4.11 HAZARDS AND HAZARDOUS MATERIALS

Introduction

This section addresses project impacts related to hazardous materials and other potential hazards. Information in this section is based primarily on the following plan and report:

- *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 by Brady/LSA, November 1999; and
- 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).

Environmental Setting

Hazardous Materials. The only known hazardous materials in the project site vicinity are petroleum products, such as hydraulic and lubrication oil, that are used in the dredging equipment stored in the Upper Harbor area immediately south of the site. Fencing separates the Arana Gulch area from the area that houses the dredging equipment.

No known hazardous materials exist on the Arana Gulch project site. Since the site has never been developed, it is extremely unlikely to contain hazardous materials. Small amounts of herbicides that may have been applied in the past when the site was used for grazing would not still be detectable on the site (see Chapter 3, Project Description, for details on past grazing use). An Initial Site Assessment prepared in compliance with Caltrans standards concluded that there was no evidence of hazardous materials on the site (Brady/LSA, 1999).

Other Hazards. The project site is subject to seasonal rainfall. After the rainy season and for much of the year, all vegetation is dry and the grassy areas of the site are dry and brown. Fire hazard is therefore moderate to high. Areas with substantial fuel (dry brush) located near housing are considered likely to pose the highest fire hazard (Brady/LSA, 1999). Section 4.13, Public Services, evaluates effects on public safety related to fire hazards.

Impacts and Mitigation Measures

Significance Criteria. For the purposes of this Draft EIR, development of the project site would present a significant impact if the project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- 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.

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school.
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.
- Result in a safety hazard for people residing or working in the project area, for a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public-use airport.
- Result in a safety hazard for people residing or working in the project area, for a project within the vicinity of a private airstrip.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- 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.

Less-Than-Significant Impacts. The Arana Gulch Master Plan project would allow continued recreational use of the project site. The site does not contain any known hazardous materials, as noted in the "Environmental Setting" section above, and the project would not involve routine transport, use, or disposal of hazardous materials or create upset and accident conditions involving hazardous materials release. The project therefore would not expose the public to any known hazardous materials. The significance criterion regarding hazardous materials emissions near schools does not apply, since (1) the site is not located within ¼ mile of an existing school; (2) the project would amend the *Santa Cruz General Plan and Local Coastal Program* to eliminate the designation for community facilities, including a school, on the site; and (3) the project would not emit hazardous materials.

The project site adjoins an urbanized area and has moderate to high fire hazard, as noted in the "Environmental Setting" section above. Continued recreational use of the site as proposed by the project therefore has the potential to expose people to wildland fires. However, the degree of hazard would not differ substantially from existing site conditions. The project would not change Santa Cruz Fire Department access to the project site and would not interfere with emergency response or evacuation plans. Section 4.13, Public Services, addresses potential project impacts on fire protection and other emergency services. The significance criteria regarding safety hazards near airports do not apply, since the project site (1) is not subject to an airport land use plan, (2) is not located within 2 miles of a public airport or public-use airport, and (3) is not near a private airstrip.

Potentially Significant Impacts. No potentially significant impacts related to hazardous materials would result from the project.

Cumulative Impacts. Active or pending development projects located in Santa Cruz or the unincorporated area could be located on sites that contain hazardous materials or other hazardous conditions. As noted above, however, the project site does not contain known hazardous materials, and the Arana Gulch Master Plan project would not create any significant impacts related to hazardous materials or other hazards. The proposed project therefore would not combine with other past or reasonably foreseeable future development to result in cumulative impacts related to such hazards.

References

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

Introduction

This section addresses the impacts of the project on population, housing, and employment conditions. Information in this section is based primarily on the following reports and studies:

- Association of Monterey Bay Area Governments (AMBAG), *2004 AMBAG Population, Housing Unit and Employment Forecast* (available at www.ambag.org/dem.html); and
- U.S. Census Bureau, Census 2000 Update (available at www.ambag.org/dem.html).

Environmental Setting

Existing Population, Housing, and Employment in the City of Santa Cruz. In 2000, there were an estimated 54,593 residents in the City of Santa Cruz. This population represented about 21 percent of the total Santa Cruz County population of 255,602. The City's 2000 population of 54,593 was an 11.3 percent increase over its 1990 population of 49,040 (U.S. Census, 2000).

The City contained an estimated 21,982 housing units in 2000, representing about 22 percent of the 98,873 housing units in Santa Cruz County (AMBAG, 2004). The City had 46,213 jobs in 2000, representing about 31 percent of the 149,618 jobs in Santa Cruz County. The City's jobs-housing ratio was 2.10, indicating that the City had over two jobs for every housing unit (AMBAG, 2004).

Existing Population, Housing and Employment at the Site. The project site does not contain any housing units or land uses that provide jobs other than the jobs of the City rangers patrolling the site.

Population, Housing, and Employment Projections. According to AMBAG projections, the population of the City of Santa Cruz will increase by about 12.3 percent, from an estimated 56,953 people in 2005 to about 63,987 people in 2030 (see Table 4.12-1). The population of Santa Cruz County as a whole is expected to increase from an estimated 267,544 to 304,847 during this same period, representing a 14 percent increase.

Similarly, the number of housing units in the City of Santa Cruz is projected to increase from an estimated 22,826 in 2005 to 26,082 in 2030, representing a 14.3 percent increase. The number of housing units in the County as a whole is expected to see a similar (14.2 percent) increase, from 103,434 in 2005 to 118,088 in 2030 (AMBAG, 2004).

AMBAG projects that the number of jobs in the City of Santa Cruz will increase from 47,598 in 2005 to 66,872 in 2030, representing a 41 percent increase. In the County as a whole, the number of jobs is expected to increase by 37.5 percent, from 155,098 in 2005 to 213,251 in 2030. Based on these projections, the City's jobs-housing ratio would be 2.56 in

Table 4.12-1: Population, Housing and Employment Projections for the City of Santa Cruz and Santa Cruz County, 2000 to 2030

	2000	2005	2010	2015	2020	2025	2030
Population (Number of Residents)							
City of Santa Cruz	54,593	56,953	57,768	58,846	59,924	61,956	63,987
Santa Cruz County	255,602	267,544	275,359	284,027	292,695	298,773	304,847
Housing (Number of Housing Units)							
City of Santa Cruz	21,982	22,826	23,321	23,916	24,510	25,296	26,082
Santa Cruz County	98,873	103,434	106,397	109,833	113,265	115,677	118,088
Employment (Number of Jobs)							
City of Santa Cruz	46,213	47,598	53,344	56,564	59,783	63,328	66,872
Santa Cruz County	149,618	155,098	173,223	183,146	193,066	203,160	213,251

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

2030, indicating that there would be over two-and-a-half jobs for every housing unit. In Santa Cruz County as a whole, the jobs-housing ratio would be 1.81.

Impacts and Mitigation Measures

Significance Criteria. For the purposes of this Draft EIR, development of the project site would present a significant population and housing impact if the project would:

- Induce substantial population growth or concentration of population in an area, either directly (for example, by proposing new housing and/or businesses), or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Less-Than-Significant Impacts. The following project impacts would be less than significant.

Population Growth. The project would improve trails and establish a new west entrance to the site at Hagemann Gulch (for pedestrians and bicyclists), providing a connection between the project site and the Seabright residential neighborhood. These changes could increase the number of visitors to the site, but would not be likely to induce new housing or business development in the area. New visitors to the site are likely to be existing residents of the surrounding neighborhoods and other parts of Santa Cruz that are already developed. No impact on population growth is anticipated, and no mitigation measures are necessary.

Housing or Population Displacement. The project would not displace any existing housing units or residents. No impact on housing or population conditions is anticipated, and no mitigation measures are necessary. The proposed General Plan amendment to amend the existing "Very-Low Density Residential" designation to "Natural Areas" would not

significantly impact the potential supply of housing, as this area could provide up to 15 single-family units. In addition, such an amendment would not result in a significant impact based on the significance criteria above.

Potentially Significant Impacts. No significant impacts related to population and housing would result from the project.

Cumulative Impacts. Development projects elsewhere in the City of Santa Cruz and in unincorporated areas would cause population growth and may displace existing housing units and/or residents. However, the Arana Gulch Master Plan project would not induce substantial population growth or displace housing units or residents. Therefore, the project would not contribute to any cumulative population or housing impacts.

References

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

Introduction

This section addresses the impacts of the project on fire protection and emergency medical services, police services, and schools. Information in this section is based primarily on the following plan and report:

- *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 by Brady/LSA, November 1999; and
- 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).

Project impacts on parks and recreational facilities and services are addressed in Section 4.6, Recreation.

Environmental Setting

Existing Fire Protection and Emergency Medical Services. The City of Santa Cruz Fire Department provides fire protection services to all areas within the city limits. The department also provides fire engine-based paramedic services. The paramedic ambulance is privately owned and operated under a countywide contract. A countywide 911 dispatch center dispatches fire and ambulance services simultaneously to medical emergencies.

The City of Santa Cruz Fire Department employs one chief, one deputy chief, three line battalion chiefs, one training chief (division chief), two deputy fire marshals, 12 line fire captains, 12 fire engineers, 18 firefighters, one emergency medical services (EMS) program manager, and 1.5 administrative staff. A future staffing goal is one additional firefighter per company (four additional firefighters per shift).

The City maintains three fire stations: Fire Station #1 (Downtown Station) at 711 Center Street, Fire Station #2 (Eastside Station) at 1103 Soquel Avenue, and Fire Station #3 (Westside Station) at 335 Younglove Avenue. All of the stations were improved in 2000-2001, and there are plans to add another building on the Fire Station #2 site for storage of apparatus and equipment. Station #2 provides primary service to the project site. In the event of a major incident, the City's other two fire stations would be called into service. The current staffing at Fire Station #2 is one captain, one engineer, and one firefighter/paramedic per shift. There are no existing staffing, facility, or equipment deficiencies.

The *City of Santa Cruz General Plan* Safety Element establishes a response time goal of three minutes for commercial land uses but does not include a response time goal for public land uses such as open space and parks. Fire Station #2 is approximately five minutes from the

project site. The Fire Department responds to about two fire calls per year from the project site (Chief Mathew Tracy, 2005).

Standard minimum emergency water flow within the City of Santa Cruz is 1,500 gallons per minute, at 20 pounds per square inch (psi) residual pressure, for a duration of 120 minutes. Hydrant spacing is typically 500 feet (Latham, 2005). There are no fire hydrants located within the open space area. Adequate fire hydrants are available at the north and south ends of the project site, based on current land uses.

The Santa Cruz Fire Department currently has access to the project site off the Agnes Street entrance. Four-wheel drive vehicles can drive along the bicycle/pedestrian trail or along the site's western boundary year-round (Harris, 2005). During the dry season, two-wheel drive vehicles have limited access to the main meadow area from the Agnes Street entrance. The minimum required width of a fire apparatus roadway is 20 feet with an unobstructed height of 13 feet, 6 inches, consistent with the *City of Santa Cruz General Plan* Safety Element. The access from Agnes Street is unobstructed vertically.

The California Department of Forestry (CDF) responds upon request to all wildland fires in unincorporated areas of Santa Cruz County. (The unincorporated area includes an 8.4-acre portion of the project site.) During the declared fire season (June through October), CDF firefighting units typically respond to wildland fires in the Santa Cruz vicinity as available from throughout Santa Cruz County. Response times may vary dramatically. The Santa Cruz Fire Department participates in a "County Mutual Aid" agreement. Adequate resources are normally available for the project site.

Existing Police and Ranger Services. A City Park Ranger conducts patrols of the Arana Gulch property. There is currently one full-time ranger position assigned to all of the City parklands and open spaces. Staffing levels have varied over the years based on the City's fiscal considerations. The Park Ranger enforces infractions and misdemeanors within Arana Gulch.

While the Park Ranger provides patrol services for Arana Gulch, the City of Santa Cruz Police Department responds to specific calls for assistance from the Ranger or the public. The City of Santa Cruz Police Department, located at 809 Center Street in the City Hall complex about 2 miles west of the project site, provides police services to all areas within the city limits. The Police Department employs 134 people, including 96 sworn officers.

The *City of Santa Cruz General Plan* Safety Element establishes police response time goals of 4.5 minutes for in-progress/emergency calls, 7.5 minutes for recent/just occurred calls, and 9.0 minutes for "cold calls" (City of Santa Cruz, 2003).

Some of the law enforcement problems that have occurred within Arana Gulch include illegal camping and associated refuse and environmental damage, vandalism of signs and trees, and off-leash dog use. Camping and other illegal activities along the lower reach of Arana Gulch Creek have resulted in public safety concerns in this area of the site in the past.

The Santa Cruz County Sheriff's Office currently has jurisdiction over the 8.4-acre portion of the project site that is within unincorporated Santa Cruz County.

Existing Schools. The project site is located within the Santa Cruz City Schools district, which is technically two separate school districts (an elementary school district and a high school district) governed by one board of trustees and a single administration. The Santa Cruz City Schools district operates four elementary (Kindergarten through fifth grade) schools, one alternative education elementary school, two middle (sixth through eighth grade) schools, three high schools, and two alternative high schools.

Enrollment in district schools is projected to decline over the next five to ten years, mainly due to a substantial decline in the number of local births in the late 1980s and early 1990s. Since the district is operating under capacity, it has been considering closure of some schools. The district has school renovation projects in progress and in the planning stages, none of which would add capacity at any of its schools.[1]

The *City of Santa Cruz General Plan and Local Coastal Program* (Policy 2.2.7 of the Land Use Element) currently provides for a possible community facility, including a school and neighborhood park of at least 10 developable acres, on the project site.

Impacts and Mitigation Measures

Significance Criteria. For the purposes of this Draft EIR, development of the project site would present a significant impact on public services if the project would:

- Result in substantial adverse impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:
  - Fire protection services.
  - Police services.
  - Schools.
  - Other public facilities.

Impacts on Fire Protection and Emergency Medical Services. Project impacts would be as follows.

Less-than-Significant Impacts. Trail improvements in the Arana Gulch Master Plan area would probably result in a larger number of visitors to the site. The visitor increase could increase the number of calls for fire protection and emergency medical services, but any such

[1] Santa Cruz City Schools website: www.sccs.santacruz.k12.ca.us.

increase in calls would not be large enough to require new or physically altered fire/emergency medical facilities.

The project would not change Santa Cruz Fire Department access to the project site; the Fire Department would continue to have access to the site off the Agnes Street entrance. Fire trucks would either drive along the 8-foot-wide multi-use trails (i.e., the proposed Arana Meadow, Creek View and Canyon Trails within the main meadow area) or along the western boundary of the site, which is mowed annually as a fuel break. These locations have been used in dry conditions but the pathways are not being designed for fire truck specifications. Therefore, similar to the existing condition, fire trucks may not have access under wet soil conditions. The City considers this situation acceptable, since fire hazards are less of an issue during the rainy season.

Resource management guidelines in the Draft Arana Gulch Master Plan call for (1) coordination with the Santa Cruz Fire Department to conduct prescribed burns in the coastal prairie/tarplant management area of the site, and (2) containment of eucalyptus tree expansion and reduction of fire hazards through various treatments in the Hagemann Gulch riparian woodland management area. The Santa Cruz Parks and Recreation Department would coordinate closely with the Santa Cruz Fire Department for any prescribed burns, which would also serve as fire training exercises. The Fire Department would be the lead department for any such prescribed burn or training exercise(Harris, 2005).

Warnings regarding high fire season would continue to be posted at the entrances to Arana Gulch (Harris, 2005).

If the 8.4-acre portion of the project site that is now within the County is annexed to the City, enforcement of City regulations and ordinances would be consistent throughout the property. In any emergencies, the City of Santa Cruz Fire Department would respond to any area of Arana Gulch if the site were totally within the city limits. Annexation would clarify the enforcement and response duties for the entire project site. Annexation would result in an increased area for the Fire Department to serve, but this increase would have less-than-significant impacts on service.

Since the project would not create a need for new or physically altered facilities, the impact on fire/emergency medical services would be less-than-significant and no mitigation measures would be necessary.

Potentially Significant Impacts. No potentially significant impacts related to fire/emergency medical services would result from the project.

Impacts on Police Services. Project impacts would be as follows.

Less-than-Significant Impacts. Trail improvements associated with the Arana Gulch Master Plan would probably result in a larger number of visitors to the site. The visitor increase could increase the number of calls for ranger and/or police service, but any such increase in calls would not be large enough to require new or physically altered facilities.

Some of the proposed Master Plan provisions could help to reduce the number of calls for ranger and police services. For example, improvements to the Marsh Vista Trail could increase public views into the area, which would help to discourage illegal camping and other activities that have occurred in the area. The Master Plan also includes trail management provisions that call for continued Park Ranger patrols and distribution of brochures describing trail regulations and etiquette.

If the 8.4-acre portion of the project site that is now within the County is annexed to the City, enforcement of City regulations and ordinances would be consistent throughout the property. In any emergencies, the City of Santa Cruz Police Department would respond to any area of Arana Gulch if the site were totally within the city limits. Annexation would clarify the enforcement and response duties for the entire project site. Annexation would result in an increased area for police to patrol, but this increase would have less-than-significant impacts on service.

Since Arana Gulch is a day-use facility (open from sunrise to sunset) and is located close to existing housing, City staff has concluded that 911 call boxes are not warranted**.** The area would remain a day-use facility under the Arana Gulch Master Plan. The Master Plan may provide for minimal lighting near the Hagemann Gulch bridge and the pathway behind the harbor storage area, but there would be no lighting on the trail through the meadow area. [2] Lighting of the bridge would improve safety during hours of darkness.

Since the Park Ranger would continue to patrol Arana Gulch and the project would not create a need for new or physically altered Santa Cruz Police Department facilities, the impact on police services would be less-than-significant and no mitigation measures would be necessary.

Potentially Significant Impacts. No potentially significant impacts related to police services would result from the project.

Impacts on Schools. Project impacts would be as follows.

Less-Than-Significant Impacts. The project would not result in any substantial growth in population (see Section 4.12, Population and Housing) and therefore would not increase the number of students attending Santa Cruz City Schools facilities.

The project would include amendments to the *Santa Cruz General Plan and Local Coastal Program* to (1) change the land use map designation on the site from Community Facilities to Natural Area, and (2) revise Policy 2.2.7 of the Land Use Element to delete the reference to a possible community facility, including school and neighborhood park, on the project site. Since school enrollment is projected to decline and the school district has been considering closure of some schools, it is reasonable to conclude that loss of the possible school site at

[2] E-mail communication from Susan Harris, City of Santa Cruz Parks and Recreation Department, to Amy Skewes-Cox, September 16, 2005.

Arana Gulch would not create the need for new or altered facilities elsewhere in the district. Project impacts on school services would therefore be less-than-significant.

Potentially Significant Impacts. No potentially significant impacts related to school services would result from the project.

Cumulative Impacts. Other active or pending projects elsewhere in Santa Cruz would allow development of 684 single-family housing units, 85 multi-family housing units, 48 single-room-occupancy (SRO) housing units, and 2,600 square feet of office and/or retail uses. These development projects, combined with the proposed Arana Gulch Master Plan project, would be likely to increase demand for fire/emergency medical, police, and school services. The Arana Gulch Master Plan project would not contribute substantially to cumulative impacts on these services, however. The new developments would contribute revenues to the City of Santa Cruz, County of Santa Cruz, and Santa Cruz City Schools that would offset some or all of the costs associated with the provision of expanded services.

References

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

Introduction

This section addresses the impacts of the project on water, sewer, solid waste, and energy systems. Information in this section is based primarily on the following report and plan:

- *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 by Brady/LSA, November 1999; and
- 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).

Environmental Setting

Existing Water Service. The Santa Cruz Water Department (SCWD) provides potable water to the city of Santa Cruz as well as the University of California, Santa Cruz (UCSC) and adjoining unincorporated areas. The City's water system currently produces approximately 4,400 million gallons annually from four main sources: the San Lorenzo River (48 percent), north coast streams (29 percent), Loch Lomond Reservoir (16 percent), and various wells (7 percent) (ESA, 2004).

Year 2000 citywide water demand was estimated at approximately 4.4 billion gallons per year. Demand was projected to increase to approximately 5.2 billion gallons per year by 2005 (Skewes-Cox, 2003).

Because the City's water system relies heavily on surface water sources, the primary water management problem is the potential for inadequate supply during low-rainfall years. Studies conducted by the City indicate that existing water supplies/production would fall short of existing and projected demands during critical and/or long-term droughts. Current and future water demand within the City's water service area exceeds the safe yield of the supply system during drought conditions. During the worst year on record,[1] the City's water production system fell 46 percent short of meeting the existing average annual demand of 4.4 billion gallons per year. This situation required the City to impose water rationing for the entire dry season. During the 1987-1992 drought, the lack of normal rainfall and runoff forced the City to declare a water supply emergency for five consecutive years. Water shortages during this time ranged from 10 to 24 percent of average supply and required extensive efforts by the City and its customers to curtail demand during the summer and fall months (ESA, 2004).

The City recently completed an "Integrated Water Plan" that provides water demand forecasts and identifies potential supplemental water sources. Options under investigation

[1] The worst year on record is considered to be the second year of a two-year drought similar to the drought that occurred in 1976-1977. Fiske and Associates, "City of Santa Cruz Integrated Water Plan," March 2003.

include using additional groundwater, maximizing use of existing sources, desalinating salt water, and reclaiming wastewater. Additionally, the City currently carries out demand reduction and rationing measures during droughts and has begun other water conservation programs such as retrofitting (e.g., replacing old toilets with new, water-conserving toilets). The City is current focusing mainly on desalination options (ESA, 2004).

The project site does not currently receive water service (Harris, 2005).

Existing Sewer Service. The City of Santa Cruz Public Works Department provides wastewater collection services within the City. A network of sewer and trunk lines collects wastewater and conveys it to the wastewater treatment plant at Neary Lagoon, located off Bay Street. Treated wastewater is discharged into Monterey Bay via a 12,000-foot-long ocean outfall line (ESA, 2004).

The wastewater treatment plant has an average dry-weather flow capacity of 17 million gallons per day (mgd) and can accommodate peak wet-weather flows of up to 81 mgd. The combined average daily flow currently measures around 10 mgd. The projected wastewater flow for the year 2020 is 12.7 mgd. The plant was upgraded in 1998 with secondary treatment capacity. The City currently reclaims 200,000 gallons of wastewater at the treatment plant for on-site uses (ESA, 2004).

The City's Public Works Department is preparing a Sewer System Master Plan that will be completed before the City's General Plan/Local Coastal Program update in 2005. The Sewer System Master Plan is expected to provide updated information on existing wastewater flows to all City conveyance and processing facilities (ESA, 2004).

The project site does not currently receive sewer service (Harris, 2005).

Existing Solid Waste Services. The City of Santa Cruz owns and operates the Resource Recovery Facility (RRF), a Class III sanitary landfill located approximately 3 miles west of the city off Highway 1. The landfill operation is required to comply with regulations, plans, and permits of the California Integrated Waste Management Board (CIWMB) and the Regional Water Quality Control Board (RWQCB). Since 1990, the landfill has been permitted to accept only non-hazardous waste. As of 2001, the landfill accepted 64,213 tons of municipal solid waste annually from Santa Cruz, or an average of 176 tons of waste per day. The landfill is permitted to accept a "refuse throughput" of up to 400 tons per day. According to the City of Santa Cruz Public Works Department, capacity at the RRF is projected to be adequate through the year 2038, mainly due to waste reduction and diversion programs carried out in response to the Integrated Waste Management Act of 1989. There are currently no City or County plans for securing new landfill locations, since the RRF is expected to have adequate capacity through 2038 (ESA, 2004).

The City Parks and Recreation Department provides and maintains trash cans at the entrances to Arana Gulch.

Existing Electricity, Natural Gas, and Telecommunications Service. Pacific Gas and Electric Company (PG&E) provides electricity and natural gas service in Santa Cruz. Currently, there are no existing lights, structures, or facilities on the project site, and therefore no energy is being consumed. The site does not have electrical service. A PG&E natural gas line extends from the terminus of Mello Lane underneath the Upper Harbor to Harbor Drive. Anchoring and dredging are prohibited in this location (Brady/LSA, 1999).

SBC provides telecommunications services in Santa Cruz. There are no telephone lines on the project site (Brady/LSA, 1999).

Impacts and Mitigation Measures

Significance Criteria. For the purposes of this Draft EIR, development of the project site would present a significant impact on utilities and service systems if the project would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- 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 adverse effects;
- Have insufficient water supplies available to serve the project from existing entitlements and resources, necessitating new or expanded entitlements;
- Result in a determination by the wastewater treatment provides that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs;
- Fail to comply with applicable federal, State, and local statutes and regulations related to solid waste; or
- Result in the wasteful, inefficient, and unnecessary consumption of energy.

Less-Than-Significant Impacts. The following project impacts would be less than significant.

Impacts on Water Service. The project would not include new restrooms, drinking fountains, irrigation, or other features that would require extension of water service to the project site. Water use would be limited to water imported to the site during construction of trail improvements and used to wet soils for compaction and dust control (Sharp, 2005). (Emergency water demand is addressed in Section 4.13, Public Services, in the discussion of fire protection services.)

Since the project as currently proposed does not contain any features that would create water demand or require extension of water service to the site, no impact on water service is anticipated and no mitigation measures are necessary.

Impacts on Wastewater Service. The project would not include new restrooms, drinking fountains, or other features that would require extension of wastewater service to the project site.

The project as proposed does not contain any features that would create demand for wastewater service or require extension of wastewater facilities to the site. The project therefore would not exceed any applicable wastewater treatment requirements, require construction of new wastewater treatment facilities, or result in inadequate wastewater treatment capacity. No impact on wastewater service is anticipated and no mitigation measures are necessary.

Impacts on Solid Waste Service. Trash cans would continue to be provided at entrances to the project site with implementation of the Arana Gulch Master Plan. While the number of visitors to the site may increase, the increase would not be large enough to create a substantial new demand for solid waste services or to affect landfill capacity. As noted in the "Environmental Setting" section above, the landfill serving the City of Santa Cruz is expected to have adequate capacity through 2038. The project's impact on solid waste services would be less-than-significant and no mitigation measures would be necessary.

Impacts on Energy Services. The project may, in the future, include low-level lighting near the Hagemann Gulch Bridge and the trail behind the Upper Harbor storage area but is not proposed at this time. On the bridge, the lighting would consist of small lights in the bridge railing to illuminate the deck. There would be no lighting on the trail through the meadow area (Harris, 2005; Sharp, 2005). PG&E has previously indicated that it could provide service to the site without impact on its capacity or delivery systems (Brady/LSA, 1999). The low-level lighting planned as part of the project would not result in the wasteful, inefficient, and unnecessary consumption of energy. The impact on electrical service would be less-than-significant and no mitigation measures are necessary.

The Arana Gulch Master Plan does not provide for any features requiring natural gas or telecommunications service.

Potentially Significant Impacts. No potential significant impacts related to utilities and service systems would result from the project.

Cumulative Impacts. Other active or pending projects elsewhere in Santa Cruz would allow development of 684 single-family housing units, 85 multi-family housing units, 48 single-room-occupancy (SRO) housing units, and 2.600 square feet of office and/or retail uses. Anticipated development in the unincorporated area would allow an additional 50 single-family residential lots.

These development projects would be likely to increase demand for water, wastewater, solid waste, and energy services. In the case of water, wastewater, and natural gas services, the Arana Gulch Master Plan project would not create any service demands and therefore would not contribute to any cumulative impacts. In the case of solid waste and electrical services,

the project would create minimal service demands and would not contribute substantially to cumulative impacts on these services.

References

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

Introduction

This section addresses project impacts on agricultural resources. Information in this section is based primarily on the following document:

- 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).

Environmental Setting

The project site is undeveloped and has been used for cattle grazing in the past. As described in Chapter 3, Project Description, the project site was once part of the 110-acre Live Oak Ranch established by Frederick Hagemann in 1871. Wheat production and cattle grazing were the main activities on the site. In 1919, a portion of the ranch was sold to the Kinzlis family, who created the Live Oak Dairy that was in operation until 1948. Cattle continued to graze on the site until the late 1980s. Today, the site still contains a few remnants of the past dairy use, such as what appear to be building foundations.

Map EQ-5 in the Environmental Quality Element of the *City of Santa Cruz General Plan and Local Coastal Program* identifies unique, prime, and important farmland and grazing land in Santa Cruz. The map does not show the project site as containing unique, prime, or important farmland or grazing land (City of Santa Cruz, 1992).

Impacts and Mitigation Measures

Significance Criteria. For the purposes of this Draft EIR, development of the project site would present a significant impact if the project would:

- Convert Prime Farmland, Unique Farmland, 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.
- Conflict with existing zoning for agricultural use, or a Williamson Act contract.
- Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland to non-agricultural use.

Less-Than-Significant Impacts. The Arana Gulch Master Plan project would allow continued recreational use of the project site. The site does not contain "Farmland" as defined by the state Farmland Mapping and Monitoring Program, is not zoned for agricultural use, and is not under Williamson Act (agricultural preserve) contract. Project impacts on agricultural resources would therefore be less than significant and no mitigation measures are necessary.

Potentially Significant Impacts. The project would not have any potentially significant impacts on agricultural resources.

Cumulative Impacts. Active or pending development projects located in Santa Cruz or the unincorporated area could be located on sites that contain "Farmland" as defined by the state Farmland Mapping and Monitoring Program, are zoned for agricultural use, or are under Williamson Act contract. As noted above, however, the project site does have any of these characteristics, and the Arana Gulch Master Plan project would not have any significant impacts on agricultural resources. The proposed project therefore would not combine with other past or reasonably foreseeable future development to result in cumulative impacts on agricultural resources.

References

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

Introduction

This section addresses the impacts of the project on mineral resources. Information in this section is based primarily on the following reports and studies:

- *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 by Brady/LSA, November 1999.

Environmental Setting

Regulatory Context. As mandated by the Surface Mining and Reclamation Act of 1975, the California Geological Survey (formerly the California Division of Mines and Geology) classifies lands throughout the state into Mineral Resource Zones (MRZs) according to the known or inferred mineral potential of the area.[1] The process is based solely on the underlying geology, without regard to existing land use or land ownership. The main goal of the mineral land classification is to ensure that local government decision makers recognize and consider the mineral potential of the land before making land use decisions that could preclude mining (ESA, 2004). Among the four categories of MRZs, MRZ-2 is of the greatest importance because lands in this classification are underlain by demonstrated mineral resources where geologic data indicate that significant measured or indicated resources are present (Skewes-Cox, 2003).

The City of Santa Cruz General Plan does not address mineral resources. The County of Santa Cruz General Plan does not identify mineral resources within the city limits (Kaufman, 2005).

Presence of Mineral Resources at Project Site. The Arana Gulch watershed consists of mostly alluvial sediments and organically rich, laminated, fine silty sands with thin interbeds of fine or medium sands and dark silty sands. Purisima sandstone occurs at depths of approximately 50 feet beneath the valley floor. No valuable mineral resources are known to occur on the site, and the site is not classified as MRZ-2 by the California Geological Survey (Brady/LSA, 1999; Kohler, 2005).

Impacts and Mitigation Measures

Significance Criteria. For the purposes of this Draft EIR, development of the project site would present a significant impact on mineral resources if the project would:

- 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; or

[1] California Geological Survey website (www.consrv.ca.gov/cgs/minerals/index.htm), 2005.

- 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.

Less-Than-Significant Impacts. The project site does not contain any known mineral resources, and therefore the project would not result in the loss of availability of important mineral resources. No impact on mineral resources is anticipated, and no mitigation measures are necessary.

Potentially Significant Impacts. The project would not have any potentially significant impacts on mineral resources.

Cumulative Impacts. There are no known mineral resources on the project site or in the immediate vicinity and, as noted above, the City of Santa Cruz General Plan does not identify or address mineral resources. It is possible that development projects elsewhere in Santa Cruz or the unincorporated area could be located on sites that contain mineral resources. Since the project site does not contain known mineral resources, however, the Arana Gulch Master Plan project would not contribute to any cumulative losses of mineral resources. Therefore, the proposed project would not combine with other past or reasonably foreseeable future development to result in cumulative impacts on mineral resources.

References

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.