

CHAPTER 5

ALTERNATIVES

The State *CEQA Guidelines* (Section 15126.6) require that an EIR describe and evaluate the comparative merits of a range of reasonable alternatives to the project, or to the location of the project, that could feasibly attain most of the basic objectives of the project. The Guidelines further require that the discussion focus on alternatives that could avoid or substantially lessen any of the project's significant effects, including the "No Project" Alternative. Furthermore, if the environmentally superior alternative is the "No Project" Alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives.

The project objectives are discussed in Chapter 3, Project Description. This discussion will focus on alternatives that could address the project's potentially significant impacts. The EIR identifies potentially significant impacts that can be reduced to a less-than-significant level with implementation of mitigation measures.

Four alternatives are evaluated in this section:

- Alternative 1: No Project Alternative
- Alternative 2: Reduced Creek View Trail Alternative
- Alternative 3: Unpaved Trail System with Hagemann Gulch Bridge Alternative
- Alternative 4: Unpaved Trail System without Hagemann Gulch Bridge Alternative

5.1 SUMMARY OF ALTERNATIVES

Alternative 1, the No Project Alternative, would keep the site in its existing condition. No Master Plan and no Santa Cruz Tarplant Adaptive Management Program would be adopted. Management actions would be limited and the *Arana Gulch Interim Management Plan* would remain in effect. No new trails would be developed on the site. This alternative would eliminate most of the project impacts but would not contribute to the achievement of any of the project objectives.

Alternative 2, the Reduced Creek View Trail Alternative, would include the same trail system as the proposed project but would not include any trail segments within Port District property. Trail access to Arana Gulch would continue to be provided by the existing trail segment along the western edge of the dry storage area at the Upper Harbor. This alternative would include the long-term Santa Cruz Tarplant Adaptive Management Program.

Alternative 3, the Unpaved Trail System with Hagemann Gulch Bridge Alternative, would have the same trails as the proposed project except that no trails would be paved and no

trails would comply with Americans with Disabilities (ADA) requirements. Due to unpaved surfaces and gradients, trails would not be accessible for wheelchairs and some types of street bicycles. Without funding for paved, multi-use trails, there would be uncertainty about funding and implementing the Santa Cruz Tarplant Adaptive Management Program.

Alternative 4, Unpaved Trail System without Hagemann Gulch Bridge Alternative, would provide unpaved trails and would not include the Hagemann Gulch Bridge proposed by the project. This alternative would provide public access for pedestrians and some bicyclists but would not comply with ADA requirements. Since no bridge across Hagemann Gulch would be constructed, this alternative would not provide a new west entrance or east-west trail connection. As with Alternative 3, all trails would remain unpaved. Without funding for paved, multi-use trails, there would be uncertainty about funding and implementing the Santa Cruz Tarplant Adaptive Management Program.

Table 5-1 summarizes the impacts of the alternatives after mitigation. Table 5-2 shows the extent to which each alternative would meet the project objectives.

5.2 ALTERNATIVE 1: NO PROJECT

Setting

The setting for the No Project Alternative would be the same as that described for the proposed project. Additional detailed information on existing site conditions is provided in the topic sections of the EIR (e.g., Hydrology and Water Quality, Biological Resources, Cultural Resources, Aesthetics, Land Use and Planning, Noise).

Characteristics

Under this alternative, the project site would remain in its existing condition and the City would not have an adopted Master Plan with management strategies to protect on-site resources. For example, no Santa Cruz Tarplant Adaptive Management Program would be adopted. No new trails would be constructed and minimal resource management actions would be implemented. The *Arana Gulch Interim Management Plan* would remain in effect.

Impacts

The No Project Alternative would eliminate potentially significant impacts of the proposed project (e.g., impacts on biological resources, geology and soils, hydrology and water quality). However, the No Project Alternative would not provide the benefits offered by the proposed project, such as long-term resource management strategies, including the Santa Cruz Tarplant Adaptive Management Program, or a new west entrance and connection to the Seabright neighborhood. The site would remain in its current state as a "natural area," with existing unpaved trails, some of which have created erosion problems.

Table 5-1: Comparison of Impacts of Project Alternatives (After Mitigation)

Environmental Issue Area	PP Proposed Project	ALT 1 No Project	ALT 2 Reduced Creek View Trail	ALT 3 Unpaved Trails with Hagemann Gulch Bridge	ALT 4 Unpaved Trails without Hagemann Gulch Bridge
Aesthetics	LTS	LTS	LTS-	LTS-	LTS-
Agricultural Resources	LTS	LTS	LTS	LTS	LTS
Air Quality	LTS	LTS	LTS	LTS	LTS
Biological Resources	SU	LTS	SU	LTS-	LTS-
Cultural Resources	LTS	LTS	LTS	LTS	LTS
Geology/Soils	LTS	LTS+	LTS-	LTS	LTS
Hazards/Hazardous Materials	LTS	LTS	LTS	LTS	LTS
Hydrology/Water Quality	LTS	LTS+	LTS-	LTS-	LTS-
Land Use/Planning	LTS	LTS	LTS	LTS	LTS
Mineral Resources	LTS	LTS	LTS	LTS	LTS
Noise	LTS	LTS	LTS	LTS	LTS
Population/Housing	LTS	LTS	LTS	LTS	LTS
Public Services	LTS	LTS	LTS	LTS	LTS
Recreation/Public Access	LTS	LTS	LTS	LTS	LTS
Transportation/Traffic	LTS	LTS	LTS	LTS	LTS
Utilities/Service Systems/Energy	LTS	LTS	LTS	LTS	LTS

Notes:

- PP = Proposed Project
- ALT 1 = No Project Alternative
- ALT 2 = Reduced Creek View Trail Alternative
- ALT 3 = Unpaved Trail System with Hagemann Gulch Bridge Alternative
- ALT 4 = Unpaved Trail System without Hagemann Gulch Bridge Alternative
- LTS = Less than significant impact (with mitigation)
- + = Greater adverse impact than proposed project
- = Lesser adverse impact than proposed project

Source: A. Skewes-Cox, 2005.

Ability to Meet Project Objectives

The No Project Alternative would not support the achievement of the project objectives except the objective related to restricting dogs to on-leash.

5.3 ALTERNATIVE 2: REDUCED CREEK VIEW TRAIL ALTERNATIVE

Setting

The setting for this alternative would be the same as that described for the proposed project. Additional detailed information on existing site conditions is provided in the topic sections of the EIR (e.g., Hydrology and Water Quality, Biological Resources, Cultural Resources, Aesthetics, Land Use and Planning, Noise).

Table 5-2: Relationship of Alternatives to Project Objectives

Project Objective	PP Proposed Project	ALT 1 No Project	ALT 2 Reduced Creek View Trail	ALT 3 Unpaved Trails With Hagemann Gulch Bridge	ALT 4 Unpaved Trails Without Hagemann Gulch Bridge
Protect sensitive riparian/wetland habitat areas	X	O	X	X	X
Implement an adaptive management program for Santa Cruz tarplant	X	O	X	O	O
Reduce sedimentation	X	O	X	X	X
Provide trail system for public access without significantly impacting habitat values	X	O	X	X	X
Provide ADA-compliant trails	X	O	O	O	O
Provide a new west entrance and east-west multi-use trail	X	O	X	X	O
Provide nature viewing areas and interpretive displays	X	O	X	O	O
Restrict dogs to on-leash	X	X	X	X	X
Close unauthorized, non-designated pathways	X	O	X	X	X

Notes:

- PP = Proposed Project
- ALT 1 = No Project Alternative
- ALT 2 = Reduced Creek View Trail Alternative
- ALT 3 = Unpaved Trail System with Hagemann Gulch Bridge Alternative
- ALT 4 = Unpaved Trail System without Hagemann Gulch Bridge Alternative
- X = Alternative would meet project objective
- O = Alternative would not meet project objective or would meet objective to a lesser extent than the proposed project (i.e., would not substantially meet the objective)

Source: A. Skewes-Cox, 2005.

Characteristics

The Reduced Creek View Trail Alternative would include all of the project-proposed trail system within the City-owned property but would not include the trail segment within Port District property. The new paved multi-use trail segment along the northern edge of the Upper Harbor dry storage area would be eliminated. Trail access from the harbor to Arana Gulch would continue to be provided by the existing trail segment along the western edge of the dry storage area.

Similar to the proposed project, this alternative would provide public access within Arana Gulch. It would also provide ADA-compliant north-south and east-west trail connections, as would the proposed project.

As with the proposed project, the bridge spanning Hagemann Gulch, Canyon Trail, and Creek View Trail within City property would be funded primarily from the CMAQ program

federal funding. This alternative would include implementation of the Santa Cruz Tarplant Adaptive Management Program as mitigation for paved, multi-use trails.

Impacts

This alternative would have impacts similar to those of the proposed project except that any impacts associated with trail construction on Port District property would be eliminated. No retaining wall would be constructed in the vicinity of the existing culverts at the base of Arana Gulch Creek (see Figure 4.5-6), and therefore biological, visual, geologic, and hydrologic impacts would be reduced, compared to the proposed project. No easements through Port District property would be required.

Ability to Meet Project Objectives

This alternative would meet all project objectives except the objective to provide an ADA-compliant trail through the Port District property.

5.4 ALTERNATIVE 3: UNPAVED TRAIL SYSTEM WITH HAGEMANN GULCH BRIDGE ALTERNATIVE

Setting

The setting for this alternative would be the same as that described for the proposed project. Additional detailed information on existing site conditions is provided in the topic sections of the EIR (e.g., Hydrology and Water Quality, Biological Resources, Cultural Resources, Aesthetics, Land Use and Planning, Noise).

Characteristics

This alternative would provide the same trails as proposed by the project, but none of the trails would be paved. This alternative would provide public access for pedestrians and some bicyclists but would not comply with ADA requirements. Like the proposed project, this alternative would provide north-south and east-west trail connections. Due to unpaved surfaces and gradients, however, these trail connections would not be accessible to wheelchair users and some types of bicycles.

The cost of construction would be reduced if trail surfacing remained unpaved, as proposed under this alternative. It is uncertain, however, whether state and federal transportation grants previously received by the City would fund the Hagemann Gulch bridge if the multi-use trails were not paved. Therefore, under this alternative, the City would need to seek other funding for the Canyon and Creek View Trails. If the bridge were not funded by state and federal grants, it is uncertain when the bridge would be constructed. New funding for the bridge would need to be secured. Funding for the Santa Cruz Tarplant Adaptive Management Program would also be uncertain.

Impacts

This alternative would have impacts similar to those of the proposed project except that fewer impacts associated with construction of paved trails – such as effects on views, habitats, wetlands, and drainage – would result. Unpaved trails could lead to more erosion, as compared to paved trails. With a management plan in place, however, erosion would be monitored to minimize such impacts.

Compared to the proposed project, this alternative would have fewer impacts on the Santa Cruz tarplant due to the reduced amount of trail construction (i.e., no trail paving). Visual impacts would also be reduced since all trails would be unpaved.

It is assumed that the Port District property would not be used for trail construction and that the existing unpaved trail at the western edge of the Upper Harbor would be used for access to Arana Gulch. Therefore, impacts associated with the retaining wall at the south-eastern edge of the site would be eliminated.

Ability to Meet Project Objectives

This alternative would meet all project objectives except those for providing nature viewing areas and interpretive displays and providing ADA-compliant public access. Public access would be more restricted since wheelchair users and some bicyclists would not have access to the Arana Gulch area. Also, due to funding uncertainties, this alternative may not be able to meet objectives for protecting and enhancing habitat areas and implementing an adaptive management program for the Santa Cruz tarplant.

5.5 ALTERNATIVE 4: UNPAVED TRAIL SYSTEM WITHOUT HAGEMANN GULCH BRIDGE ALTERNATIVE

Setting

The setting for this alternative would be the same as that described for the proposed project. Additional detailed information on existing site conditions is provided in the topic sections of the EIR (e.g., Hydrology and Water Quality, Biological Resources, Cultural Resources, Aesthetics, Land Use and Planning, Noise).

Characteristics

This alternative would provide unpaved trails and would not include the Hagemann Gulch Bridge proposed by the project. This alternative would provide public access for pedestrians and some bicyclists, but would not comply with ADA requirements. It would provide a north-south trail connection, like the proposed project, but would not include a new west entrance or east-west trail connection. Trails would not be accessible to wheelchair users.

All trails would remain unpaved. The north-south trail would be realigned to allow for restoration of the steep eroded slope near southern entrance. The north-south trail would be open to some bicyclists and pedestrians. Some types of street bicycles may not be able to use this trail due to unpaved surfaces. The Coastal Prairie Loop Trail and Marsh Vista Trail would be open to pedestrians only.

Under this alternative, funding for the Santa Cruz Tarplant Adaptive Management Program would be uncertain, as described for Alternative 3.

Impacts

This alternative would have impacts similar to those of the proposed project but with fewer impacts associated with construction of a bridge and paved trails, such as effects on habitats, wetlands, and drainage. Unpaved trails could lead to more erosion, as compared to paved trails. With a management plan in place, however, erosion would be monitored to minimize such impacts.

Compared to the proposed project, this alternative would have fewer impacts on the Santa Cruz tarplant due to the reduced amount of trail construction (i.e., no trail paving). Visual impacts would be reduced since the Hagemann Gulch bridge would not be constructed. Without the bridge, fewer impacts on biological resources would occur.

It is assumed that the Port District property would not be used for trail construction and that the existing unpaved trail at the western edge of the Upper Harbor would be used for access to Arana Gulch. Therefore, impacts associated with this trail segment would be eliminated.

Less park use may occur under this alternative because there would be no west entrance. With reduced use, less parking demand may occur.

Ability to Meet Project Objectives

This alternative would meet some project objectives but would not meet objectives related to providing ADA-compliant trails and nature viewing areas and interpretive displays. Public access would be more restricted since there would be no ADA-compliant trails and no east-west connection would be available. Also, due to funding uncertainties, this alternative may not be able to meet objectives for protecting and enhancing habitat areas and implementing an adaptive management program for the Santa Cruz tarplant.

5.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project Alternative would not be the environmentally superior alternative because the site would be left without an effective management plan that includes implementation measures to protect on-site resources. Of the other three alternatives, the Unpaved Trail

System without Hagemann Gulch Bridge Alternative would be the environmentally superior alternative, because it provides for the least amount of construction at the site. Thus, on-site resources such as Santa Cruz tarplant, wetlands, and other habitat would be least affected. With unpaved trails, fewer soils and hydrologic impacts may occur except that erosion on unpaved trails would have to be carefully monitored and mitigated. This alternative would not meet the project objectives of providing ADA-compliant, multi-use trails and would not provide a new west entrance and connection to the Seabright neighborhood. Thus, access within Arana Gulch would be significantly limited compared to the proposed project. Additionally, funding may not be available for long-term resource management of the site, specifically the Santa Cruz Tarplant Adaptive Management Program.

CHAPTER 6

CEQA CONSIDERATIONS

A. INTRODUCTION

As required by the California Environmental Quality Act (CEQA), this chapter provides an overview of the impacts of the proposed project on several technical topics. The topics covered in this chapter include four effects which span the specific environmental topics considered through Chapter 4: growth-inducing impacts; significant irreversible changes; and cumulative impacts.

B. GROWTH-INDUCING IMPACTS

Growth-inducing impacts from the project could occur if major utility lines were extended across undeveloped lands to serve the site, or if the project would result in an increased demand for local housing or commercial services. No utility lines would be extended to or through the site as part of the project. The project would serve existing residents and would not result in any growth-inducing impacts. The project site is surrounded by urban development within the City boundaries and adjacent County lands to the east.

C. SIGNIFICANT IRREVERSIBLE IMPACTS

CEQA states that impacts associated with a proposed project may be considered to be significant and irreversible for the following reasons:

- Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes the removal or non-use thereafter unlikely;
- Primary impacts and, particularly, secondary impacts (such as a highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses; and
- Irreversible damage can result from environmental accidents associated with the project.

This project would include the adoption of a master plan that would guide future uses of Arana Gulch and that would include management guidelines aimed at the protection of the existing natural resources on the site.

The construction of paved multi-use trails, retaining walls, and the bridge over Hagemann Gulch would constitute an irreversible use of these lands, as it is unlikely that the improvements would be removed. However, the bridge is the only main new structure that would be constructed within Arana Gulch. The proposed project would irretrievably commit materials to the construction and maintenance of these facilities. In addition, the construction of the proposed project improvements would result in the use of energy, including fossil fuels.

The project is not expected to result in any activities likely to result in accidents that could lead to irreversible environmental damage.

D. SIGNIFICANT UNAVOIDABLE IMPACTS

All potential impacts identified for the project could be mitigated to a less-than-significant level except for impacts to the Santa Cruz tarplant (SCT). Trail construction through or near the SCT areas, coupled with increased human activity in the area, may result in impacts on the SCT. A seed bank may still be present throughout historic areas of tarplant occurrence.

Project activities such as trail construction would avoid areas that have been more recently noted (see Figures 4.2-4 and 4.2-5). However, construction of trails through any historic areas of tarplant would result in permanent loss of tarplant habitat within the width of the trail. Additional habitat for 1 to 2 feet outside the trail footprint could also be disturbed if pedestrians and bicyclists do not stay strictly within the trail width. The removal of unauthorized pathways that currently exist in the vicinity of or through historic tarplant areas would reduce impacts on the Santa Cruz tarplant. Loss of tarplant habitat, however, would be relatively greater with the multi-use trails (Canyon Trail, Arana Meadow Trail, and Creek View Trail) because these trails would be 8 feet wide and paved, as compared to the existing earthen, unauthorized pathways that are narrower.

To the extent that the new paved, multi-use trails cannot be routed to fully avoid the historic tarplant areas, this direct impact cannot be fully mitigated and would be significant and unavoidable. Nevertheless, mitigation measures are recommended to reduce the potential impacts. For example, trail segments avoid the most recently-mapped populations; the Santa Cruz Tarplant Adaptive Management Program would be fully implemented; and soil within the vicinity of historic tarplant areas would be gathered and redistributed to avoid loss of the seedbank. These measures are described in Section 4.2 of the Draft EIR.

E. CUMULATIVE IMPACTS

Cumulative impacts are addressed at the end of each subsection of Chapter 4 of this EIR. No significant cumulative impacts were identified. The cumulative project list shown in Table 6-1 was the basis of the cumulative analysis. This list was provided by staff of the City of Santa Cruz and the County of Santa Cruz, and addresses pending, approved, and permitted projects that are not yet constructed and that could occur at the same time as the proposed project. Figure 6-1 illustrates the location of the cumulative projects.

Table 6-1: Active/Pending Projects in City and County of Santa Cruz near Arana Gulch – As of September 29, 2005^a

Map Code	Project Name (If Any)	Address ^b	Project Scale	Status
CITY PROJECTS				
1		1430 North Branciforte Drive	5 single-family units	Not built
2		175 Belvedere Terrace	4 multi-family units	Not built
3		708-716 Frederick Street	22 multi-family units (condos) 1,600 square feet office	Not built
4	Reed Street Cottages	719 Water Street (at Reed Street)	18 single-family units	Under construction
5		1226 Soquel	9 multi-family units	Approved
6		Market Street/Isabel Drive	646 single-family units	
7			4 single-family units	
8	Branciforte Commons	630 Water Street	48 single-room-occupancy (SRO) units 5 multi-family units 1,000 square feet office/retail	Under construction
9		1205 Seabright	4 multi-family units (condos)	Under construction
10		119/125 Blaine St.	13 multi-family units (condos)	Under construction
11		269 Goss	8 single-family units	Under construction
12		716 Seabright Avenue	12 multi-family units (condos)	Approved
13		132 Clay Street	16 multi-family units (condos) and 3 single-family units	Pending application
CITY TOTALS			684 single-family homes 85 multi-family homes 48 SRO units 2,600 square feet office/retail	
COUNTY PROJECTS				
14	Harbor Vista	NA	11 single-family lots	Not built
15	Harbor Beach	NA	11 single-family lots	Not built
16	Harbor Square	NA	1 unbuilt lot	Not built
17	Santina Court	NA	10 single-family lots	Not built
18	Santa Cruz Gardens	NA	1 single-family lot	Not built
19	Yacht Harbor Oaks	NA	16 single-family lots	Not built
COUNTY TOTALS			50 single-family lots	

Note: NA = Not available.

^a Refer to Figure 6-1 for Locations of Projects

^b The distance of these projects from Arana Gulch is quite variable.

Source: City of Santa Cruz Planning Department, 2005.

Figure 6-1: Cumulative Projects

CHAPTER 7

REPORT PREPARATION

The Draft EIR was prepared by the following CEQA consultants under the direction of the City of Santa Cruz Parks and Recreation Department, the City Public Works Department, and the City Planning Department:

Amy Skewes-Cox, AICP: *Overall EIR Preparation and Management; Transportation; Hazardous Materials, Agricultural Resources; Land Use and Planning; Aesthetics*

EcoSystems West: *Biological Resources*

Natalie Macris: *Noise, Services, Utilities, Population/Housing, Mineral Resources, Recreation and EIR Editing*

Vanessa Bulkacz: *Aesthetics, Land Use and Planning, Cultural Resources, and EIR Editing*

Fall Creek Engineering: *Hydrology and Water Quality; Geology, Soils, and Seismicity*

Environmental Vision: *Visual Simulations*

Susan Smith (Wordsmith): *Word Processing*

Tom Camara: *Graphics*

City Contacts: Ms. Susan Harris, City of Santa Cruz Parks and Recreation Department; Mr. Thomas Sharp, City of Santa Cruz Public Works Department; Mr. Ken Thomas, City of Santa Cruz Planning Department

CHAPTER 8

BIBLIOGRAPHY AND PERSONS CONSULTED

Chapter 3, Project Description

City of Santa Cruz Parks and Recreation Department, 2006. Arana Gulch Master Plan (DRAFT).

City of Santa Cruz, 2002. Broadway-Brommer Street Bicycle/Pedestrian Path Connection Response to Comments Addendum (Final EIR), May.

City of Santa Cruz, 1999. Broadway-Brommer Street Bicycle/Pedestrian Path Connection Draft EIR/Environmental Assessment, November.

City of Santa Cruz Parks and Recreation Department, 1997. Arana Gulch Interim Management Plan, July.

4.1 Land Use

City of Santa Cruz, 1992. City of Santa Cruz General Plan and Local Coastal Program 1990-2005, adopted 1992 and amended October 25, 1994.

City of Santa Cruz, Parks and Recreation Department, 1997. *Arana Gulch Interim Management Plan*. City of Santa Cruz, Santa Cruz Municipal Code, Title 24, Zoning, compiled 2005.

County of Santa Cruz, 2003. Website: <http://sccounty01.co.santa-cruz.ca.us/planning/coastal.htm>

County of Santa Cruz, 1994. County of Santa Cruz General Plan and Local Coastal Program.

McCormick, Pat, 2005. Personal communication with A. Skewes-Cox, July 21.

4.2 Biological Resources

Alley, D.W. and Associates, 2000. Salmonid densities and habitat conditions in 1999 for Arana Gulch, Santa Cruz County, California; identifying migrational barriers, streambank erosion and opportunities for steelhead enhancement. Report prepared for Arana Gulch Watershed Alliance, May.

Balance Hydrologics, Inc., in association with D.W. Alley and Associates, Coastal Watershed Council, and T. Danzig, 2002. *Arana Gulch Watershed Enhancement Plan Phase 1: Steelhead and Sediment Assessments, Santa Cruz County, California*. Prepared for the Arana Gulch Watershed Alliance, February.

- Biological Resources, 2004. *UCSC McHenry Library Final EIR*.
- Bainbridge, S., 2003, *Holocarpha macradenia* Greene (Santa Cruz tarplant) demography and management studies. Unpublished report submitted to the California Department of Fish and Game, Sacramento, CA, May.
- Bengal Engineering, 2003a. *Hagemann Gulch Pedestrian Bridge Alternative 1 Planning Study*. Prepared for the City of Santa Cruz Department of Public Works, Revised August 2003.
- Bengal Engineering, 2003b. *Hagemann Gulch Pedestrian Bridge Alternative 2 Planning Study*. Prepared for the City of Santa Cruz Department of Public Works, Revised August 2003.
- Biotic Resources Group, 1999. Letter report to Brady/LSA Re: Santa Cruz Tarplant Survey Results of the Proposed City of Santa Cruz Arana Gulch Pedestrian/Bike Path Connection in Santa Cruz County, California, August 31.
- Bland and Associates, 1999. Surveys for California red-legged frog, raptor nest and heron roosts at Broadway-Brommer bike path, Santa Cruz County (June 1999). *In Broadway/Brommer Street bicycle/pedestrian path connection Natural Environment Study*. Caltrans Natural Environment Study: Final Addendum, October.
- Block, W., M.L. Morrison, and J. Verner, 1990. Wildlife and oak woodlands interdependency. Fremontia, July.
- BMP Ecosciences, 2005. Management program for Santa Cruz tarplant (*Holocarpha macradenia*) at Arana Gulch. BMP Ecosciences, San Francisco, CA.
- Brady/LSA, 1999a. *Broadway/Brommer Street Bicycle/Pedestrian Path Connection Natural Environment Study*. Caltrans Natural Environmental Study, May; with Final Addendum, October 1999.
- Brady/LSA, 1999b. *Broadway-Brommer Bicycle/Pedestrian Path Connection Environmental Impact Report/Environmental Assessment*, prepared for the City of Santa Cruz Department of Public Works, October.
- California Coastal Commission (CCC), 1994. Procedural guidance for the review of wetland projects in California's coastal zone. California Coastal Commission, San Francisco, CA.
- California Coastal Commission (CCC), 2003. Coastal Development Permit Amendment No. 3-00-034-A2, Santa Cruz Port District Dredging Amendment, Santa Cruz Yacht Harbor; for the applicant Santa Cruz Port District Director, Brian Foss.

- California Department of Fish and Game (CDFG), 2003. List of California terrestrial natural communities recognized by the Natural Diversity Data Base. <http://www.dfg.ca.gov/whdab/pdfs/natcomlist.pdf>, September.
- California Department of Fish and Game (CDFG), 2005a. State and Federally Listed Endangered, Threatened, and Rare Plants of California. <http://www.dfg.ca.gov/whdab/pdfs/TEPlants.pdf>, July.
- California Department of Fish and Game (CDFG), 2005b. State and Federally Listed Endangered and Threatened Animals of California. <http://www.dfg.ca.gov/whdab/TEAnimals.pdf>, July.
- California Department of Fish and Game (CDFG), 2005c. Special Animals. <http://www.dfg.ca.gov/whdab/SPAnimals.pdf>, July.
- California Department of Fish and Game (CDFG), 2005d. Consultation on Jefferson to San Martin Segment 2 Overhead Project San Mateo County.
- California Department of Fish and Game (CDFG), 2005e. California Habitat Relationships System. <http://www.dfg.ca.gov/whdab/html/M033.html>.
- California Department of Transportation (Caltrans), 2000a. Letter to LSA Associates, Inc., from California Department of Transportation, October 5.
- California Department of Transportation (Caltrans), 2000b. Letter to the City of Santa Cruz Public Works Department from California Department of Transportation (05-SCR-0-SCR; CML-5025[012]), November 10.
- California Department of Transportation, 2001. Letter to City of Santa Cruz Public Works Department, April 6.
- California Fish and Game Commission, 2005. California Fish and Game Code Division 0.5, Division 3 and 4. California Code of Regulations, Title 14, Chapter 1. Sacramento, CA. <http://www.fgc.ca.gov/html/regs.html>.
- California Native Plant Society (CNPS), 2005. California Native Plant Society Inventory of Rare and Endangered Plants. Online edition. Version 6-05c, July 9. <http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi>.
- California Natural Diversity Data Base (CNDDB), 2005. Occurrence records for the Santa Cruz County, CA. Rarefind-3. Published by California Department of Fish and Game Natural Heritage Division.

- EcoSystems West Consulting Group, 2005. Memo/Letter to City of Santa Cruz Parks and Recreation Re: Special-status bat assessment/survey results of the proposed City of Santa Cruz Arana Gulch pedestrian/bike path connection in Santa Cruz County, California, September 13.
- Entrix, Inc., 2004. Survey for the federally endangered fish, the tidewater goby, *Encyclogobius newberryi*, in Arana Gulch, City of Santa Cruz. Prepared for City of Santa Cruz Parks and Recreation Department, Santa Cruz, CA, November 22.
- Environmental Services Division, 1987. Department of Fish and Game Recommended Wetland Definition, Mitigation Strategies, and Habitat Value Assessment Methodology. Presented by Glenn Rollins, Environmental Services Supervisor in a public workshop to the Fish and Game Commission, Sacramento, CA. June 24.
- Feldman, M., 1982. Notes on reproduction in *Clemmys marmorata*. Herpetological Review. 13:10-11.
- Ferris, R.M., 1987. Assessment of wildlife impacts for the UCSC long-range development plan. Unpublished report, UCSC, Santa Cruz, CA.
- Habitat Restoration Group and John Stanley and Associates, 1992. Santa Cruz Harbor – Wetland Consultation. In *Broadway-Brommer Bicycle/Pedestrian Path Connection Environmental Impact Report/Environmental Assessment*, prepared for the City of Santa Cruz Department of Public Works (Brady/LSA, October 1999).
- Habitat Restoration Group, 1993. *Arana Gulch Santa Cruz Tarplant Survey*. Consultant's report prepared for the City of Santa Cruz, September 7.
- Habitat Restoration Group, 1996a. *Arana Gulch Biotic Assessment Final Report*. Prepared for the City of Santa Cruz. File No. 775-01, January 10.
- Habitat Restoration Group, 1996b. *Arana Gulch Greenbelt Lands Preliminary Wetland Delineation*. Consultant's report prepared for the City of Santa Cruz, April 30.
- Havlik, N., 1986. The Santa Cruz Tarweed Local Preservation Project. Transactions of the Western Section Wildlife Society 22: 57-59.
- Havlik, N., 1989. Final Report of the Santa Cruz Tarweed Local Preservation Project, Contra Costa and Alameda Counties, California. Report submitted to the California Department of Fish and Game, Sacramento, CA, July.
- Hayden, S.K., 2002. The effects of habitat fragmentation on large mammals in a San Diego County regional corridor. Unpublished Masters Thesis. San Diego State University, San Diego, CA.

- Hayes, G., 2002. Cattle grazing effects on California coastal prairie and associated annual forbs. Ph.D. dissertation, University of California, Santa Cruz.
- Hayes, G., 2002. 2003. *Holocarpha macradenia* (Santa Cruz tarplant) plant community composition, seedling density, pollination, seed dispersal and plant vigor/phenology. Unpublished report submitted to the California Department of Fish and Game, Sacramento, CA, May.
- Holland, R.F., 1986. Preliminary descriptions of the terrestrial natural communities of California. Nongame-Heritage Program, California Department of Fish and Game, Sacramento, CA.
- Holland, D.C. and R.B. Bury, 1998. *Clemmys marmorata* (Baird and Girard 1852) western pond turtle. In P.C.H. Pritchard and A.G.J. Rhodin (eds.), The Conservation Biology of Freshwater Turtles. Chelonian Research Monographs 2(2).
- Messick, T. C., 1993. *Plagiobothrys*. pp. 386-390 in J.C. Hickman (ed.), The Jepson Manual: Higher Plants of California. University of California Press, Berkeley, CA.
- Morgan, R, 1991. Native Plants Observed at Arana Gulch During Three Visits (1977, 1982, and 1991). Unpublished list given to City of Santa Cruz.
- Morgan, Randall, Professional Botanist, 2005. Personal communication with Roy Buck, September 29.
- National Oceanic and Atmospheric Administration (NOAA), 2000. Letter to Federal Highway Administration, Region 9, June 12.
- Palmer, R., 1987. Evolutionary relationships of *Holocarpha macradenia*. Pp. 295-304 in T.S. Elias (ed.), Conservation and management of rare and endangered plants. California Native Plant Society, Sacramento, CA.
- Rathbun, G.B., N. Siepel, and D.C. Holland, 1992. Nesting Behavior and Movements of Western Pond Turtles (*Clemmys marmorata*). The Southwestern Naturalist, 37(3):319-324.
- Reis, Dawn, 1999. Distribution and habitat study of California red-legged frogs (*Rana aurora draytonii*) at Elkhorn Slough National Estuarine Research Reserve 1997-1998. Report submitted to California Department of Fish and Game, Elkhorn Slough National Estuarine Research Reserve.
- Sakai, H.F. and B.R. Noon, 1993. Dusky-footed woodrat abundance in different-aged forests in Northwest California. Journal of Wildlife Management. 57(2); 373-381.

- Santa Cruz, City of, 2003. City of Santa Cruz General Plan and Local Coastal Program, 1990-2005. Vol. 1-3: General Plan Elements and Local Coastal Program Summary, last amended October 28, 2003.
- Stone, R.D., 1989. Arana Gulch properties Santa Cruz tarplant (*Holocarpha macradenia*). Letter to Mr. Lee Courtright, Santa Cruz Auto Center, July 11.
- Strelow Consulting, 2002. *Arana Gulch Watershed Enhancement Plan, Initial Study and Mitigated Negative Declaration*. Prepared for the Santa Cruz County Resource Conservation District, June.
- Suddjian, D., 2000a. Santa Cruz Bird Report (including reports through August 2000). Published in the November - December 2001 issue of the Albatross (Vol. 46, No. 2). <http://santacruzbirdclub.org/David's%20Articles/Santa%20Cruz%20Birds%20900%20V46%20No%202.html>.
- Suddjian, D., 2000b. Disappearing Birds in *Ventana*, Dec 2000/Jan 2001. <http://66.102.7.104/search?q=cache:F1spPs2USiJ:www.ventana.org/archive/wildlife.htm+yellow+warblers+arana+gulch,+ca&hl=en>.
- Suddjian, D., 2001. Santa Cruz Bird Report (including reports through August 2001). Originally published in the November - December 2001 issue of the Albatross (Vol. 47, No. 2). <http://santacruzbirdclub.org/David's%20Articles/Santa%20Cruz%20Birds%209-01%20V47%20No%202.html>.
- Suddjian, D., 2003. Santa Cruz Bird Report (including reports from June to August 2003). Originally published in the November - December 2003 issue of the Albatross (Vol. 49, No. 2). <http://santacruzbirdclub.org/David's%20Articles/49-2.html>
- Suddjian, D., 2004. Santa Cruz Bird Report, (Including reports from June to August 2004). Originally published in the November - December 2004 issue of the Albatross (Vol. 49A, No. 2). <http://santacruzbirdclub.org/David's%20Articles/49A%20-2.html>.
- Swift, Camm, Senior Project Scientist, Entrix Inc., 2005. Personal communication with Kim Glinka, EcoSystems West, September 23.
- Tibor, D.P. (ed.), 2001. Inventory of rare and endangered vascular plants of California. California Native Plant Society Special Publication No. 1 [6th edition]. California Native Plant Society, Sacramento, CA.
- Tietje, W., 1990. Acorns: planning for oak woodland wildlife. Fremontia, July.
- U.S. Fish and Wildlife Service, 1997. Letter to Brady and Associates, February 4.
- U.S. Fish and Wildlife Service, 1998. Letter to Brady and Associates, April 2.

- U.S. Fish and Wildlife Service, 1999. Endangered and threatened wildlife and plants; review of plant and animal taxa that are Candidates or Proposed for listing as Endangered or Threatened; annual notice of findings on recycled petitions; annual description of progress on listing actions; proposed rule. Federal Register 64(205): 57534-57547.
- U.S. Fish and Wildlife Service, 2000a. Endangered and threatened wildlife and plants; threatened status for *Holocarpha macradenia* (Santa Cruz tarplant). Federal Register 65(54): 14898-14909.
- U.S. Fish and Wildlife Service, 2000b. Letter to U.S. Department of Transportation-Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans), February 1.
- U.S. Fish and Wildlife Service, 2002. Recovery plan for the California red-legged frog (*Rana aurora draytonii*). U.S. Fish and Wildlife Service, Portland, Oregon, vii+173pp.
- U.S. Fish and Wildlife Service, 2004. Draft recovery plan for the tidewater goby (*Encyclogobius newberryi*), Pacific Region U.S. Fish and Wildlife Service Portland, Oregon (October 2004) vi+ 171pp.
- U.S. Fish and Wildlife Service, 2005a. Threatened and endangered species system (TESS). U.S. listed flowering plant species report by taxonomic group.
http://ecos.fws.gov/tess_public/servlet/gov.doi.tess_public.servlets.VipListed?code=F&listings=0.
- U.S. Fish and Wildlife Service, 2005b. Threatened and Endangered Species System (TESS). U.S. listed nonflowering plant species report by taxonomic group.
http://ecos.fws.gov/tess_public/servlet/gov.doi.tess_public.servlets.VipListed?code=N&listings=0.
- U.S. Fish and Wildlife Service, 2005c. Threatened and Endangered Species System (TESS). U.S. listed vertebrate animal species report by taxonomic group.
http://ecos.fws.gov/tess_public/servlet/gov.doi.tess_public.servlets.VipListed?code=V&listings=0.
- U.S. Fish and Wildlife Service, 2005d. Threatened and Endangered Species System (TESS). U.S. listed invertebrate animal species report by taxonomic group.
http://ecos.fws.gov/tess_public/servlet/gov.doi.tess_public.servlets.VipListed?code=I&listings=0.
- U.S. Fish and Wildlife Service, 2005e. Threatened and Endangered Species System (TESS). Proposed and Candidate Species. http://ecos.fws.gov/tess_public/servlet/gov.doi.tess_public.servlets.NonlistedSpecies?listings=0&type=both.

U.S. Fish and Wildlife Service, 2005f. Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog, August.

Western Bat Working Group, 1998. Western bat species: regional priority matrix. Pamphlet produced by Western Bat Working Group Workshop, February 9-13.

Xerces Society for Invertebrates Conservation, 2004. Methods for conducting Monarch Surveys (November 15 , 2004). Viewed online at: info@xerces.org.

4.3 Geology and Soils

Balance Hydrologics, Inc. 1982. Geomorphology and Hydrology of Lower Arana Gulch, Santa Cruz, California.

Brabb, E., 1997. Geologic Map of Santa Cruz County, Compiled by Earl E. Brabb, Digital Database prepared by S. Graham, C. Wentworth, D. Knifong, R. Graymer and J. Blissenbach, 1997, Department of the Interior, U.S. Geological Survey.

CDMG, 1989. CSMIP strong-motion records from the Santa Cruz Mountains (Loma Prieta), California, earthquake of October 17, 1989/A. Shakal [et al.], California Department of Conservation, Division of Mines and Geology, Office of Strong Motion Studies, 1989.

CDMG, 1994. Fault Activity Map of California and Adjacent Areas, An Explanatory Text to Accompany, Jennings, C., Saucedo, G., California Department of Conservation, Division of Mines and Geology, California Geologic Data Map Series, Map No. 6.

CGS-1, 2005. California Geological Survey Probabilistic Seismic Hazards Mapping Ground Motion Page, <http://www.consrv.ca.gov/cgs/rghm/pshamap/pshamap.asp?Longitude=-122&Latitude=36.968>, accessed October 2005.

CGS-2, 2005. Alquist-Priolo Earthquake Fault Zoning Act, http://www.consrv.ca.gov/CGS/rghm/ap/chp_7_5.htm, accessed October 2005.

City of Santa Cruz, 1994. City of Santa Cruz General Plan (1990-2005) Volume 1, Safety Element, page 11, and Environmental Quality Element, page 10.

Cooper-Clark Associates, 1974. Preliminary Map of Landslide Deposits in Santa Cruz County.

Erzin , Y, 2004. Correlations for Quick Prediction of Swell Pressures, Cumhuriyet University, Faculty of Engineering, Department of Civil Engineering, Sivas, Turkey <http://www.ejge.com/2004/Ppr0476/Ppr0476.htm>, accessed October 2005.

- Hickey, J. J., 1968. Hydrogeologic Study of the Soquel-Aptos area, Santa Cruz County, California. USGS. Open file report.
- Mathewson, C, Dobson, B., 1982. The Influence of Geology on the Expansive Potential of *Soil Profiles*. Geological Society of America Bulletin: Vol. 93, No. 7, pp. 565–571.
- NHDRED, 2004. Best Management Practices for Erosion Control During Trail Maintenance and Construction, State of New Hampshire, Department of Resources and Economic Development, Division of Parks and Recreation, Bureau of Trails, <http://www.nhtrails.org/Trailspages/BMPmanual2004.pdf>.
- NRCS, 2005. Natural Resources Conservation Service, 2005, Web Soil Survey, <http://websoilsurvey.nrcs.usda.gov/app>, accessed October 2005.
- Santa Cruz Harbor, 2005. Harbor Tourist Map, <http://www.santacruzharbor.org/pdf/rv.pdf>, accessed October 2005.
- SWRCB, 2005. State Water Resources Control Board, Construction Storm Water Program, <http://www.swrcb.ca.gov/stormwtr/construction.html>, accessed October 2005.
- Weber, 1996. Weber Hayes and Associates, Perched Groundwater Assessment, Arana Gulch Property, City of Santa Cruz Santa Cruz California, dated June 11, 1997.
- WLA, 2005. William Lettis & Associates, Maps showing Quaternary geology and liquefaction susceptibility, San Francisco, California, 1:100,000 quadrangle, , Keith L. Knudsen, Jay Stratton Noller, Janet M. Sowers, and William R. Lettis, William Lettis & Associates, Inc., Walnut Creek, California, http://funnel.sfsu.edu/courses/gm309/problems/LivingOnTheEdge/geomaps/SFGeo_Explanation.pdf, accessed October 2005.
- USGS, 2003. Earthquake Probabilities in the San Francisco Bay Region: 2002–2031, U.S. Geological Survey Open-File Report 03-214, By Working Group On California Earthquake Probabilities, <http://pubs.usgs.gov/of/2003/of03-214>, accessed October 2005.
- USFS, 2004. United States Forest Service, Trail Construction and Maintenance Notebook 2004 Edition, <http://www.fhwa.dot.gov/download/hep/fspubs/pdf00232839.pdf>.

4.4 Hydrology and Water Quality

- Balance Hydrologics, Inc., 2002. *Arana Gulch Watershed Enhancement Plan Phase 1: Steelhead and Sediment Assessments, Santa Cruz County, California*, prepared for Arana Gulch Watershed Alliance

Bassuck, N., J. Grabosky, and P. Trowbridge, 2005. *Using CU-Structural SoilTM in the Urban Environment*, Urban Horticulture Institute, Cornell University, New York.

Central Coast Regional Water Quality Control Board, 1994. *Water Quality Control Plan: Central Coast Region*.

Coastal Watershed Council, 2000. *Arana Creek Watershed Monitoring Program: 4-Year Trend Analysis*.

Harvey, H.T. and B. Hecht, 1982. *Arana Gulch Mitigation/Sedimentation Draft Final Report*. Prepared for Santa Cruz Port District.

U.S. Department of Agriculture, 1979. *Soil Survey of Santa Cruz County, California*.

Weber, Hayes & Associates, 1996. *Perched Groundwater Assessment: Arana Gulch Property, City of Santa Cruz, Santa Cruz, California*. Prepared for the City of Santa Cruz Planning Department.

4.5 Aesthetics

California, State of, 2005. California Coastal Act, Public Resources Code, Division 20.

City of Santa Cruz, 1994. *General Plan and Local Coastal Program: 1990-2005*. October.

4.6 Recreation

Amy Skewes-Cox, 2003. *Emergency Response Center Project Draft Environmental Impact Report*, prepared for the University of California, Santa Cruz November, page 4.14-2.

City of Santa Cruz, *City of Santa Cruz General Plan and Local Coastal Program, 1990-2005* (adopted October 27, 1992, last amended October 28, 2003), Parks and Recreation Element, pages 2, 7 and 10.

Santa Cruz County, 2005. Website on parks: www.scparks.com reviewed September 2005.

4.7 Transportation/Circulation

Brady/LSA, 1999. Broadway-Brommer Bicycle/Pedestrian Path Connection, Draft Environmental Impact Report/Environmental Assessment, November.

City of Santa Cruz Parking Survey, 2005.

Santa Cruz County Regional Transportation Commission, 2002. Santa Cruz County Bike-ways (Map).

4.8 Air Quality

Website for UCSC LRDP EIR (Draft), 2005. <http://www.ucsc.edu/lrdp/draft2005eir/2005deir-4.3-airquality.pdf>.

4.9 Noise

Brady/LSA, 1999. *Broadway-Brommer Bicycle/Pedestrian Path Connection Environmental Impact Report/Environmental Assessment*, prepared for the City of Santa Cruz in conjunction with the Federal Highway Administration and California Department of Transportation, November.

City of Santa Cruz, 1992. City of Santa Cruz General Plan and Local Coastal Program 1990-2005, adopted 1992 and amended October 25, 1994.

Sharp, Thomas, Engineering Associate, City of Santa Cruz Public Works Department. E-mail communication with Amy Skewes-Cox, September 21, 2005.

4.10 Cultural Resources

Basin Research Associates, 1997. *Historic Properties Survey Report/Finding of Effect, Broadway-Brommer Bike Path*.

City of Santa Cruz, 1999. *Broadway-Brommer Street Bicycle/Path Connection Draft Environmental Impact Report/Environmental Assessment (EIR/EA)*, November.

City of Santa Cruz, 1992. *City of Santa Cruz General Plan and Local Coastal Program (1990-2005)*. Amended 1994.

Lehmann, Susan, Historical Resources Consultant, 2004. *Arana Gulch Preliminary Historical Research*. Prepared for City of Santa Cruz Parks and Recreation Department, October 14.

4.11 Hazards and Hazardous Materials

Brady/LSA, 1999. *Broadway-Brommer Bicycle/Pedestrian Path Connection Environmental Impact Report/Environmental Assessment*. Prepared for the City of Santa Cruz in conjunction with the Federal Highway Administration and California Department of Transportation, pages 89-90, November.

City of Santa Cruz, *City of Santa Cruz General Plan and Local Coastal Program, 1990-2005* (adopted October 27, 1992, last amended October 28, 2003).

4.12 Population and Housing

Association of Monterey Bay Area Governments (AMBAG). *2004 AMBAG Population, Housing Unit and Employment Forecast*, available at www.ambag.org/dem.html.

U.S. Census Bureau. Census 2000 Update (available at www.ambag.org/dem.html).

4.13 Public Services

City of Santa Cruz, 2003. *City of Santa Cruz General Plan and Local Coastal Program, 1990-2005* (adopted October 27, 1992, last amended October 28, 2003), Safety Element, page 24.

Harris, Susan, City of Santa Cruz Parks and Recreation Department, 2005. E-mail communications with Amy Skewes-Cox, September.

Chief Matthew Tracy, City of Santa Cruz Fire Department, 2005. Communication with Susan Harris, City of Santa Cruz Parks and Recreation Department, October 4.

Latham, Mark, City of Santa Cruz Fire Department, 2005. Personal communication with Susan Harris, City of Santa Cruz Parks and Recreation Department.

4.14 Utilities and Service Systems

Brady/LSA, 1999. *Broadway-Brommer Bicycle/Pedestrian Path Connection Environmental Impact Report/Environmental Assessment*, prepared for the City of Santa Cruz in conjunction with the Federal Highway Administration and California Department of Transportation, November.

City of Santa Cruz Parks and Recreation Department, 2005. *Arana Gulch Park Master Plan*, Chapter 3 (Draft), page 2.

Environmental Science Associates (ESA), 2004. *UCSC Marine Science Campus CLRDP Draft Environmental Impact Report*, prepared for the University of California, Santa Cruz, Environmental Assessment Group, January.

Foss, Brian, Port Director, Santa Cruz Port District, 2006. Personal communication with Natalie Macris, January 27.

Harris, Susan, City of Santa Cruz Parks and Recreation Department, 2005. E-mail communication with Amy Skewes-Cox, September 16.

Sharp, Thomas, Engineering Associate, City of Santa Cruz Public Works Department, 2005. E-mail to Amy Skewes-Cox, September 21.

Skewes-Cox, Amy, AICP, et al., 2003. *Emergency Response Center Project Draft Environmental Impact Report*, prepared for the University of California, Santa Cruz, November.

4.15 Agricultural Resources

City of Santa Cruz, *City of Santa Cruz General Plan and Local Coastal Program, 1990-2005* (adopted October 27, 1992, last amended October 28, 2003).

4.16 Mineral Resources

Brady/LSA, 1999. *Broadway-Brommer Bicycle/Pedestrian Path Connection Environmental Impact Report/Environmental Assessment*, prepared for the City of Santa Cruz in conjunction with the Federal Highway Administration and California Department of Transportation, November.

Environmental Science Associates (ESA), 2004. *UCSC Marine Science Campus CLRDP Draft Environmental Impact Report*, prepared for the University of California, Santa Cruz, January.

Kaufman, Susan, Planner IV, County of Santa Cruz Planning Department, 2005. Personal communication with Natalie Macris, September 1.

Kohler, Susan, California Geological Survey, 2005. Personal communication with Natalie Macris, September 12.

Skewes-Cox, Amy, AICP, et al., 2003. *Emergency Response Center Project Draft Environmental Impact Report*, prepared for the University of California, Santa Cruz, November.

