



**ENVIRONMENTAL IMPACT
ELEMENT**

ENVIRONMENTAL IMPACT ELEMENT
(DRAFT ENVIRONMENTAL IMPACT REPORT)
WILDER RANCH STATE PARK GENERAL PLAN

This Environmental Impact Element (EIE) is an environmental assessment of the proposals set forth in the elements of this General Plan for Wilder Ranch State Park. As such, it meets the requirements of the California Environmental Quality Act. This EIE is synonymous with a Draft Environmental Impact Report (DEIR). The degree of specificity in the EIE corresponds to the degree of specificity of the General Plan. Whenever a specific phase of the overall plan is budgeted and proposed for implementation, a more detailed and specific environmental assessment will be prepared for that particular project, as part of the budget package.

Description of the Project

Maps of Wilder Ranch State Park showing existing and proposed features of the general plan's land use and facilities element are on pages 5 and 49; a regional map of the study area is on page 2.

Objectives of the plan are to provide general guidelines for the park's resource management, land use and facilities, and operations. The resource management objectives are given in the Resource Element. The general proposals set forth in this plan are to:

1. Propose recreation opportunities for day and overnight use
2. Protect cultural and natural resources through restoration, stabilization, and other measures
3. Interpret cultural and natural resources
4. Remove exotic plants and rehabilitate natural areas

Description of Environmental Setting

A description of the park's physical features is given in the Resource Element.

The Land Use and Facilities Element describes the regional setting of the park and existing land uses. Included are descriptions of existing utilities, roads, and trail systems.

A more detailed discussion of the environmental aspects of traffic, utilities, noise, and air quality is presented here to provide a better basis for assessing the impact of proposed development on these factors.

Traffic

Automobile traffic along Highway 1 in the City of Santa Cruz has been studied by the City Public Works Department, by the county, and by the State Department of Transportation. Traffic along this stretch of highway, called Mission Street, will be affected to some degree by the establishment of Wilder Ranch State Park, and is consequently worth describing in its present condition. Traffic flow has not been studied in the project area.

Mission Street is highly congested with traffic flow ranging from 6,100 to 54,000 vehicles over a twenty-four hour period. It is the major corridor for access to the western urbanized area, the University of California at Santa Cruz campus, and the north coast beaches. State Highways 9 and 17 intersect Mission Street from the north. The main hindrance to traffic flow is the abundance of intersections, many with traffic signals, and the multitude of driveways into adjacent commercial and residential development.

Utilities

The City of Santa Cruz does not supply separate water or sewage treatment facilities to the Wilder Ranch project area. A city water line, which feeds the project area, has been in existence since about 1957 and branches into two lines. A 2-inch line feeds the older residences of the Wilder Ranch complex and two fire hydrants; a 3/4-inch line runs downhill to the cow barn. Irrigation systems are supplied by 4-inch lines coming from two reservoirs directly north of Wilder Ranch. Water is pumped up from Wilder Creek below to feed these reservoirs. The reservoirs also supply water used to power some of the farm equipment. At the time of this report, the state does not own these two reservoirs. A 1,000-gallon tank supplies water for the office of the city landfill.

Local septic tanks constitute the sewage system at Wilder Ranch, PG&E supplies electric power, and propane gas is supplied by contract with a local supplier.

Noise Levels

A study of noise levels was made along Highway 1 in the County of Santa Cruz. At Wilder Ranch State Park the decibel levels were recorded in contours along the highway at varying distances from the midline of the road and projections were made for noise levels in 1995. It was found that future noise levels would remain unchanged. This reflects the fact that the estimated increase in average daily traffic at 4 percent per year will be balanced by the production of quieter cars in the future as a result of federal and state noise emission standards, and that up to 30 percent of traffic is expected to be diverted to transit services.

The Southern Pacific railway, which runs through the state park south of Highway 1, contributes minimally to noise levels as trains are infrequent, passing by a particular spot for a cumulative total of about one-half hour per day.

Operations at the sand quarry in the park produce substantial noise at times, yet the noise level never exceeds about 60 dba at the property line. Large trucks climbing up Dimeo Road to the city sanitary landfill and landfill equipment also contribute to noise pollution.

Air Quality

A report on air quality done by Monterey and Santa Cruz counties (1978) contains detailed information in regard to air quality and a breakdown of pollutant types and their sources. No information, however, is available on the project lands in particular. In the report, levels of organic gases were measured and recorded. Future emissions and air quality speculations are also made based on estimated population growth (increased industrial activity, increased driving, etc.) and current pollution levels.

Odors emanating from the city's sanitary landfill are especially noticeable in the Dimeo Road area. Chemical ponds appear to be the primary source of the objectionable odors. In the past, some of the polluted water behind the dikes has reportedly leaked onto state park property.

Significant Environmental Effects of the Proposed Project

Figure 6 summarizes the significant environmental effect of the plan's proposals. The left column lists facilities proposed in the Land Use and Facilities Element. Each was assessed in regard to the environmental factors listed across the top. The following key describes the four categories used in rating the environmental effects.

Key for Table

- No Interaction: Project implementation does not cause a significant environmental effect because the proposed development or management does not interact with the environmental factor.
- Beneficial Environmental Effect: The interaction of the proposed development or management with the environmental factor is favorable.
- Nonsignificant Environmental Effect: Although the development and management interacts with the environmental factor, the effect does not cause a substantial adverse change in the environment, or the significant effect will be mitigated by the design.
- Significant Environmental Effect: The interaction between development (and management) and the environmental factor may cause a substantial significant change in the environment that cannot be avoided if the proposals implemented as proposed.

Beneficial Environmental Effects

Historical Restorations. The proposed restoration of historical buildings in the area will have a beneficial effect.

Wetlands. The proposed restoration of agricultural lands (3.7 acres at Four Mile Beach area and 10 acres at Wilder Creek area) to their original wetlands state will have a beneficial effect.

Significant Environmental Effects

As indicated on the chart, there are no significant environmental effects resulting from the proposed project. There are several effects that could become significant if care was not taken during the development stage.

Pollution. A minimal amount of air and noise pollution is expected from increases in traffic and visitor use. Slight increases in pollution of streams will result from soil erosion, drainage of petroleum products from roads and parking lots, and careless littering.

Cattle now on park lands create stream pollution with their wastes and add to soil erosion and stream turbidity grazing and disturbing the soil. The removal of cattle from the park (with the exception of small numbers to be kept in the Cultural Preserve for interpretive purposes) will eliminate these impacts. Human effects on stream pollution would be very minor compared to those of cattle.

Aesthetics. New use areas and facilities will be visible from strategic viewpoints such as along trails in the upland area.

Energy Consumption. Heating and maintenance of park buildings, operation of park and private vehicles, and construction activities will consume energy.

Fire. Because of the steepness of park terrain, the accumulation of vegetation and vegetative litter, and long, dry summers and frequent onshore winds, there is a possibility of a severe wildfire. Structural fires, including historic buildings, are also possible.

Soils. Slight disturbance of soil will result from construction activities. A potential problem is erosion on trails, near streams, and in off-trail areas that is caused by vegetative loss linked to human activities. Soil compaction, resulting in less soil permeability, and increased runoff and erosion can also be expected. Despite these effects, human effects on the soil would be less than those caused by the cattle that have up to now been grazing on the lands periodically. The plan recommends the removal of cattle except on the Cultural Preserve for interpretive purposes.

Vegetation. Development of facilities, trail construction, and visitor use will affect some vegetation.

The removal of cattle will increase vegetation.

There are no known rare or endangered plant species in the park.

The removal or at least the control of several invasive exotic species will benefit the perpetuation of existing native plants. Historically correct vegetation in the Wilder Ranch complex would be retained.

Cultural Resource Effects. As indicated in the resource element, there are several prehistoric archeological sites that have been inventoried. Proposed developments at other areas will not directly affect those sites, but indirect human activities could have an effect.

The State School Lands portion of the unit has not been thoroughly surveyed for cultural sites. Before any development is implemented there, such a survey will be made and adequate mitigation of any cultural resources found will be carried out.

The historic buildings could suffer indirect effects by human activities in and around them.

The equipment barn and the potter's shed at the Baldwin Ranch complex are not historical and therefore may be removed, if this is deemed advisable. It is proposed that the equipment barn be renovated or dismantled and rebuilt for use as a park office, visitor contact station, and a restroom facility with showers.

Three other buildings at Baldwin Ranch -- the barn, a residence, and the creamery -- are historical and will be protected.

There are several small, abandoned structures and a few farm labor housing buildings in the row crop area, which have no historical significance, in locations other than the Wilder Ranch or Baldwin Ranch complexes. These structures may be stabilized, dismantled, or demolished at some later date.

The short term construction and long term operation of the hostel should not cause any known significant effects. A cultural survey should take place before construction. Since the site is on a former dairy a careful historical survey and excavation for historical artifacts should take place. Adequate mitigation measures should be taken if any archeological resources are found.

Restorations and stabilizations are essential and construction for interpretive programs would have beneficial environmental effects.

Wildlife Effects. There are no rare or endangered species of wildlife at Wilder Ranch State Park. However, the snowy plover uses Wilder Beach for a nesting area. Suitable nesting sites for these birds are becoming less common along the central coast due to losses of undisturbed nesting habitat. Wilder Beach and surrounding wetlands as shown on the plan are proposed for classification as a natural preserve.

Public Services Effects. Utility use, including gas, electricity, water, sewage, and telephones, and the use of roads and highways will increase. Sewer hookups to sewer lines are not available. Leach lines and chemical toilets will be used. Some overhead lines and soil disturbances may be necessary. Visitor use will increase traffic congestion along Highway 1 and the Mission Street corridor in Santa Cruz.

Local Service Effects. Increased park personnel will have a slight effect on local services such as schools, hospitals, traffic, and utilities. Employment will help the local economy by hiring local persons both in the construction phase and in the operation of the unit. Local businesses will benefit from increased tourism.

Inholders, lessees, and neighbors could be affected. Visitors trespassing onto agricultural land could affect brussels sprouts production. There would be less than a 10 percent acreage cutback due to park facility development. The elimination of grazing will not have a long-term adverse effect because the land used for grazing here represents an extremely minor percentage of the state's grazing lands. The inholding areas, the landfill and sand quarry, may receive some trespass. The city water supply in Majors Creek is not likely to be affected by siltation due to people because it is near the northern park boundary and its watershed is mostly outside the park boundary.

Significant Environmental Effects That Cannot Be Avoided

All of the effects mentioned, although rated less than significant, cannot be completely avoided. Many of the proposed plan's features can be altered to minimize the effects. Mitigation measures will be carried out to minimize adverse impacts.

Mitigation Measures Proposed to Minimize Significant Effects

Several mitigation measures have been proposed in the land use and facility element. Resource protection measures are discussed in the Resource Element.

1. Members of the operations staff at Wilder Ranch State Park will patrol and maintain the area. By enforcing park rules and regulations and by educating the public through interpretive programs, the staff can help minimize damage to the natural and cultural resources. Park rangers patrolling the roads can cite violators. Maintenance crews will remove solid waste, maintain trails, and maintain barriers used to protect the park's resources. Maintenance of park signs and picnicking and camping facilities will help reduce vandalism.
2. Barriers, such as ditches, rocks or fences, and specially sited information signs, will be used to protect some of the unit's natural resources, agricultural leases, inholdings (the sand quarry and city sanitary landfill), and the rights of neighboring property owners, as well as to keep visitors away from dangerous conditions.
3. The brussels sprouts fields will be sprayed periodically. It may be necessary to temporarily close trails in the spray area to protect the public from hazardous pesticide chemicals.
4. All facilities will be sited, designed, constructed, and screened with native vegetation to minimize visual intrusion. At Four Mile Beach use area a buffer zone will be established to help minimize the effects of strong winds and pesticide spraying.
5. Roads, parking lots, and trails will be designed and constructed so as to minimize soil erosion.
6. The department will work closely with other agencies and support programs to reduce the amount of traffic.
7. The Resource Element's management policies will be implemented. They will significantly reduce existing resource problems and help prevent future impacts.
8. Fuel economy will be practiced by the park staff. Car pooling and bus transportation will be encouraged for park visitors.
9. Only native plants will be used in landscaping, stabilization, or revegetation projects except in areas where nonnative species are needed to maintain historical integrity or in special cases where a department ecologist so advises.

10. When development is proposed, a detailed survey of natural and cultural features will be completed before final siting and development design. If deemed appropriate by the Resource Preservation and Interpretation Division, such surveys will include investigations of the hydrology, pedology, geology, biology, archeology, and history of the project site and will be completed by staff personnel that have the needed expertise. Should these surveys identify any endangered species or other feature of significant merit, or identify any unfavorable condition (e.g., slope instability), the development project will be modified or the impact mitigated in order to protect and preserve the resource and the safety of the public.
11. Utilities will be designed and installed so as not to be a visual intrusion.
12. Garbage cans will be provided to minimize litter problems.

Alternatives to the Proposed Action

No Action

Making no changes in current uses and existing facilities is not considered an acceptable alternative because there is a need for an orderly plan to protect resources, control visitor use, and enhance visitor experiences. Moreover, parking for Four Mile Beach is inadequate and there are no basic use facilities at the park.

An Increased or Decreased Level of Development

An increased level of development would provide greater public access and use, but it would also cause greater impacts on the park's natural and cultural resources. A decreased level of development would have fewer impacts on the natural and cultural environment.

Alternative Plans Studied

During the planning process, many alternatives put forward by interested segments of the public and by staff members were considered. Five alternative plans were developed by the department and students from the University of California at Santa Cruz. This was a class project for the students. Additional input to the plan came from the public during public involvement meetings.

Assumptions to All Alternative Plans

1. All the plans are based on the environmental resource data now available.
2. All the plans will provide for public recreation while providing for the protection and interpretation of significant natural and cultural features consistent with state park policy.
3. Agricultural lands are statewide resources and should be protected.
4. The city will continue operating the sanitary landfill as long as feasible.
5. The sand quarry will continue excavating material until the present lease expires in 2007.

Any Significant Irreversible Environmental Changes That Would Be Involved in the Proposed Action Should It Be Implemented

The following irreversible environmental changes are anticipated:

1. The commitment of nonrenewable resources such as oil, gasoline, and gravel to construct roads, parking areas, and other park facilities.
2. The loss of some open space, wildlife, wildlife habitat, brussels sprouts row fields, and vegetation due to the development of new facilities in previously undeveloped areas and from increased numbers of people visiting the area.

The Growth-Inducing Impact of the Proposed Action

There will be no significant growth-inducing impacts from the proposed actions. Only minimal economic gains from construction of proposed facilities are anticipated in the area. The greater opportunities for camping in the park may result in increases in trade for local service businesses.

ORGANIZATIONS AND PERSONS CONTACTED

Local Agencies

AMBAG (Association of Monterey Bay Area Governments)
City of Santa Cruz
County of Santa Cruz

State Agencies

California Coastal Commission
California State Department of Fish and Game
California State Department of Transportation
University of California, Santa Cruz

Publications

- AMBAG. Air Quality Plan for Monterey Bay Region. 1978.
- Center for Environmental Design (Consultants). Wilder Ranch and Beaches. Fremont, CA, 1972.
- County of Santa Cruz. General Plan for Santa Cruz County. 1961.
- _____. Community Resources Agency. Noise Element: County of Santa Cruz. 1978.

Common Key Facilities to All Plan Alternatives

1. Wilder Ranch Historic Core
2. California Dairy Museum
3. Four Mile Beach use area
4. Wilder Beach nature preserve
5. Interpretive trails near nature preserve and historic water power system
6. Accessibility for handicapped persons
7. Car and bus parking
8. Restrooms
9. Park Administration - office
10. Park service and maintenance area

Variable Aspects of Alternative Plans

1. Amount of existing row crop area used
2. Recreational facilities on land inland from Highway 1, or none in that area
3. Whether or not to have overnight camping and plan variations between hike-in, car camping, and equestrian camping
4. Use of coastal bluffs for hiking, equestrians, and biking
5. Equestrian staging area or no equestrian staging and use area
6. Cultural center or no cultural center

The proposed plan uses ideas from all these alternatives except the cultural center. This is a facility that would be more compatible nearer the center of the City of Santa Cruz and would not serve a function related to the park's purpose. The hostel is the only proposed facility that was not a part of those alternatives. The hostel itself is an alternate site to one originally planned in Natural Bridges State Beach. Various sites in Wilder Ranch State Park were considered for the hostel.

The alternative of placing the campground for the Four Mile Beach use area at a lower level, adjacent to the wetlands was abandoned because of possible effects on the natural ecology of the wetlands and the potential for flood damage from the creek during heavy rains or by tsunamis. A cultural resource survey of the present location will have to be made before any development is implemented.

Because of the size of the area and its varied resources, a great number of alternative uses are possible.

The Relationship between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity

The short-term uses of Wilder Ranch State Park include the enjoyment of activities such as hiking, picnicking, camping, and viewing the scenic hills and ocean. If the land in this unit were privately owned, it would probably be used for commercial activities, such as logging, cattle ranching, and residential housing development.

The long-term uses proposed in the plan's Resource Element and the Land Use and Facilities Element will provide opportunities for public recreation and at the same time protect the resources. The relationship between the short-term uses and the long-term productivity is complementary.