, parking facilities, play structures, and or restroom or maintenance structures.

All of the necessary wastewater, drinking water, and storm water infrastructure is being completely reconstructed to current building codes and water quality standards as a component of the project, and mitigation measures and specific standards have been required of this project, no additional significant impacts beyond those already analyzed in this document are anticipated as a result of the installation of this storm water treatment infrastructure.

Regulatory Framework

As a result of the North Coast Regional Water Quality Control Board's (Regional Board) adoption of the Santa Rosa area's NPDES storm water permit (Order No. R1-2009-0050) the regulations relating to storm water have changed. This permit regulates both storm water and non-storm water discharges into the Santa Rosa municipal storm drain system with the intent to reduce storm water pollution and protect the water quality of local creeks and waterways and continue to promote groundwater recharge.

Effective January 1st, 2010 the City of Santa Rosa prioritizes Low Impact Development (LID) Best Management Practices (BMPs) for all new development and re-development projects requiring post-construction storm water treatment BMPs. The new LID Prioritization requirement applies to all new development and re-development projects (not approved by January 1, 2010). Such projects that propose the use of non-LID BMPs, such as structural separator units or traditional detention, will also be required to meet with Regional Board staff to discuss the feasibility of incorporating LID BMPs into the site design and to ensure compliance with storm water regulations.

Projects that have not received approval (or equivalent) by June 1, 2010 fall under the new sizing threshold requirements. After June 1, 2010 projects that create or replace 10,000 square feet of impervious area will require post-construction storm water BMPs and fall under the SUSMP requirements. This project has been conditioned to incorporate onsite landscaped based LID storm water treatment features and should not have to meet with Regional Board staff to discuss these features as they will be designed to meet existing development and treatment requirements.

All projects are required to submit Standard Urban Stormwater Management Plan (SUSMP) worksheets and documents to verify that the project does not contribute negatively toward (storm) water quality. The SUSMP requirements are part of the Storm Water Management Plan that is an enforceable part of the municipal storm water National Pollutant Discharge Elimination System (NPDES) permit for the City of Santa Rosa, the County

of Sonoma, and the Sonoma County Water Agency issued by the State Water Quality Control Board. SUSMP provides technical guidelines for design measures that reduce negative effects on water quality due to development and these LID measures are typically required to be installed on every project that has the potential to contribute impacted water to the City of Santa Rosa storm drain system.

Setting and Impacts

As no land use changes or substantial development is proposed as a part of this project, impacts to wastewater treatment, available water supplies, and solid waste are not anticipated to be significant.

While the construction of the proposed bicycle and pedestrian pathway and the Neighborhood Park will require the re-construction of some existing storm water infrastructure and the construction of new landscaped based LID infrastructure, these impacts have been analyzed and mitigated to a level less than significant by the (previously) required mitigation measures identified in the Geology and Soils, Hydrology and Water Quality section of this document. This issue is also discussed in the biological section above.

This creek restoration and park project is necessary to improve habitat and water quality as well as improve flood control capacity in the lower reach of Colgan Creek (in the City of Santa Rosa) and expand on recreational opportunities in southwest Santa Rosa. The project is not expected to generate significant impacts to City of Santa Rosa utility and service systems and infrastructure.

Recommended Mitigation Measures

None. Mitigation Measures required in the biological and water quality sections within this document address potentially significant impacts associated with the construction of any storm water infrastructure required to address storm water runoff created as an aspect of this project.

(Sources: 1)

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐

Discussion:

The project does have the potential to degrade the quality of the riparian habitat of Colgan Creek and surrounding area which could result in impacts to fish and wildlife populations, plant and animal communities, water quality, and impacts examples of California prehistory. However, the potential impacts to these resources have been analyzed by multiple experts who have made specific mitigation recommendations to bring the potential impacts to these resources to a level less than significant.

Setting and Impacts

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact

The surrounding properties and riparian areas do contain wetlands and may support special-status plant species according to a Biological Assessment prepared by Environmental Specialist Intern Betsy Black and Senior Environmental Specialist Sheri Emerson, MS, PWS, CEP. Impacts to water quality could impact species in the project area and downstream. However, any impacts associated with environmental quality, habitat, known plant and/or animal populations, have been addresses and mitigated to a level less than significant through the standard development requirements of the City of Santa Rosa and/or project specific mitigation measures to address potentially significant impacts. Impacts to historic and/or cultural resources could also be significant however, specific mitigation measures have been required to address these potential impacts and mitigate them to levels less than significant.

Recommended Mitigation Measures
Comply with all mitigation measures identified in the attached Mitigation Monitoring Plan.

(Sources: 1-12)

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐

Discussion:
The project proposes to construct a neighborhood park, pedestrian and bicycle path, and restore a stretch of Colgan creek which was previously impacted by channelization of the natural flow into a defined drainage channel. This channel currently provides little to no riparian habitat and or environmental benefits to the known threatened and/or endangered species. The project area does contain known wetlands that will be impacted. Additional aspects of the project including the construction of a five acre City park and extension of bike and pedestrian paths, have been identified as goals in the City of Santa Rosa 2035 General Plan, Citywide Creek Master Plan, and Bicycle and Pedestrian Master Plan.

Setting and Impacts
While the project has identified some impacts which could be seen as contributing to a cumulatively considerable impact to known biological, cultural, and aesthetic resources, these impacts have been mitigated to levels less than significant in accordance with Federal, State, and local regulations regarding each of these resources. Further, a majority of the impacts from the project are temporary in nature as they are directly attributed to the construction activities themselves. Because the project is primarily the restoration of an existing un-natural creek channel to create a more naturalized riparian area, the cumulative impacts associate with the project are all expected to result in positive impacts and improvements to the quality of the environment, habitat, rare and endangered pant and animal species, and historic resources and this expectation has been verified by the environmental analysis completed to prepare this Initial Study.

Recommended Mitigation Measures
Comply with all mitigation measures identified in the attached Mitigation Monitoring Plan.

(Sources: 1-12)

	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporation	Less-Than-Significant Impact	No Impact
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion:
All potential impacts identified within the Initial Study/Mitigated Negative Declaration are either less than significant through the incorporation of mitigation, or less than significant and do not require mitigation.

Setting and Impacts
The project does not present significant impacts which may cause adverse impacts upon human beings, either directly or indirectly. The project will be conditioned to comply with Federal, State, and local development regulations. Building and improvement plans will be reviewed to ensure compliance with applicable building codes and standards.

Recommended Mitigation Measures
Comply with all mitigation measures identified in the attached Mitigation Monitoring Plan.

(Sources: 1-12)

APPENDIX

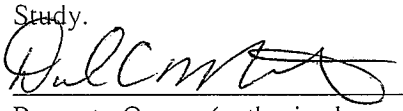
SOURCE REFERENCES

The following is a list of references used in the preparation of this document. Unless attached herein, copies of all reference reports, memorandums and letters are on file with the City of Santa Rosa Department of Community Development. References to Publications prepared by Federal or State agencies may be found with the agency responsible for providing such information.

1) City of Santa Rosa 2035 General Plan, adopted November 3, 2009, and Final EIR, certified November 3, 2009 (SCH No. 2008092114).
2) Creek Master Plan adopted November, 2006, Final EIR Certified November 2006 (SCH No. 2006072103).
3) BAAQMD. 2006. http://www.baaqmd.gov/pln/air_quality/ambient_air_quality.htm.
4) BAAQMD. 1999. BAAQMD CEQA Guidelines: Assessing the Air Quality Impacts of Projects and Plans. December
5) Biological report prepared Environmental Specialist Intern Betsy Black and Sheri Emerson MS, PWS, CEP
6) Up date of Wetlands survey previously prepared by Golden Bear Biostudies in 2002
7) Cultural resources survey prepared by Vicki R. Beard, M.A./RPA of Tom Origer and Associates
8) April 21, 2010 Urbemis Environmental Management Software Construction and Operational Emissions and CO2 Analysis
9) City of Santa Rosa Tree Ordinance
10) Prunuske Chathaum Inc. Lower Colgan Creek Conceptual Restoration Plan 2002
11) City of Santa Rosa Zoning Code
12) City of Santa Rosa Bicycle and Pedestrian Master Plan

PROJECT SPONSOR'S INCORPORATION OF MITIGATION MEASURES

As the project sponsor or the authorized agent of the project sponsor, I, David Montague undersigned, have reviewed the Initial Study for the Colgan Creek Restoration and have particularly reviewed all mitigation measures and monitoring programs identified herein. I accept the findings of the Initial Study and mitigation measures and hereby agree to modify the proposed project applications now on file with the City of Santa Rosa to include and incorporate all mitigation measures and monitoring programs set out in this Initial Study.



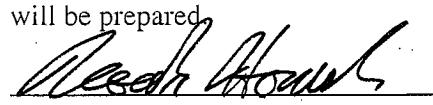
8/25/2010

Property Owner (authorized agent) Date

DETERMINATION FOR PROJECT

`On the basis of this Initial Study and Environmental Checklist I find that the proposed project (choose the appropriate text):

☒ could have a Potentially Significant Effect on the environment; however, the aforementioned mitigation measures to be performed by the property owner (authorized agent) will reduce the potential environmental impacts to a point where no significant effects on the environment will occur. A Mitigated Negative Declaration will be prepared.



8/25/10

Signature Date

Noah Housh City Planner

Printed Name Title

REPORT AUTHORS AND CONSULTANTS

Noah Housh, City Planner, City of Santa Rosa, Community Development Department.

California Regional Water Quality Control Board
North Coast Region
Geoffrey M. Hales, Chairman

Linda S. Adams
Secretary for
Environmental Protection

www.waterboards.ca.gov/northcoast
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Arnold
Schwarzenegger
Governor

June 16, 2010

Mr. Noah Housh
City of Santa Rosa
100 Santa Rosa Avenue, Room 3
Santa Rosa, CA 95404

Dear Ms. Housh:

Subject: Comments on the Proposed Mitigated Negative Declaration for the Colgan Creek Restoration Project, SCH 2010072004

Thank you for the opportunity to comment on the Proposed Mitigated Negative Declaration (MND) for the Colgan Creek Restoration Project. The North Coast Regional Water Quality Control Board (Regional Water Board) is a responsible agency for this project, with jurisdiction over the quality of ground and surface waters (including wetlands) and the protection of the beneficial uses of such waters.

The proposed project consists of the restoration of approximately 1.4 miles of Colgan Creek from a modified flood control channel to a seasonal creek that includes riffles, pools, and vegetation, as well as a five acre neighborhood park and bicycle pathway. The project also includes the reconstruction of bridges at Dutton Meadow, East of Burgess Drive, and Burgess Drive itself.

The Regional Water Board does not believe the Mitigated Negative Declaration (MND) provides adequate mitigation for the project impacts at this time. The project includes the construction of a five acre park and bike path in close proximity to a sensitive watershed listed as impaired on the Clean Water Act (CWA) section 303(d) list. Extensive grading and filling of wetlands may disturb locally significant natural communities for rare and endangered species and can not be supported by the Regional Water Board. These issues must be addressed in the MND before we can consider it an adequate assessment of environmental impacts. Without modifications, an Environmental Impact Report would be a more appropriate form of environmental review for the proposed project at this time.

The following comments explain what is required under the California Environmental Quality Act (CEQA), and provide guidance for issues to address in the Colgan Creek Restoration Project.

Impaired Waters

This project is within the Russian River watershed. Please note that the Russian River, including its tributaries, is listed on the Regional Water Board's 303(d) list as impaired due to sedimentation/siltation. Sources of impairment include land development, channelization, streambank modification, erosion, surface runoff, non-point source runoff, and urban runoff. The proposed Colgan Creek Restoration Project is required to treat storm water runoff from any impervious surfaces to prevent further degradation of the Russian River watershed.

Locally Significant Natural Communities

The California Tiger Salamander, a species known to reside in Colgan Creek are genetically distinct and geographically isolated from other salamander populations and unique to the Santa Rosa Plain. The Santa Rosa Plain provides an ideal habitat for the California Tiger Salamander providing vernal pools and streams ideal for breeding. The Regional Water Board has the responsibility to ensure that these valuable characteristics are maintained to protect the rare and endangered species, as well as any water habitats beneficial uses included in our Water Quality Control Plan for the North Coast Basin (Basin Plan). The MND does not currently contain adequate mitigation to protect these beneficial uses.

According to Government Code §65041.1, State Planning and Zoning Law, Legislative Findings, state that planning priorities are intended to promote protecting, preserving, and enhancing the state's most valuable natural resources, including "...landscapes with locally unique features and areas identified by the state as deserving protection." Special emphasis should be placed on environmental resources that are rare or unique to the Russian River watershed and may be affected by this project.

Surface Waters

Individual stream and wetland systems contribute to the water quality of aquatic ecosystems through surface and subsurface hydrologic connections. Healthy systems perform functions that protect and enhance watershed-wide water quality. In addition, surface waters provide habitat that supports a variety of plant and animal life, including rare and endemic species. Riparian areas near streams and wetlands and their adjoining environments play critical roles in protecting and enhancing water quality. An important tool for reducing and avoiding impacts to surface waters is the implementation of setbacks.

The Regional Water Board and the United States Environmental Protection Agency (EPA) recommends a *minimum* setback of 100 feet from the top of bank of a stream, watercourse or the edge of a wetland. Setbacks should be vegetated and undisturbed or enhanced with native plants.

A wetland/water of the State delineation should be done on the entire project area to determine where waters of the State exist and how impact may be avoided.

Storm Water

Regional Water Board staff notes that the MND does not mention Low Impact Development (distributed landscape-based infiltration and storage storm water treatment) techniques and best management practices (BMPs) for the park and bike path areas of the project. The Regional Water Board requires the use of Low Impact Development (LID) techniques to treat storm water runoff on any project. We have included a list of LID resources for your reference.

LID (distributed landscape-based infiltration and storage storm water treatment) is a development site design strategy with a goal of maintaining or reproducing the pre-development hydrologic system through the use of design techniques to create a functionally equivalent hydrologic setting. LID emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions. Hydrologic functions of storage, infiltration, and ground water recharge, as well as the volume and frequency of discharges, are maintained through the use of integrated and distributed storm water retention and detention areas, reduction of impervious surfaces, and the lengthening of flow paths and runoff time. This can be achieved with BMPs such as permeable sidewalks and bike paths, and riparian buffers. LID seeks to mimic the pre-development site hydrology through infiltration, interception, reuse, and evapotranspiration. LID requires that the storm water runoff volume from small storms be retained onsite.

Other LID strategies include the preservation and protection of environmentally sensitive site features such as wetlands, steep slopes, valuable trees, flood plains, woodlands, native vegetation and permeable soils. Natural vegetation and soil filters storm water runoff and reduces the volume and pollutant loads of storm water runoff. Other benefits from LID implementation include reducing global warming impacts from new development (preserving carbon sequestering in native soils and retaining native vegetation), increasing water supply (by encouraging ground water recharge) and reducing energy consumption.

LID requires the use of landscape-based BMPs that filter storm water runoff using vegetation and amended soil prior to infiltration. Examples of these types of BMPs are rain gardens and vegetated swales. LID BMPs need to be sized to treat the storm water runoff from all impervious surfaces (e.g. roads, roofs, walkways, patios) using the following sizing criteria:

1. The volume of runoff produced from the 85th percentile of 24-hour rainfall event, as determined from the local historical rainfall record; or

2. The volume of runoff produced by the 85th percentile 24-hour rainfall event, determined using the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, p. 170-178 (1998); or

3. The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in California Storm Water Best Management Practices Handbook-Industrial/Commercial (1993).

BMPs to prevent the release of sediment or hazardous materials during construction activities in the park and bike path project area are required in the MND to prevent sediment and other pollutants reaching surface waters or leaving the site in storm water runoff. These should include scheduling grading to take place during the dry season, identifying staging areas for work vehicles that are separated from sensitive areas, training employees in procedures for cleaning up spills of hazardous materials, and erosion and sediment control techniques.

Additionally, BMPs for operation of the park to prevent impacts to waters should be implemented, such as, installation of dog waste bag stations and trash cans, interpretive signage that explains the creek system and its benefits, little or no use of fertilizers and pesticides/herbicides.

The following permits may be required for this project:

Construction General Storm Water Permit: Land disturbances on projects of one acre or more require coverage under the construction general storm water permit. If the land disturbance will be one acre or more, the owner of the property will need to apply for coverage under this permit prior to the commencement of activities on-site. This permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that identifies BMPs to implement and maintain to minimize pollutant discharges from a construction site. The permit also requires a risk level analysis for the project based on erosion risk and sensitivity of the receiving waters, inspections of construction sites before and after storm events, and every 24 hours during extended storm events, storm event monitoring, and electronic document and data submittal. Owners may find the permit at http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml.

Waste Discharge Requirements (WDRs) or a Conditional Waiver of WDRs: Under authority of the California Water Code, the Regional Water Board may issue WDRs for any project which discharges or threatens to discharge waste to waters of the state. Projects that impact waters of the state (including discharges of post-construction storm water runoff, and any grading activities within stream courses or wetlands) require permitting by the Regional Water Board. The Regional Water Board may also require permits for on-site septic systems accepting 1,500 gallons or more per day. An application may be printed from the State Water Resource Control Board website at: www.swrcb.ca.gov/sbforms/.

Water Quality Certification (401 Certification): Permit issued for activities resulting in dredge or fill within waters of the United States. All projects must be evaluated for the presence of jurisdictional wetlands and other waters of the state. Destruction of or

City of
Santa Rosa

August 24, 2010

Stephen Bargsten
Environmental Scientist
California Regional Water Quality Control Board
5550 Skylane Blvd. Suite A
Santa Rosa, CA

Mr. Bargsten,

Re: June 16, 2010 Colgan Creek Restoration and Park Project Initial Study & Mitigated Negative Declaration Comment Letter

Thank you for your comments on the Colgan Creek Restoration and Park Project, Initial Study, and Mitigated Negative Declaration. We take all comments from responsible agencies and members of the public very seriously and have made efforts to address your comments by revising the document to add clarifying information and/or additional mitigation measures to clearly identify the project's compliance with all environmental regulations, including the objectives of the MS4 Storm Water Permit.

Modifications have been made to the Biological Resources, Geology and Soils, Hydrology and Water Quality, and the Utilities and Service Systems sections of the Initial Study Checklist. The intent of these modifications is to provide clarifying information on the use of Low Impact Development and landscape based storm water treatment to achieve compliance with the regulations of the NCRWQCB. Additional language was put into the document clarifying the intent of the project with regards to storm water treatment and water quality in general. Mitigation measures have been required to address potential impacts to the California Tiger Salamander in compliance with the U.S. Fish and Wildlife Services Programmatic Biological opinion, enclosure 1. Wetland delineations have been done, the results of which were used in calculating the wetland mitigation requirements also identified in the document.

In order to better assure that the Board's concerns are adequately addressed, it would be helpful to receive comments from your Staff earlier in the review process. Specifically, these comments would be most beneficial during the referral stage of our project review. We are interested in meeting with you to work out an effective way to coordinate our efforts.

Thank you again for your comments. If you have any further questions or concerns please feel free to contact me at 543-4322 or nhoush@srcity.org.

Sincerely,

Noah Housh
City Planner
City of Santa Rosa

DEPARTMENT OF COMMUNITY DEVELOPMENT
100 Santa Rosa Avenue • Santa Rosa, CA 95402-1678
Phone: • Fax: