FINAL
ENVIRONMENTAL ASSESSMENT
BORDER ROAD AND FENCE: CONSTRUCTION AND REPAIR
CAMPO TO JACUMBA, SAN DIEGO COUNTY, CALIFORNIA
JT041-94B/C/D/E/F/G

SERVICE TO THE NATION

Prepared for
JOINT TASK FORCE SIX
DEPARTMENT OF DEFENSE
Fort Bliss, Texas

Prepared by
U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT
Los Angeles, California

JUNE 1994
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U.S. Army Corps of Engineers
Los Angeles District
Environmental Resources Branch
300 N. Los Angeles Street
Los Angeles, CA  90053

June 1994
FINDING OF NO SIGNIFICANT IMPACT

FOR THE

JOINT TASK FORCE SIX OPERATION JT 041-94 (B, C, D, E, F, G)

BORDER FENCE/ROAD CONSTRUCTION AND ROAD REPAIR

CAMPO TO JACUMBA, SAN DIEGO COUNTY, CALIFORNIA

I have reviewed the attached Environmental Assessment (EA) prepared by the U.S. Army Corps of Engineers (COE), Los Angeles District (LAD) for the Joint Task Force Six (JTF-6) project for San Diego County, California. JTF-6 coordinates all Title 10 Department of Defense support to Federal, state and local law enforcement agencies as requested by Operation Alliance and approved by the Joint Chiefs of Staff in the efforts to disrupt illegal operations along the southwest land border and protect national security.

The purpose of JTF-6 Operation in San Diego County is to repair and construct roads and fencing to assist law enforcement agencies in the prevention of illegal importation of drugs along the border with Mexico. The proposed project consists repairs and improvements to existing roads; construction of new road segments; installation of fencing; and installation of culverts along approximately 28 miles of the border between Campo and Jacumba in San Diego County, California. The road repair will consist of light grading, installation of culverts, and grading and shaping for drainage. The road construction will be near and parallel to the border and be utilized for the construction and placement of a 10 foot high border fence; however, in rural areas a five foot high fence will be installed.

The proposed construction is divided into six segments identified as JT041-94B through G. Project construction for segments JT041-94B and C will commence the second week of June 1994 and will be completed by the end of August 1994. Presently, support personnel, bivouac sites, equipment storage areas, and water sources for segments D, E, F, and G are not identified and, therefore, amendments to this Environmental Assessment (EA) will be prepared and required coordination will be performed with resource agencies prior to construction.

In the event of time delays, resource agencies and concerned individuals will be notified via telephone by Corps personnel. In the event of flooding or heavy rain, project construction will be delayed until conditions are again suitable for the movement of machines and materials.
This EA addresses the effects of the proposed construction on segments JT041-94B and C related to natural, biological, and cultural resources. Environmental commitments and mitigation measures are outlined in this EA to minimize impacts to environmental resources.

Construction is not anticipated to have any significant long- or short-term impacts on the environment. I have considered the available information contained in this EA, and it is my determination that the proposed project will not result in any significant adverse effect on the existing environment. Therefore, preparation of an Environmental Impact Statement (EIS) is not required.

Joint Task Force Six

[Signature]

DATE

KEVIN P. BYRNES
Brigadier General, U.S. Army
Commanding
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features and/or vegetation would be used in any areas that contain sensitive resources. New construction for the project’s first phase would be accomplished by members of the Army Reserve 368th Engineer Battalion and road repair completed by the California National Guard, producing minimal socioeconomic effects on communities in or near the project area.

1.2 PROJECT LOCATION AND VICINITY

The project area comprises a relatively narrow strip of land located adjacent to the U.S.-Mexico border in the sparsely populated area of southeastern San Diego County, California, starting approximately 40 air miles southeast of downtown San Diego, the sixth largest city in the nation (Figure 1). Most of the project area is uninhabited and contains terrain of high topographic relief, ranging in elevation from 2,200 feet near Canyon City to nearly 4,000 feet at Carrie’s Mountain on the Imperial County line. The largest community within or adjacent to the project area is Jacumba; the 1990 population of the greater project region was less than 5,400 people. The region’s arid climate primarily supports chaparral vegetation, however some stands of oaks and other riparian vegetation infrequently occur in the watercourses of ephemeral streams located in the area’s deeper canyons.

1.3 SUMMARY OF IMPACTS

Short-Term Impacts

Short-term impacts on environmental components would be limited to those arising from road and fence construction activities. Where new road and fence construction are proposed, vegetation would be removed and surface soils would be exposed to compaction by vehicles. However, given the well-drained nature of the soils, new fence and road construction proposed for relatively level terrain, and a relatively narrow impact zone, short-term impacts to soil erosion and soil instability are expected to be minor.

Potential short-term impacts to surface water and water quality could arise from the removal of vegetation, compaction of surface soils, and disruption of established drainage during the construction phase. Standard construction procedures that minimize erosion or excessive runoff during construction if rainfall occurs would be followed, and construction would not resume until surface conditions returned to states not encouraging erosion or excessive runoff. No short-term impacts to groundwater quality are expected.

Given the short-term duration proposed for construction and the fixed conditions of the project (permanent fence and road), no major adverse impacts to the regional climate or air quality are expected. During construction, short-term impacts would be limited to dust expelled into the air near construction sites; the amount of dust and other particulates released during construction would be kept to minimum levels by regular watering of dust-generating sites. Any increased dust levels that may be created during the construction period would be short-term, minor, and located away from population centers. Watering trucks would be used to control fugitive dust. Equipment currently designated for project construction does not require permitting.
Land use in the project area would experience no substantial adverse effects as a result of proposed project construction. Construction of new fence and roads would occur largely on federally owned land within 60 feet of the international boundary and would create no inconsistent or incompatible uses in that or neighboring parcels. Potential short-term impacts to aesthetics during the construction phase of the project would include disruption to isolated appeal of the area. Noise impacts would be greatest over the short-term during the construction phases when equipment is in use. Since very few sensitive receptors occupy the project area and since these impacts would be temporary, these effects are not considered significant.

Although billeting campsites are intended to be self-contained, some daily needs may be met in the local community creating a short-term economic impact on the area. Most construction equipment already is owned by either the Army Reserve or the California National Guard, however additional equipment may be rented in the San Diego area creating short-term economic opportunities there.

Long-Term Impacts

Long-term impacts would be created from establishment of new roads and fencing, and upgrades and potential realignment of existing roads. Potential long-term impacts to the physical setting are anticipated to be minor. No major earthmoving or terrain alterations are proposed. No long-term increased soil erosion, no long-term degradation of existing soil conditions, and no increased soil instability are expected. Once in place, neither the new road nor fence would adversely affect the physical environment. Where road repair is projected, minimal alterations to the existing environment would occur, and, in many cases, road repair, realignment, and reengineering would correct erosion and washout problems currently occurring on existing roads that cross steep terrain and seasonal watercourses.

No deterioration of natural drainages, no disruption of current drainage patterns, and no degradation of surface water or groundwater quality is expected from project implementation. The well-drained nature of the soils, together with new fence and road construction proposed for relatively level terrain and a relatively narrow impact zone, would eliminate any wide-scale or long term adverse impacts to surface water and water quality. Once in place, neither the new road nor fence would adversely affect either surface water or water quality. No long-term impacts to groundwater quality are anticipated.

Land use in the project area would experience no substantial adverse affects as a result of proposed project implementation. Road repair would upgrade existing roadways and could be considered improvements to existing land use. Where road repair and new road construction or alignment would occur on BLM lands, rights-of-way applications to BLM would need to be completed and approved to permit construction.

Once completed, road repair or realignment would have a minimal long-term impact to aesthetics given the number of existing unpaved roads in the area. Completion of the new border fence, however, would have the greatest impact on the area’s aesthetics. The new fence currently is proposed to be 10 feet high, which would approximate the average height of shrub vegetation in the area. The fence still would be visible in clearings between vegetation stands from both sides of the international boundary.
Upon completion of road repair and construction, the effectiveness of U.S. Border Patrol agents would be increased; and at completion of fence construction, traffic of illegal narcotics would be reduced. Together, these two beneficial long-term impacts of the project would improve the quality of life for residents throughout the region.

No long-term impacts to air quality, climate, transportation, public health and safety, or the noise environment are expected.
2. NEED FOR PROPOSED ACTION

2.1 CONSTRUCTION OF NEW ROADS AND REPAIR OF EXISTING ROADS

Current conditions require excessive time to travel existing back-country roads. Many segments of these existing roads either cross watercourses which seasonally flood, unnecessarily ascend and descend steep slopes, or are constructed too narrowly or have acute turns which do not allow passage to larger vehicles. Access to some portions of the existing roads is denied by local private property owners. If emergencies occur, agents using these roads can be far removed from assistance.

2.2 FENCING

Since 1991, illegal drug seizures by the U.S. Border Patrol’s Campo Station have increased markedly. During FY 1992 and FY 1993, the Campo Station seized more than $125 million in illegal drugs, representing more than 50 percent of seizures (by value) for the U.S. Border Patrol’s San Diego County Sector. By contrast, between FY 1989 and FY 1991 the Campo Station seized less than 8 percent (by value) of that sector’s total (U.S. Border Patrol, 1994). These figures represent only that amount of illegal narcotics which were intercepted and may constitute only a small fraction of the total illegal drug traffic in this area. With improved border security west of this project area, from Tecate westward to San Ysidro, it is anticipated that illegal drug activity previously occurring there will shift to this border area and result in an increase in illegal drug trafficking in this area. Together with improved roads, solid fencing would increase greatly the effectiveness of the limited number of officers and vehicles that are available to patrol this segment of the border.
3. DESCRIPTION OF PROPOSED ACTION

3.1 ROAD AND FENCE CONSTRUCTION AND REPAIR

Figure 1 illustrates the total geographic extent of the proposed action. The panels of Figure 2 show in more detail the individual segments comprising the project. This road and fence project represents a continuation of border road and fence construction for locations west of the project area, currently underway in the vicinity of Tecate and previously completed near San Ysidro. An EA for border road and fence construction and repair was completed in October 1993 by the U.S. Army Corps of Engineers (1993) addressing construction between Tecate Peak eastward to Canyon City ending at “the boundary of Sections 19 and 20” in Township 18 South and Range 5 East. The eastern limit of that construction project represents the western most limit of this study’s project area. For this EA, border road construction would occur for approximately 28 miles from that point south of Canyon City eastward to the San Diego County-Imperial County line; fence construction would take place over approximately 17 miles of that distance, distributed among six locations along the length of that border road.

The need for culvert installation and road alignment modifications would be assessed during the course of road construction. Access road width along the border parallel to the fence mostly would have a maximum width of 24 feet; other existing or newly constructed roads also would be improved to a maximum width of 24 feet. A 10-foot high fence would be constructed using steel poles and steel airport runway matting assembled in sections. Each section would consist of six runway mats, each about 1.5 ft x 10 ft, aligned horizontally. Fence sections would be assembled on site; steel poles would be set in concrete on site with the fence sections welded onto them (Army Reserve, 1994).

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<td>2.5 miles</td>
<td>5.5 miles</td>
</tr>
<tr>
<td>JT041-94C (Fence Construction east of Campo)</td>
<td>1.5 miles</td>
<td>n.a.</td>
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<tr>
<td>JT041-94D (Fence Construction from Smith Canyon to Rattlesnake Mountain, and Road Construction and Repa east of Campo)</td>
<td>0 miles</td>
<td>22.5 miles</td>
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<td>n.a.</td>
<td></td>
</tr>
<tr>
<td>JT041-94G (Fence Construction from Airport Maines Mountain)</td>
<td>0 miles</td>
<td>n.a.</td>
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To date, personnel, staging and bivouac sites necessary for construction have been used only for the first phase of road.
construction and repair and fence construction: JT041-94B, 2.5 miles of fence construction west of Campo, Old Port of Entry, and 5.5 miles of road construction west of Campo, Old Port of Entry; and JT041-94C, 1.5 miles of fence construction east of Campo, Old Port of Entry.

Table 1 and the following discussion, adapted from descriptions provided by the U.S. Immigration and Naturalization Service (1993), address the individual segments of the project. These segments are illustrated in the nine panels comprising Figure 2:

1) Fence construction, west of Campo, Old Port of Entry, 2.5 miles (JT041-94B, part; Figure 2, Panel 2). Construct approximately 2.5 miles of 10-foot high steel fence, near to and parallel to the border, from the Old Campo Port of Entry westward to the eastern base of the hill mounted by Border Monument 241—in Township 18 South, Range 5 East, Section 20. The proposed fence line traverses a gradual western upslope for a distance of 1.5 miles to a promontory point, then continues over gradual and varying slopes for an additional 1.0 mile to the base of a mountain that forms an impenetrable ridge westward to the end of the project area.

1.1) Road construction, west of Campo, Old Port of Entry, 5.5 miles (JT041-94B, part; Figure 2, Panels 1 and 2). Repair or construct about 5.5 miles of roadway west from the Old Campo Port of Entry. The first 2.5 miles would parallel the proposed border fence west of the Old Campo Port of Entry, with the remaining 3.0 miles terminating southeast of Canyon City at the boundary of Sections 19 and 20 in Township 18 South, Range 5 East. The existing road is an average of 18 feet wide and requires a four-wheel drive vehicle or all-terrain vehicle (ATV) to traverse. Portions of the road cross small seasonal drainages which would require the installation of culverts to prevent seasonal washouts. Some surface road grades are quite steep and would require engineered drainage to prevent erosion.

2) Fence construction, east of Campo, Old Port of Entry, 1.5 miles (JT041-94C; Figure 2, Panels 2 and 3). Construct about 1.5 miles of 10-foot-high steel fence near to and parallel to the border, from the Old Campo Port of Entry eastward to the rim of La Gloria Canyon—at the boundary between Sections 23 and 24, in Township 18 South, Range 5 East. This fence line crosses a gradual eastward upslope for a distance of 0.5 mile, with a heavy outcrop of granite boulders occurring in the last 300 meters. At the top of the grade, the terrain becomes a long plateau that continues for 1.0 mile until the formation of La Gloria Canyon.

The 3.5 miles between the western slope of La Gloria Canyon eastward to the eastern slope of Smith Canyon is not included in the border fence project due to the severe terrain and unlikely ingress of vehicular traffic across the International Boundary.

2.1) Fence construction, Smith Canyon to Rattlesnake Mountain, 7.0 miles (JT041-94D, part; Figure 2, Panels 4, 5, and 6). Construct approximately 7.0 miles of 10-foot-high steel fence near to and parallel to the border, from the eastern rim of Smith Canyon, at the southern midpoint of Section 19 in Township 18 South, Range 6 East, eastward to the western base of Rattlesnake Mountain, approximately at the border of Sections 17 and 18 in Township 18 South, Range 7 East. The proposed fence line crosses a gradual sloping plateau eastward from Smith Canyon.
Granite boulders occur in the first 1.0 mile; east of that, decomposed granite constitutes the surface material for the balance of the distance. Several residences are adjacent to both sides of the International Boundary, with the Mexican village of Rincon del Jardín situated south of California's Tierra del Sol community, approximately 1.0 mile west of Rattlesnake Mountain.

3.3) Road construction, east of Campo, Old Port of Entry, 22.5 miles (JTO41-94D, part; Figure 2, Panels 2 through 6). Repair or construct approximately 22.5 miles of roadway east from the Old Campo Port of Entry to the Imperial County line. The border road segment beginning at the Old Campo Port of Entry parallels the International Boundary eastward for approximately 16.5 miles, over Rattlesnake Mountain, and terminates at the Lakeside Sportsman Club, just east of Jewel Valley. The border road traverses very rugged terrain and would require culvert installation and drainage engineering over much of its distance to minimize erosion. Due to impassable terrain, the border road discontinues at the Lakeside Sportsman Club for a distance of about 1.0 mile and then resumes at the eastern end of the Chimneys. From this point eastward, the border road continues along the same route proposed for the border fence.

3) Fence construction, west of Jacumba, Old Port of Entry, 2.0 miles (JTO41-94E; Figure 2, Panels 5, 7, and 8). Construct about 2.0 miles of 10-foot-high steel fence near to and parallel to the border, from the Old Jacumba Port of Entry westward to the base of hills known as the Chimneys, located near the western edge of Section 13 in Township 18 South, Range 7 East—upon which sits Border Monument 234. This fence line traverses a gradual western upslope for a distance of 0.5 mile to a granite outcropping called Mercado Rock, then continues for an additional 1.5 miles to the base of the Chimneys. Vegetation is sparse for the first 0.5 mile of fence which separates Jacumba in California, and Jacume in Mexico; the remaining 1.5 miles is a flood plain meadow that supports livestock grazing. Fencing of this 1.5 miles would require engineering to allow for seasonal water levels up to 4 feet in depth.

3.1) Fence construction, east of Jacumba, Old Port of Entry, 2.0 miles (JTO41-94F; Figure 2, Panel 8). Construct about 2.0 miles of 10-foot high steel fence near to and parallel to the border, from the Old Jacumba Port of Entry eastward to the western foot of Airport Mesa, upon which sits Border Monument 232, located in the western half of Section 10 of Township 18 South, Range 8 East. The fence line crosses a flat plain used for farming in the United States with a small unmanned airport located at its eastern extremity; the Mexican side is uninhabited, open rangeland. The first 0.5 mile east of the Old Port of Entry is a seasonal flood plain which can experience up to 4 feet of water during flood stage.

3.2) Fence construction, Airport Mesa to Carrie's Mountain, 2.0 miles (JTO41-94G; Figure 2, Panel 9). Construct about 2.0 miles of 10-foot-high steel fence near to and parallel to the border, from the eastern foot of Airport Mesa to the western base of Carrie's Mountain, or from the western edge of Section 11 to the southern midpoint of Section 12 in Township 18 South, Range 8 East. The fence line crosses the flat, uninhabited rangeland of Oneill Valley to the base of Carrie's Mountain, which forms the boundary between San Diego and Imperial Counties.
Figure 2 (Panel 4 of 9). Component Segments of Border Fence/Road Project, Campo to Jacumba
3.2 BATTALION SUPPORT AND BILLETING, EQUIPMENT AND STAGING, CONSTRUCTION CONCERNS, AND CONSTRUCTION SCHEDULING

JT041-94B (Road and Fence Construction West of Campo)

Support Personnel. The 368th Engineer Battalion of the Army Reserve in Manchester, New Hampshire, would provide 300 personnel to construct both the border fence and paralleling access road during the project’s first phase west of Campo. Repair and potential realignment of existing roads would be performed by personnel of the California National Guard. Personnel from the California National Guard currently are repairing roads west of the project area in the Tecate-Canyon City area and road construction is moving eastward. As road repairs are completed to the west, California National Guard personnel will begin road repairs in the project area addressed in this EA (U.S. Border Patrol, 1994).

Bivouac Site. All 300 Army Reserve personnel required for the first phase of new road and fence construction will be billeted on privately-owned ranch land located approximately 2.5 miles north of the international boundary and 1.0 mile north of Campo (see Figure 3). This bivouac area would be self-contained with tents, a hot kitchen, private well water provided in 500-gallon drinking water tanks, and portable toilet facilities provided by the Army Reserve. Personnel would be transported from the bivouac site to construction sites in vans on existing roads. The bivouac site is visible from Buckman Springs Road north of Cameron Corners; however, it is not visible from Campo, from the construction sites, or from the international boundary (U.S. Border Patrol, 1994).

Fencing Equipment and Storage. All equipment needed to install the fence currently either is owned by the Army Reserve—and would be transported to the project area by the 368th Engineering Battalion—or would be rented in the San Diego area. Necessary equipment would include forklifts, wheeled cranes, earth augers, rick drills, stake bed trucks, arc welders, cement mixers, and dump trucks. Landing mats are scheduled to arrive at the equipment storage yard in April 1994. The equipment yard will be located on private property less than 0.25 miles from the international boundary; the equipment yard already has been cleared of vegetation and is accessible from the proposed fence construction area by existing roads (Figure 3).

Access Road Equipment and Storage. Most equipment needed for access road construction currently is owned by the Army Reserve and would be transported to San Diego by train and then to the project area by low-bed truck for the first phase of construction. Some additional equipment would be rented in the San Diego area. Necessary equipment would include scrapers, bulldozers, compactors, water distribution trucks, auger trucks, backhoes, excavators, vibrator rollers, road graders, and flat bed trucks (Army Reserve, 1994). The equipment yard will be the same as that used for fence equipment: located on private property less than 0.25 miles from the international boundary and accessible from the proposed construction area by existing roads (Figure 3).

Road Repair Equipment and Storage. Equipment needed for road repair is owned by either the California National Guard or the U.S. Border Patrol and would be transported by road to construction sites. Necessary equipment would include scrapers, bulldozers, compactors, water distribution trucks, auger trucks, backhoes, excavators, vibrator rollers, road graders, and flat bed trucks. The equipment yard used will be the same as that used for fence and new road equipment: located on private property less than 0.25 miles from the
international boundary and accessible from the proposed construction area by existing roads (Figure 3).

**Construction concerns.** Construction water would be taken from Campo Creek upstream from Campo's sewage treatment facility (see Figure 3) and trucked to the equipment yard in 6,000-gallon capacity water trucks. From the equipment yard, water construction would be delivered to construction sites in 500-gallon capacity water trucks. No seasonal downstream users of Campo Creek have been identified. If Campo Creek runs dry during the construction period, water would be taken from a private well which would supply water to the personnel bivouac site (U.S. Border Patrol, 1994). Maintenance and refueling of equipment would occur at equipment storage areas. Storage, handling, and disposal of petroleum, oil, lubricants, and other chemical products at these sites would be performed in accordance with applicable regulations. Disposal of waste products would occur offsite at licensed facilities.

**Scheduling.** Construction of the border fence and new access road is scheduled to begin on 1 June 1994 and to end on 26 June 1994. Repair and potential realignment to existing roads also are scheduled to begin 1 June, however personnel from the California National Guard currently are committed to repair roads west of the project area in the Tecate-Canyon City area. The 1 June start date for road repair is contingent on the California National Guard's completion of these roads to the west (U.S. Border Patrol, 1994).

**JT041-94C (Fence Construction East of Campo)**
The U.S. Border Patrol and 368th Engineering Battalion of the Army Reserve have coordinated construction of this phase of the border fence with construction of the JT041-94B phase of the project; therefore, these two project phases will occur simultaneously. Support personnel, bivouac site, fencing equipment and storage, road equipment and storage, construction concerns, and construction scheduling are identical to those present above for the JT041-94B segment.

**JT041-94D (Fence Construction, Smith Canyon to Rattlesnake Mountain, and Road Construction 22.5 miles east from Campo)**
**Support Personnel.** Repair and potential realignment of existing roads would be performed by personnel of the California National Guard. Personnel from the California National Guard currently are repairing roads west of the project area in the Tecate-Canyon City area and advancing eastward. After they have completed road construction and repair on the JT041-94B segment of the project, California National Guard personnel will begin road repairs in this project segment.

**Road Repair Equipment and Storage.** Equipment needed for road repair is owned by either the California National Guard or the U.S. Border Patrol and would be transported by road to construction sites. Necessary equipment would include scrapers, bulldozers, compactors, water distribution trucks, auger trucks, backhoes, excavators, vibrator rollers, road graders, and flat bed trucks. No equipment storage sites have been identified for this project segment.

**Scheduling.** Construction of this segment border fence and adjoining access road is scheduled to begin on 15 June 1995.

Presently, support personnel, bivouac sites, equipment storage areas, and water sources for construction of this segment of fencing have not yet been identified. The number of personnel and equipment would vary based on
operational requirements. Fencing and access road equipment and construction concerns for this segment of fence construction would be similar to the equipment and concerns discussed for the JT041-94B segment of fence discussed above.

**JT041-94E through G**

Support personnel, bivouac sites, equipment storage areas, water sources, and scheduling for construction of this segment of fencing have not yet been identified. The number of personnel and equipment would vary based on operational requirements. Fencing and access road equipment and construction concerns for this segment of fence construction would be similar to the equipment and concerns discussed for the JT041-94B segment of fence discussed above.
The principal drainages in the project area—Boundary Creek, Jacumba Valley, and watercourses in Smith Canyon, La Gloria Canyon, and Jewel Valley—flow northward across the international boundary from Mexico into the United States. Two small drainages southeast of Tierra del Sol drain southward into Mexico. Neither the San Diego County Flood Control District nor the Federal Emergency Management Agency (FEMA) has performed mapping of potential floodplains in the project area (San Diego County Department of Public Works, 1994; Federal Emergency Management Agency, 1989); however, field inspection, personal communication with local residents (U.S. Border Patrol, 1994), and published soil surveys of the area (Soil Conservation Service, 1973) indicate that the Jacumba Valley east of Jacumba and the Boundary Creek channel west of Jacumba both are subject to flooding during major storm events.

JT041-94B (Road and Fence Construction West of Campo)

Within this area—located from the upper Campo Valley westward toward Canyon City—most of the uplands are dissected, steep, and rocky with shallow soils. Sheet erosion has carved gullies and ravines into some slope faces. Soils here fall into two principal associations: Tollhouse-La Posta-Rock land and Motts ville-Calpine. The Tollhouse-La Posta-Rock land association occurs on either side of Campo Valley on uplands and is characterized by well-to excessively drained soils that are underlain by rocky and eroded granite and granidiorite. The Motts ville-Calpine association consists of well-to excessively drained soils in basins and on alluvial fans in upland areas, such as the floor of the upper Campo Valley near the Old Campo Port of Entry (Soil Conservation Service, 1973). No soils considered prime, unique, or of statewide importance have been identified in this area (Soil Conservation Service, 1994). Three ephemeral stream channels flow through the road improvement alignment south of Canyon City; however, no permanent streams flow through this area.

JT041-94C (Fence Construction East of Campo)

The physical setting of this project segment is very similar to that described for west of Campo. Here, most of the uplands again are dissected, steep, and rocky with shallow soils. Sheet erosion has carved gullies and ravines into some slope faces. Soils here fall into the same two principal associations: Tollhouse-La Posta-Rock land and Motts ville-Calpine. The Tollhouse-La Posta-Rock land association occurs on either side of Campo Valley on uplands and is characterized by well-to excessively drained soils (sandy loams and loamy coarse sands) that are underlain by rocky and eroded granite and granidiorite. The Motts ville-Calpine association consists of well-to excessively drained soils (loamy coarse sands and coarse sandy loams) in basins and on alluvial fans in upland areas, such as the floor of the upper Campo Valley near the Old Campo Port of Entry (Soil Conservation Service, 1973).

No soils considered prime, unique, or of statewide importance have been identified in this area (Soil Conservation Service, 1994). No permanent streams flow through this area.

JT041-94D (Fence Construction, Smith Canyon to Rattlesnake Mountain)

Between Smith Canyon and Rattlesnake Mountain, the project area crosses dissected and steep uplands (mostly to the west) to gently sloping rangeland (to the east). Two principal soil associations—the La Posta-Kitchen Creek and the Motts ville-Calpine—are found in this segment of the project area. The La Posta-Kitchen Creek association—present over nearly the entire length of this
project segment—consists of rocky, eroded soils. These soils are mostly excessively drained loamy coarse sands that have formed over decomposed grandiorite. The Mottsville-Calpine association consists of well-to-excessively drained soils in basins and on alluvial fans in upland areas and occurs infrequently here in seasonal washes south of Tierra del Sol (Soil Conservation Service, 1973). No soils considered prime, unique, or of statewide importance have been identified in this area (Soil Conservation Service, 1994). No permanent streams flow through this area.

JT041-94E (Fence Construction West of Jacumba)

This segment of the project area largely is level to gently sloping with some uplands on the eastern and western peripheries. The area's soil transition from the Tollhouse-La Posta-Rock land association on the west to the more-fertile Mecca-Indio association on the east, closer to Jacumba. As noted previously, the Tollhouse-La Posta-Rock land association is characterized by well-to-excessively drained soils (sandy loams and loamy coarse sands) that are underlain by rocky and eroded granite and grandiorite. Mecca-Indio association are well-drained sandy loams and silt loams on alluvial fans (with less than 5 percent slope) that are subject to occasional flooding and deposition (Soil Conservation Service, 1973). For this segment of the project area, no soils considered prime, unique, or of statewide importance occur (Soil Conservation Service, 1994).

Although no mapping of potential floodplains in this segment of the project area has been performed by either the San Diego County Flood Control District or FEMA, field inspection, personal communication with local residents (U.S. Border Patrol, 1994), and published soil surveys of the area (Soil Conservation Service, 1973) indicate that the Boundary Creek channel west of Jacumba is subject to inundation, overland storm flow, and sustained periods of flooding during major storm events.

JT041-94F (Fence Construction East of Jacumba)

East of Jacumba, this segment of the project area encompasses a nearly level reach of the Jacumba Valley. This area is underlain by fertile soils of the Mecca-Indio association in the Jacumba Valley and by Rock land association at the eastern limits near Airport Mesa. As described above, the Mecca-Indio association are well-drained sandy loams and silt loams on alluvial fans (with less than 5 percent slope) subject to occasional flooding and deposition (Soil Conservation Service, 1973). In this project segment through the Jacumba Valley, the Mecca-Indio association contains three soil types classified as prime farmland: Reiff fine sandy loam (on 0 to 2 percent slopes), Indio silt loam (on 0 to 2 percent slopes), and Indio silt loam (on 2 to 4 percent slopes [Soil Conservation Service, 1994]). Located within the proposed fence and access road alignments on Federal property within 60 feet of the international boundary, these soils currently are not under cultivation. Exposed bedrock and large boulders constitute the eastern extent of this project segment.

Although no mapping of potential floodplains in this segment of the project area has been performed by either the San Diego County Flood Control District or FEMA, field inspection, personal communication with local residents (U.S. Border Patrol, 1994), and published soil surveys of the area (Soil Conservation Service, 1973) indicate that the Jacumba Valley east of Jacumba is subject to inundation, overland storm flow, and sustained periods of flooding during major storm events.
JT041-94E (Fence Construction West of Jacumba)

The plant community within this segment consists of elements of chaparral and desert transition scrub and extends over terrain characterized by boulder outcroppings and elevation changes of two hundred feet. An extensive floodplain exists for approximately 1.5 miles from the western point of the proposed fenceline of this segment. The vegetation cover within this segment includes basin sagebrush, assorted grasses, cholla, chamise, joint fir, yucca, yerba santa, scrub oaks, catclaw acacia, red shanks, ceanothus, rattlesnake weed, cocklebur, filaree, hedgehog cactus, miner’s lettuce, deerweed, buckwheat, Mexican elderberry, willow, mulefat, snakeweed, goldenbush, tamarisk, juniper, Dudleya, sugar bush, wolfberry, encelia, caterpillar phacelia, lupine, popcorn flower, stinging nettle, mistletoe, willows, and mulefat.

JT041-94F (Fence Construction East of Jacumba)

The plant cover within this segment is rather sparse and consists of desert transition chaparral and creosote bush scrub. The vegetation cover within this segment includes catclaw acacia, mesquite, cholla, hedgehog cactus, prickly pear, juniper, creosote bush, yucca, miner’s lettuce, filaree, joint fir, sage, goldenbush, snakeweed, and Russian thistle.

JT041-94G (Fence Construction, Airport Mesa to Carrie’s Mountain)

The plant cover within this segment consists of desert transition chaparral; plant species noted in the course of field surveys included creosote bushes, joint fir, cholla, agave, jojoba, prickly pear, yucca, juniper, buckwheat, mistletoe, filaree, rabbitbrush, encelia, and Indian paintbrush.

Bivouac, Staging and Panel Assembly Sites. The sites selected for each activity have been previously disturbed. The bivouac site is located on private land which is utilized as a pasture and supports an assortment of introduced grasses and old oaks throughout the bivouac area. The staging area is on private land and has been utilized for equipment storage in the past; it currently supports no vegetation. The panel assembly area will be located on a bare piece of ground in the vicinity of the staging site.

5.5.2 Wildlife Community Description

Wildlife species likely to occur in the project area would be those associated with the host plant community. Species likely to occur in chaparral include brush rabbit, California mouse, mule deer, gray fox, woodrat, pocket mouse, brush mouse, quail, wrentit, California thrasher, San Diego alligator lizard, granite night lizard, striped racer, Coast horned lizard, and rattlesnakes. Species associated with the desert transition chaparral would include coyote, pocket mouse, horned lizard, banded sand snake, and whiptail. Species encountered in the course of field surveys included ravens, horned lizard, gopher snake, quail, brush rabbit, donkeys, and hummingbirds.

5.5.3 Endangered and Threatened Species

The U.S. Army Corps of Engineers requested a list of endangered, threatened, proposed and candidate species from the U.S. Fish and Wildlife Service on January 20, 1994; a response was forwarded to the Corps on January 27, 1994. The list prepared for the project area included five endangered species, two threatened species, five proposed endangered species, and ninety-six candidate
species. Species with the potential to occur in the project area includes as endangered the American peregrine falcon (*Falco peregrinus anatum*), the peregrine falcon (*Falco peregrinus*), the bald eagle (*Haliaeetus leucocephalus*), the least Bell’s vireo (*Vireo bellii pusillus*), and Gambell’s watercress (*Rorippa gambellii*); threatened species includes the Aleutian Canada goose (*Branta canadensis tundrius*), and Arctic peregrine falcon (*Falco peregrinus tundrius*).

5.6 CULTURAL RESOURCES

A records and literature search of the area of potential effects (APE) for the proposed project was conducted through the South Coastal Archaeological Information Center at San Diego State University. In addition, a field survey was conducted by the Corps’ archeology staff. These combined studies indicated that no cultural resources listed on, or eligible for the National Register of Historic Places would be affected.

**JT041-94B (Road and Fence Construction West of Campo)**

No cultural resources of any significance were found as a result of the records search and field survey.

**JT041-94C (Fence Construction East of Campo)**

No cultural resources of any significance were found as a result of the records search and field survey.

**JT041-94D (Fence Construction, Smith Canyon to Rattlesnake Mountain)**

No cultural resources of any significance were found as a result of the records search and field survey.

**JT041-94E (Fence Construction West of Jacumba)**

There is one prehistoric archeological site near the area of potential effects, CA-SDI-4455. This large Hakatayan site consists of 7 distinct loci. Artifacts observed on the surface include cores, mortars, slicks, manos, pottery sherds, milling features. This site is probably eligible for the National Register of Historic Places.

**JT041-94F (Fence Construction East of Jacumba)**

No cultural resources of any significance were found as a result of the records search and field survey.

**JT041-94G (Fence Construction, Airport to Carrie’s Mountain)**

No cultural resources of any significance were found as a result of the records search and field survey.
5.7 LAND USE

Regional Setting

Ownership of land within the project area is divided between private owners, public land administered by the Bureau of Land Management (BLM), BLM split estate land under BLM administration where the surface is privately owned, and Federal land located within 60 feet of the international boundary (Bureau of Land Management, 1992).

Privately owned land typically either is developed as single-resident ranch land or remains undeveloped and held for occasional use (e.g., for recreation).

With the exception of existing roads, BLM land remains largely undeveloped; these BLM roads are used by recreational vehicles and officials from other agencies, such as the CDF, SDG&E, and the Border Patrol. Any road upgrade, maintenance, realignment, or new construction on BLM land requires applications for rights-of-way (SF 299) with terms of conditions to minimize visual impacts and soil erosion (U.S. Bureau of Land Management, 1994a).

The northern limit of Federal land located within 60 feet of the international border is demarcated by a metal post/barbed wire agricultural fence originally constructed to impede the movement of livestock across the border; the southern limit is designate by international boundary monuments. No development has occurred along this strip of federally owned land.

Overall, land within the project area is predominantly undeveloped. Excluding the Jacumba area, much of the privately-owned land in the area is used for livestock grazing or recreation, or it remains unimproved. Recreational opportunities are numerous throughout the length of the project area. BLM maintains the trailhead for the Pacific Crest Trail at the border south of Campo, and evidence of all-terrain vehicle use, camping, and target shooting is present on both BLM and privately-owned land over the length of the project area.

JT041-94B (Road and Fence Construction West of Campo)

No unusual or unique land use occurs in this project segment that creates localized land use conditions significantly different from the regional land use described above. However, the trailhead for the Pacific Crest Trail tends to draw more hikers to this segment of the project area.

JT041-94C (Fence Construction East of Campo)

No unusual or unique land use occurs in this project segment that creates localized land use conditions significantly different from the regional land use described above.

JT041-94D (Fence Construction, Smith Canyon to Rattlesnake Mountain)

Southwest of Tierra del Sol near Boundary Monument 236, a cluster of approximately 20 occupied dwellings are located south of the agricultural fence near the international boundary at El Aguaje del Nat. Although the alignment of the international boundary is difficult to determine given the distance between Border Monuments 236 and 237, this settlement appears to be located primarily south of the international border. Although these residents
do not have authorized access across the border in this area and they do not own land within the United States south of the agricultural fence (within the federally owned 60 foot strip), some do use this federally owned land without authorization for cattle grazing and other ranching activities.

**JT041-94E (Fence Construction West of Jacumba)**

No unusual or unique land use occurs in this project segment that creates localized land use conditions significantly different from the regional land use described above. However, the Lakeside Sportsman’s Club, located in upper Jewel Valley, is one of the few permanently established recreational facilities adjacent to the border area.

**JT041-94F (Fence Construction East of Jacumba)**

No unusual or unique land use occurs in this project segment that creates localized land use conditions significantly different from the regional land use described above.

**JT041-94G (Fence Construction, Airport Mesa to Carrie’s Mountain)**

No unusual or unique land use occurs in this project segment that creates localized land use conditions significantly different from the regional land use described above.

### 5.8 AESTHETICS

**Regional Setting**

The border region is rich in natural and unspoiled desert and mountain scenery. With the exception of settlement near Jacumba and Canyon City, the project area is characterized by its undeveloped nature and open, uninhabited landscapes. Vast, unbroken panoramas both north and southward incorporate the border region. At a closer distance, the large number of unpaved tracks and roads, occasional and randomly strewn litter, and gunshot shells can be found in all segments of the project area to detract from the region’s natural beauty.

Although portions of the project area are restricted from the public view due to topography, land ownership, and accessibility, much of the project area lies within viewsheds of BLM land, public roads, and higher elevations throughout the border region.

**JT041-94B (Road and Fence Construction West of Campo)**

No unique natural or manmade features in this project segment that create visual environmental conditions significantly different from the regional visual and aesthetic environment described above. However, this segment of the project area does receive particular attention to its aesthetics since it includes the trailhead of the Pacific Crest Trail.

**JT041-94C (Fence Construction East of Campo)**

No unique natural or manmade features in this project segment that create visual environmental conditions significantly different from the regional visual and aesthetic environment described above.
JT041-94D (Fence Construction, Smith Canyon to Rattlesnake Mountain)

No unique natural or manmade features in this project segment that create visual environmental conditions significantly different from the regional visual and aesthetic environment described above.

JT041-94E (Fence Construction West of Jacumba)

No unique natural or manmade features in this project segment that create visual environmental conditions significantly different from the regional visual and aesthetic environment described above. However, this segment of the project area is viewed easily from public traffic on Old US Highway 80 west of Jacumba.

JT041-94F (Fence Construction East of Jacumba)

No unique natural or manmade features in this project segment that create visual environmental conditions significantly different from the regional visual and aesthetic environment described above. However, this segment of the project area is viewed easily from public traffic on Old US Highway 80 east of Jacumba.

JT041-94G (Fence Construction, Airport Mesa to Carrie’s Mountain)

No unique natural or manmade features in this project segment that create visual environmental conditions significantly different from the regional visual and aesthetic environment described above.

5.9 NOISE

Regional Setting

Other than the infrequently used airstrip east of Jacumba, road traffic on SR 94 west of Jacumba near the Boundary Creek channel, and recreation users near the border (e.g., off-road vehicles or target shooting), no substantial noise sources occur in the project area. Existing sensitive receptors in and near the project area include widely spaced private residents along the international boundary and recreation participants on BLM and privately owned land.

JT041-94B through G

No physical features, industrial activities, or other localized noise producers occur in these project segments that create localized noise environments significantly different from the regional noise environment described above.

5.10 SOCIOECONOMICS

Regional Setting

In 1990, the county recorded a population of nearly 2.5 million people (U.S. Bureau of the Census, 1991). The proposed project area lies within southeastern San Diego County, in the county’s Census Tract 211. The 1990 population for this census tract—which includes Tecate, Buckman Springs, Boulevard, and Manzanita in addition to Campo, Jacumba, and the border
area—was 5,390 people. The San Diego Association of Governments (1994) projects population for the tract to reach nearly 6,700 people by 2000 and 9,400 by 2010. In 1990, housing units numbered 2,534 in the census tract, which are projected to increase to 2,700 by 2000 and more than 3,900 by 2010.

Total employment in the area numbered about 1,000 jobs in 1990, with largest number of jobs (307 jobs) in the transportation, communication, and utilities economic sector. Jobs in the military sector (272 jobs) and the finance, insurance, and real estate sector were second and third, respectively, in total number (San Diego Association of Governments, 1994). Within the project area, most economic pursuits are limited to agricultural activities—namely ranching, stables operation, and livestock grazing.

JT041-94B through G

All socioeconomic influences characterizing the general regional socioeconomic setting apply to these segments of the project area.

5.11 TRANSPORTATION

Regional Setting

State Route 94 (SR 94) between Canyon City and Manzanita together with Old Highway 80 from Manzanita to the Imperial County line forms the only principal two-lane highway and paved road paralleling the length of the project area. SR 94 links the project area with Tecate and metropolitan San Diego to the west; Old Highway 80 links the area with Interstate 8 (I-8) at the county line to the east. Annual average daily traffic (AADT) counts number about 1,000 vehicles for the SR 94-Old Highway 80 corridor as of Fall 1992 (California Department of Transportation, 1993; San Diego County Department of Public Works, 1993).

I-8, located north of SR 94 and Old Highway 80, also parallels the project area and is closest to the area—about 1 mile to the north—at Jacumba. I-8 is a major, four-lane, limited access highway that links the project area with San Diego to the west and with El Centro and the Imperial Valley to the east. The closest direct access between I-8 and the project area is via Carrizo Gorge Road east of Jacumba; other, albeit more distant, access from I-8 is available at Manzanita and Live Oak Springs. AADT counts for I-8 along the segments paralleling the project area number about 10,000 vehicles (California Department of Transportation, 1993).

An out-of-use rail line of the San Diego and Arizona Eastern Railroad crosses the border west of the project area at Campo Creek, then remains north of the project area until reentering it at the Boundary Creek floodplain west of Jacumba. The rail line remains in the flood plain—paralleling the border—until crossing under Old Highway 80 and turning northward away from the border, still west of Jacumba.

Access to segments of the project area are largely available by an informal network of unpaved roads reaching from Canyon City to east of Jacumba. These roads are currently used by the U.S. Border Patrol and cross both privately owned land and BLM land.
JT041-94B (Road and Fence Construction West of Campo)

An informal network of unpaved roads and tracks provides access for four-wheel drive, recreational, and official government vehicles throughout this segment of the project area. These roads all are located north of the agricultural fence which marks the northern limit of federally owned land within 60 feet of the international boundary. The most direct access to this segment of the project area is available on these established unpaved roads from Canyon City on the west and from Campo on the north.

JT041-94C (Fence Construction East of Campo)

As with the JT041-94B segment of the project area, the informal network of unpaved roads and tracks south of Campo also provides access throughout this segment of the project area. The most direct access to this segment of the project area also is available on these established unpaved roads from Canyon City on the west and from Campo on the north.

JT041-94D (Fence Construction, Smith Canyon to Rattlesnake Mountain)

A network of unpaved roads and tracks provides access throughout this segment of the project area, too. In addition to those roads serving residents, recreational vehicles, and official vehicles north of the agricultural fence, an unpaved road—accessible only from Mexico and used by residents of Mexico—abuts the south side of the agricultural fence within the federally owned land from approximately the Shockey Truck Trail junction (east of Smith Canyon) nearly to Jewel Valley. The most direct access to this segment of the project area is available on these established unpaved roads from Tierra del Sol.

JT041-94E (Fence Construction West of Jacumba)

The western portion of this segment of the project area—including Jewel Valley is accessible by unpaved roads linked to SR 94 and Old US Highway 80. Farther east toward Jacumba, in the Boundary Creek channel, established unpaved roads lead directly from Old US Highway 80 to this project area segment.

JT041-94F (Fence Construction East of Jacumba)

In this project segment, established unpaved roads of short length link Old US Highway 80 with the project area.

JT041-94G (Fence Construction, Airport Mesa to Carrie's Mountain)

In this project segment also, established unpaved roads link Old US Highway 80 with the project area.

5.12 PUBLIC HEALTH AND SAFETY

Regional Setting

The undeveloped and relatively undisturbed character of the project area lends itself to be free from threats to public health and safety. No hazardous or toxic material storage or disposal sites are located within the project area or its vicinity. Waste observed on the ground during field investigations in the project area were limited to household garbage and other nontoxic litter.
No occurrences of hazardous or toxic materials occur in these project segments.
6. ENVIRONMENTAL CONSEQUENCES

Environmental impacts resulting from implementation of the proposed action (road repair and construction and fence construction) are summarized in this section. Impacts related to the Construction of All New Roads alternatives is not addressed because it does not represent a viable project alternatives. Construction of all new roads would have greater environmental consequences than repair of existing roads.

In general, impacts of the No Action Alternative would be not to address the continuous narcotics flow and other illegal activities at the United States border area. With no associated fence and road construction and repair, implementation of the No Action Alternative would result in no changes to the existing affected environmental components described in Section 5. However, without fence and road construction and repair, the effectiveness of the U.S. Border Patrol agents (under current staffing strengths in the area) would not be improved and the traffic of illegal narcotics, which currently is increasing in this area, likely would continue to grow. These two long-term impacts of the No Action Alternative could lead to a deterioration in the quality of life throughout the region.

The following discussions of environmental effects are described for specific project segments—as detailed in Sections 3.1 and 5—and reflect available information describing construction equipment, equipment staging and bivouac areas, construction personnel, and construction duration. Prior to construction at any project segment where this information currently stands incomplete because construction is yet to be scheduled, relevant resource agencies would be notified and an addendum to this EA would be prepared to comply with all applicable environmental laws and regulations. It should be noted that the road construction and repair portion of project segment JT041-94D overlays the fence construction project segments JT041-94E, JT041-94F, and JT041-94G.

Short-term impacts on environmental components would be limited to those arising from road and fence construction activities. Long-term impacts would be created from establishment of new roads and fencing, and upgrades and potential realignment of existing roads.

6.1 PHYSICAL SETTING

JT041-94B (Road and Fence Construction West of Campo)

Where new road and fence construction are proposed, vegetation would be removed and surface soils would be exposed to compaction by vehicles. However, given the well-drained nature of the soils, new fence and road construction proposed for relatively level terrain, and a relatively narrow impact zone, short-term impacts to soil erosion and soil instability are expected to be minor.

Potential long-term impacts to the physical environment are anticipated to be minor. No major earthmoving or terrain alterations are proposed. No long-term increased soil erosion, no long-term degradation of existing soil conditions, and no increased soil instability are expected. As with potential short-term impacts, the well-drained nature of the soils, new fence and road construction proposed for relatively level terrain, and a relatively narrow
impact zone, wide-scale and long term adverse impacts to the physical environment are not expected. Once in place, neither the new road nor fence would adversely affect the physical environment.

Where road repair is projected, minimal alterations to the existing environment would occur, and, in many cases, road repair, realignment, and reengineering would correct erosion and washout problems currently occurring on existing roads that cross steep terrain and seasonal watercourses.

**JT041-94C (Fence Construction East of Campo)**

Potential short- and long-term impacts to the physical setting arising from construction and establishment of new roads and fencing and from repair and possible realignment of existing roads are the same as those discussed above for project segment JT041-94B.

**JT041-94D (Fence Construction, Smith Canyon to Rattlesnake Mountain)**

Potential short- and long-term impacts to the physical setting for these segments of the project area would be similar to those impacts described above for the JT041-94B segment. However, at this time detailed information describing construction equipment, equipment staging and bivouac areas, construction personnel, and construction duration are not available. Therefore, prior to construction at these segments, relevant resource agencies would be notified and an addendum to this EA would be prepared to comply with all applicable environmental laws and regulations.

**JT041-94E (Fence Construction West of Jacumba)**

Potential short- and long-term impacts to the physical setting for this segment of the project area would be similar to those impacts described above for the JT041-94B segment. However, at this time detailed information describing construction equipment, equipment staging and bivouac areas, construction personnel, and construction duration are not available. Therefore, prior to construction at this segment, relevant resource agencies would be notified and an addendum to this EA would be prepared to comply with all applicable environmental laws and regulations.

Plans for road and fence construction near Jacumba may fall within the floodplain of Boundary Creek. Although no floodplain has been mapped for this area, surrogate information indicates that this area is prone to flooding. As road and fence construction plans are finalized for this project segment, engineering drawings, hydrology reports, and coordination with the International Boundary and Water Commission and other interested agencies would be performed.

**JT041-94F (Fence Construction East of Jacumba)**

Potential short- and long-term impacts to the physical setting for this segment of the project area would be similar to those impacts described above for the JT041-94B segment. However, at this time detailed information describing construction equipment, equipment staging and bivouac areas, construction personnel, and construction duration are not available. Therefore, prior to construction at this segment, relevant resource agencies would be notified and an addendum to this EA would be prepared to comply with all applicable environmental laws and regulations.
Plans for road and fence construction near Jacumba may fall within a floodplain at Jacumba Valley. Although no floodplain has been mapped for this area, surrogate information indicates that this area is prone to flooding. As road and fence construction plans are finalized for this project segment, engineering drawings, hydrology reports, and coordination with the International Boundary and Water Commission and other interested agencies would be performed.

The proposed fence alignment through this segment of the project area would fall on soils designated as prime farmland. Consultation with representatives of the Soil Conservation Service (1994) indicates establishment of the fence would not be significant with respect to prime farmland since the proposed fence is linear in nature, its proposed alignment does not divide any land parcels, and the underlying soils currently are not under cultivation.

**JT041-94G (Fence Construction, Airport Mesa to Carrie's Mountain)**

Potential short- and long-term impacts to the physical setting for this segment of the project area would be similar to those impacts described above for the JT041-94B segment. However, at this time detailed information describing construction equipment, equipment staging and bivouac areas, construction personnel, and construction duration are not available. Therefore, prior to construction at this segment, relevant resource agencies would be notified and an addendum to this EA would be prepared to comply with all applicable environmental laws and regulations.

### 6.2 CLIMATE

**JT041-94B (Road and Fence Construction West of Campo)**

Given the short-term duration proposed for construction and the fixed conditions of the project (permanent fence and road), no major adverse impacts to the regional climate are expected. During construction, short-term impacts would be limited to dust expelled into the air near construction sites; however, water sprayed on dust-producing areas would minimize adverse affects. Once construction is completed, vehicular traffic use on new or upgraded roads is not expected to exceed vehicular traffic use that would occur without new or upgraded roads; therefore, no long-term impacts are expected.

**JT041-94C (Fence Construction East of Campo)**

Potential short- and long-term impacts to climate arising from construction and establishment of new roads and fencing and from repair and possible realignment of existing roads are the same as those discussed above for project segment JT041-94B.

**JT041-94D through G**

Potential short- and long-term impacts to climate for these segments of the project area would be the same as those impacts described above for the JT041-94B segment. However, at this time detailed information describing construction equipment, equipment staging and bivouac areas, construction personnel, and construction duration are not available. Therefore, prior to construction at these segments, relevant resource agencies would be notified and an addendum to this EA would be prepared to comply with all applicable environmental laws and regulations.
6.3 SURFACE WATER AND WATER QUALITY

JT041-94B (Road and Fence Construction West of Campo)

Potential short-term impacts to surface water and water quality could arise from the removal of vegetation, compaction of surface soils, and disruption of established drainage during the construction phase. Standard construction procedures that minimize erosion or excessive runoff during construction if rainfall occurs would be followed, and construction would not resume until surface conditions returned to states not encouraging erosion or excessive runoff. Rapid reseeding of disturbed areas not in roadways would hasten the reestablishment of vegetation and stability of slopes.

Drinking water for the bivouac site of the first phase of construction would be drawn from a private well. No concerns exist regarding the reliability of this well water (U.S. Border Patrol, 1994). Construction water for the first phase of construction would be drawn from Campo Creek; the U.S. Border Patrol has identified no downstream users that would be affected. If Campo Creek runs dry during the construction period, the private well supplying drinking water to the bivouac site also would be used for construction water. No short-term impacts to groundwater quality are expected. Gray water will be stored in tanks; a contractor will transport and dispose of gray water in an approved manner.

No deterioration of natural drainages, no disruption of current drainage patterns, and no degradation of surface water or groundwater quality is expected from project implementation. The well-drained nature of the soils, together with new fence and road construction proposed for relatively level terrain and a relatively narrow impact zone, would eliminate any wide-scale or long-term adverse impacts to surface water and water quality. Once in place, neither the new road nor fence would adversely affect either surface water or water quality. No long-term impacts to groundwater quality are anticipated.

Installation or upgrade of as many as nine culverts would be required during the construction of new roads and existing road repair for segments JT041-94B and JT041-94C. The proposed project qualifies under regulatory permit under the Nationwide Permit No. 14: Road Crossing (33 CFR Part 330). Coordination with COE Regulatory Branch, Los Angeles, was conducted on 4 May 1994. For installation of each culvert, less than one-third acre of land would be disturbed.

JT041-94C (Fence Construction East of Campo)

Potential short- and long-term impacts to surface water and water quality arising from construction and establishment of new roads and fencing and from repair and possible realignment of existing roads are the same as those discussed above for project segment JT041-94B.

JT041-94D through G

Potential short- and long-term impacts to surface water and water quality for these segments of the project area would be similar to those impacts described above for the JT041-94B segment. However, at this time detailed information describing construction equipment, equipment staging and bivouac areas, construction personnel, and construction duration are not available.
Therefore, prior to construction at these segments, relevant resource agencies would be notified and an addendum to this EA would be prepared to comply with all applicable environmental laws and regulations. Coordination would be conducted with the Regulatory Branch, San Diego, for segments JT041-94D through JT041-94G when more detailed information regarding construction of these segments becomes available.

6.4 AIR QUALITY

JT041-94B (Road and Fence Construction West of Campo)

Regional air quality would not be affected by either short-term project construction or long-term project implementation. The amount of dust and other particulates released during construction would be kept to minimum levels by regular watering of dust-generating sites. Increased dust levels that may be created during the construction period would be short-term, minor, and located away from population centers. Equipment currently designated for project construction does not require permitting. Once construction is completed, vehicular traffic use on new or upgraded roads is not expected to exceed vehicular traffic use that would occur without new or upgraded roads.

JT041-94C (Fence Construction East of Campo)

Potential short- and long-term impacts to air quality arising from construction and establishment of new roads and fencing and from repair and possible realignment of existing roads are the same as those discussed above for project segment JT041-94B.

JT041-94D through G

Potential short- and long-term impacts to air quality for these segments of the project area would be the same as those impacts described above for the JT041-94B segment. However, at this time detailed information describing construction equipment, equipment staging and bivouac areas, construction personnel, and construction duration are not available. Therefore, prior to construction at these segments, relevant resource agencies would be notified and an addendum to this EA would be prepared to comply with all applicable environmental laws and regulations.

6.5 BIOLOGICAL RESOURCES

6.5.1 Impacts to Plant Community

The impacts to local biological resources within each segment of the proposed project are evaluated in the following paragraphs.

JT041-94B (Road and Fence Construction West of Campo)

The proposed action within this segment requires placement of a new road in closer proximity to the border for approximately four miles and improvements of approximately one mile of existing jeep trail. The proposed road construction will be initiated at the western edge of the project area and will be constructed in a straight line configuration as terrain permits. Portions of the existing jeep trail will be incorporated into the new road segment to circumvent impassable terrain and provide continuous passage. A
portion of the new road will be adjacent to the proposed steel mat fence for a
distance of approximately 2.5 miles. The placement of the new road and fence
will require the removal of approximately 11.6 acres of intact chaparral
habitat to accommodate a new road and fence while improvement/widening of the
current road system will impact approximately 0.75 acre of degraded habitat.
The current jeep trail is within the fire break that extends 300 feet north of the
agricultural fence (a barbed wire fence located 60 feet north of the U.S.
and Mexico border).

The number of drainages which exists in the project area total approximately
nine. Permanent water in two drainages near the initiation point of the
project flows from Mexico into Campo Creek. The local vegetation in the
vicinity of each drainage consists of small annuals and perennials along an
embankment approximately five feet on each side and includes monkey flower,
poison oak, and goldenrod as well as several willow trees. The east drainage
supports six willow tree approximately 15 feet high and the west drainage
supports a dozen willow trees which range in height from 8 to 15 feet. The
remaining drainages are ephemeral, one of which is located adjacent to the
east permanent drainage and the remaining six are located in the area between
Monument 241 and Monument 242. The ephemeral drainages which exist within
this area are the result of erosion as a result of rain events and contains
little to no vegetation within the drainage itself. The sideslopes of each
ephemeral drainage support a plant community typical of the surrounding area
including scrub oaks, chamise, and yuccas.

JT041-94C (Fence Construction East of Campo)

The proposed action within this segment consists of construction of a road and
fence along the border for approximately 1.5 miles from the old Campo POE to
the descent into La Gloria Canyon. The action requires the removal of
approximately 4.5 acres of intact chaparral habitat where terrain permits.

One drainage of importance exists within this segment and is located adjacent
to the old POE on its east side. The drainage contains no vegetation and the
sideslopes of the drainage contain local vegetation including basin sagebrush.

JT041-94D (Fence Construction, Smith Canyon to Rattlesnake Mountain)

The proposed project entails construction of a border fence and adjacent road
for approximately 7 miles from the east edge of Smith Canyon and ending at the
Rattlesnake Mountains. In addition, new road construction and improvements
are proposed for approximately 4 miles of roads not associated with fence
construction at the following locations: road improvements to the existing
jeep trail through La Gloria Canyon and Smith Canyon for approximately 1 mile;
0.5 miles of road over Airport Mesa; 1.5 miles of road giving access into and
from the Oneill Valley; and 1.0 mile of road to an observation site in the
Carrie’s Mountains.

The placement of a fence and adjacent road between Smith Canyon and
Rattlesnake Mountains will impact approximately 20 acres of habitat of varying
quality. From the western terminus of the proposed fence and eastward to the
intersection of Shockey Truck Trail and the agricultural fence, a distance of
approximately 2 miles, the fence will traverse relatively undisturbed
chaparral habitat. The remainder of the project area has been subjected to
previous disturbance as evidenced by the presence of several dwellings,
conversion of drainage areas to pasture, trash, grazing cows at various
locations, and the occurrence of jeep trails. Although human disturbance is
evident throughout the five miles, areas of dense vegetation exist along the proposed fence line and will require removal and disposal. Old oak growth exists in isolated locations within this segment, primarily in drainage systems, but in upland locations as well.

New road construction is proposed over Airport Mesa to provide access between the O'neill Valley and the Jacumba Valley. The site is undisturbed and will impact an area of approximately 1.5 acres if the road is placed along the shortest route over the Mesa; the impacts will be greater depending upon the final road alignment. The plant community within this segment is desert transition chaparral.

Road improvements are proposed for an area approximately 4.5 acres in extent at three locations: La Gloria Canyon through Smith Canyon, access roads to and from the O'neill Valley, and an improved road to an observation point in the Carrie's Mountain. The plant community that will be impacted consists of chaparral through Smith and La Gloria Canyons (1.2 A) while creosote scrub and desert transition communities will be impacted in the road improvement activities of in the O'neill Valley and Carrie's Mountain (3.3 A).

Drainage systems encountered in the course of field surveys total twelve. Between Smith Canyon and Monument #237, a total of five drainages were enumerated: 4 ephemeral and 1 permanent. The area between Monuments #237 and #238 contains 6 drainage systems, all of which appear to be ephemeral. The final drainage is east of Monument #236 and consists of the convergence of two large drainages and affects an area approximately 2000 feet across. Vegetation in the drainage systems between Smith Canyon and Monument #237 is absent in three drainages and assorted grasses and old oak growth in the remaining two. The drainages between Monuments #237 and #236 are ephemeral and contain no vegetation or local vegetation in four. The fifth drainage occupies a flat area of the terrain and collects water which seeps from the rocks; vegetation within this drainage is made up of grasses, filaree, and lichens. The drainage system east of Monument #236 is ephemeral and extensive in size having been created by the convergence of two systems. Local vegetation is found within and surrounding this area and typical vegetation consists of basin sagebrush, red shanks, and manzanitas.

JT041-94E (Fence Construction West of Jacumba)

The proposed project consists of construction of a fence along the border for approximately 1 mile in three isolated locations: the area between Rattlesnake Mountains and Boundary Peak, at the mouth of the drainage in Jewel Valley, the mouth of the drainage at the Lakeside Sportsman's Club as well as two miles of fence through the Boundary Creek floodplain to the old Jacumba POE. The area between Rattlesnake Mountain and Boundary Peak supports a dense covering of chaparral, primarily red shanks; the plant community in the drainage areas east of Boundary Peak requires further evaluation as they were not accessible during site visits. The two mile stretch of proposed fence across the Boundary Creek floodplain for approximately 1.5 miles is sparsely covered by native vegetation and has been extensively grazed by cattle in several locations. The fence traverses rocky, higher elevation ground for 0.5 miles from the Boundary Creek floodplain to the old POE at Jacumba. The plant community within this section is desert transition chaparral and has as its major components the following flora: juniper, sugar bush, catclaw acacia, joint fir, buckwheat, cholla, and yucca. The total area expected to be impacted is approximately 9 acres: 3 acres of intermittent fence, 4.5 acres in
the Boundary Creek floodplain, and 1.5 acres between the floodplain and the Jacumba POE.

Drainages which exist in the proposed project alignment are ephemeral and occur in five locations; a floodplain is also encountered south of Boundary Peak approximately 60 meters wide. The plant components of each drainage examined in the course of the survey supported little plant growth in the drainage itself and local vegetation was observed in the surrounding landscape of each drainage. The fence alignment is proposed to traverse a floodplain south of Boundary Peak which is currently utilized as a pasture and supports a mixture of introduced grasses. Two drainages, Jewel Valley and Lakeside Sportsman’s Club, were not directly examined due to difficulty in accessing each site.

**JT041-94F (Fence Construction East of Jacumba)**

A fence alignment is proposed from the old POE at Jacumba to the base of Airport Mesa, a distance of approximately 2 miles. The project area is a floodplain for approximately 1.75 miles and is currently utilized for agricultural purposes including grazing and cropping. The remaining portion of the project alignment supports an area of creosote bush scrub and desert transition chaparral. The total area expected to be impacted is approximately 6 acres of which an area approximately 0.7 acres is native vegetation.

The majority of the project area is a floodplain which has been cleared to accommodate agricultural uses. The vegetation within the floodplain is Russian thistle forming dense thickets is sections.

**JT041-94G (Fence Construction, Airport Mesa to Carrie’s Mountain)**

The proposed project consists of constructing a fence in the plain between Airport Mesa (west) and Carrie’s Mountain (east). The fence will traverse a relatively flat plain (Oneill Valley) which supports native vegetation of the desert transition chaparral. The total area of impact is anticipated to be approximately 6 acres in an area that has been heavily impacted. The project area has been utilized for grazing land and contains a five foot ditch which traverses for approximately 1 mile.

The project area contains no naturally occurring drainages; a drainage ditch is adjacent to the agricultural fence approximately 40 to 50 feet from the proposed fence alignment. The drainage ditch is approximately five feet deep and supports native vegetation.

**Summary**

The implementation of the proposed project will require the removal of local vegetation on a permanent basis from the project area. The removal of chaparral and desert transition chaparral does not appear to be significant due to the extensive area the project encompasses and the quantity of similar vegetation that currently exists in the area. Benefits may arise as a result of fence construction in that portions of the project area in proximity to the fence may become reestablished as grazing will be limited and the movement of vehicles stopped in the border area. Vegetation removal from the project area will require disposal of vegetation which will be accomplished by stockpiling vegetation and subsequently burning the vegetation under the guidelines and supervision of the California Department of Forestry in conjunction with
California National Guard personnel. The vegetation may be a potential fire hazard until the CDF can ignite each pile for disposal.

**IMPACT TO VEGETATION (IN ACRES)**

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</tr>
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6.5.2 Impacts to Fish and Wildlife

The proposed projects will directly impact an area estimated to be approximately 65 acres in extent with a majority of the impacted area vegetated with intact stands of native vegetation. The short term impacts associated with the project include noise and debris as a result of the operation of equipment in the project area and will temporarily disturb local fauna. The long term impacts associated with the project are the permanent removal of vegetation and loss of potential habitat for roosting, nesting, and foraging and the potential impedance of wildlife movement in areas where fence construction will occur in valleys.

6.5.3 Impacts to Endangered and Threatened Species

The proposed project is not expected to have an effect on the continued existence of any species listed by the U.S. Fish and Wildlife Service as endangered, threatened, or proposed endangered. A discussion of the potential impacts to species identified by the U.S. Fish and Wildlife Service with the
potential to occur in the project area is included in the following paragraphs.

Six avian species with the potential to occur in the project area are listed as endangered or threatened while one is listed as proposed endangered. The peregrine falcon, American peregrine falcon and bald eagle may be casual visitors to the project area, utilizing the project area for nesting and foraging; all are federally listed endangered species. Bald eagle nesting and roosting sites are usually associated with reservoirs and lakes which are absent from the project area. Peregrine falcons including the American and Arctic, a federally listed threatened species, normally winter in the vicinity of wetlands and coastal areas where food supply is available; these conditions are absent from the project area. All peregrine falcons are considered infrequent visitors to this area (Peterson, 1990). Aleutian Canada geese, a federally listed threatened species, normally overwinter on the coast of Del Norte County, near Lake Earl, and in the Sacramento and San Joaquin Valleys (Steinhart, 1990).

The least Bell’s vireo, a federally listed endangered species, is a small, migratory songbird which prefers streamside thickets of willow and wild rose in riparian woodlands with a dense shrub layer between 0.6 and 3 meters above the ground. It occurs in southern California and northern Baja California. Major populations occur in the Santa Margarita River, Sweetwater River, San Luis Rey River, San Diego River, Prado Basin-Santa Ana River, and the Santa Ynez River at Gibraltar Reservoir. The southwestern willow flycatcher, a proposed endangered species, occurs in Southern California and is found in densely wooded riparian areas with streamside associations of cottonwood, willows, and other riparian vegetation (Department of Interior, 1992). The project area contains areas where permanent streams with willows are present but the understory vegetation is very low and is composed of annuals and perennials approximately 0.25 meter in height.

The Peninsular Ranges desert bighorn sheep population was proposed for listing as endangered under the Endangered Species Act of 1973, as amended, May 8, 1992. This metapopulation of desert bighorn sheep occupies the area extending from Palm Springs into Baja California. Specific physiographic features providing habitat for the bighorn include the San Jacinto Mountains, Santa Rosa Mountains, San Ysidro Mountains, Borrego Valley, Pinyon Ridge, North Pinyon Mountains, Pinyon Mountains, Vallecito Mountains, Fish Creek Mountains, Sawtooth Mountains, Tierra Blanca Mountains, Coyote Mountains, In Ro Pah Mountains, and Jacumba Mountains (Bureau of Land Management, 1994). Habitat characteristics for these bighorn sheep are those portions of the Peninsular Ranges Province which are occupied by Colorado Desert vegetation, and contain steep rocky slopes interspersed with canyons and washes. Movement habitat may include flat valleys and major washes. The project area is not within the areas listed as supporting bighorn sheep populations and the presence of bighorn sheep within the project area appears unlikely.

The flat tailed horn lizard, a federally listed proposed endangered species, is a small, flat tailed lizard restricted to flats and valleys of the Sonoran desert. Its range is reported to include the Coachella Valley, Imperial and Borrego Valleys and the extreme eastern portion of San Diego County. Optimal areas of inhabitance were identified and occur only in Imperial County (Department of Interior, 1993). Since the project area occurs in the known range of the flat tailed horn lizard, a survey for its presence is recommended. None were observed in the course of the field surveys.
Two amphibious species, both federally listed proposed endangered species, with the potential to occur in the project area were included: arroyo southwestern toad and red legged frog. The arroyo southwestern toad is a small, light greenish gray or tan toad historically associated with the drainages between San Luis Obispo and San Diego Counties. Its habitat of preference is rivers with shallow, gravelly pools adjacent to sandy terraces in association with cottonwoods, oaks, or willows (Department of the Interior, 1993c). Its current range is limited to the headwaters of Los Padres, Angeles, San Bernardino and Cleveland National Forests. The project area is not within the defined current range and contains only small permanent streams with sandy bottoms and a canopy composed of willows; therefore, its presence appears unlikely. The red legged frog is a small amphibian historically found from the vicinity of Point Reyes National Seashore to Baja California. Its current range is limited to in the vicinity of the Santa Clara River in Ventura County (Department of Interior, 1993). The red-legged frog is associated with deep water pools with dense stands of willows and cattails; the project area contains fast moving permanent water and it appears unlikely to support this species.

Gambell’s watercress, a federally listed endangered species, is a which historically occurred in coastal wetlands of San Luis Obispo and Santa Barbara Counties and inland wetland communities of San Diego, San Bernardino, and Los Angeles Counties and Mexico. Its habitat of preference consists of brackish marsh or fresh water at the margins of lakes or slow moving streams. All known populations exist in coastal San Luis Obispo County (Department of Interior, 1993a). The project alignment does not contain suitable habitat and its presence is not reported in San Diego County (Beauchamp, 1986).

6.6 CULTURAL RESOURCES

JT041-94B through G

Cultural resources surveys were performed by the COE archeologist for sections B/C/D/E and G; no National Register listed, or eligible properties are present within these reaches of the project, and none of the cultural resources sites would be affected by the proposed project.

JT041-94F) (Fence Construction East of Jacumba)

The field investigation of the site determined that no portions of the site which would qualify it for the National Register are within the APE.

6.7 LAND USE

JT041-94B (Road and Fence Construction West of Campo)

Land use in the project area would experience no substantial adverse affects as a result of proposed project construction or implementation. Construction of new fence and roads would occur largely on federally owned land within 60 feet of the international boundary and would create no inconsistent or incompatible uses in that or neighboring parcels. Road repair would upgrade existing roadways; where road repair and new road construction or alignment would occur on BLM lands, rights-of-way applications to BLM would need to be completed and approved to permit construction.
JT041-94C (Fence Construction East of Campo)

Potential short- and long-term impacts to land use arising from construction and establishment of new roads and fencing and from repair and possible realignment of existing roads are the same as those discussed above for project segment JT041-94B.

JT041-94D (Fence Construction, Smith Canyon to Rattlesnake Mountain)

Construction of the border fence southwest of Tierra del Sol, near Boundary Monument 236, would affect residents of El Aguaje del Nat. (in Baja California) who currently reside near the international border and use without authorization the federally owned land south of the agricultural fence for cattle grazing. As a result of fence construction, access to the federally owned land south of the agricultural fence would be eliminated and, therefore, the unauthorized use of that land for cattle grazing would be discontinued. In this area, the precise orientation of the international boundary is difficult to determine given the distance between Border Monuments 236 and 237. Intrusion of El Aguaje del Nat. dwellings in the United States is a possibility; prior to fence construction, a survey party would need to determine if the proposed border fence and road would fall among these dwellings.

JT041-94E through G

Potential short- and long-term impacts to land use for these segments of the project area would be similar to those impacts described above for the JT041-94B segment. However, at this time detailed information describing construction equipment, equipment staging and bivouac areas, construction personnel, and construction duration are not available. Therefore, prior to construction at these segments, relevant resource agencies would be notified and an addendum to this EA would be prepared to comply with all applicable environmental laws and regulations.

6.8 AESTHETICS

JT041-94B (Road and Fence Construction West of Campo)

Potential short-term impacts to aesthetics during the construction phase of the project would include disruption to isolated appeal of the area. Once completed, road repair or realignment would have a minimal long-term impact to aesthetics given the number of existing unpaved roads in the area. Completion of the new border fence, however, would have the greatest impact on the area’s aesthetics. The new fence would be 10 feet high and would be about the same height as shrub vegetation in the area. The fence still would be visible in clearings between vegetation stands from both sides of the international boundary.

JT041-94C (Fence Construction East of Campo)

Potential short- and long-term impacts to aesthetics arising from construction and establishment of new roads and fencing and from repair and possible realignment of existing roads are the same as those discussed above for project segment JT041-94B.
Potential short- and long-term impacts to aesthetics for these segments of the project area would be similar to those impacts described above for the JT041-94B segment. However, at this time detailed information describing construction equipment, equipment staging and bivouac areas, construction personnel, and construction duration are not available. Therefore, prior to construction at these segments, relevant resource agencies would be notified and an addendum to this EA would be prepared to comply with all applicable environmental laws and regulations.

6.9 NOISE

JT041-94B (Road and Fence Construction West of Campo)

Noise impacts would be greatest over the short-term during the construction phases when equipment is in use. Since very few sensitive receptors occupy the project area and since these impacts would be temporary, these affects are not considered significant. No long-term impacts to the noise environment are expected.

JT041-94C (Fence Construction East of Campo)

Potential short- and long-term impacts to the noise environment arising from construction and establishment of new roads and fencing and from repair and possible realignment of existing roads are the same as those discussed above for project segment JT041-94B.

JT041-94D through G

Potential short- and long-term impacts to the noise environment for these segments of the project area would be similar to those impacts described above for the JT041-94B segment. However, at this time detailed information describing construction equipment, equipment staging and bivouac areas, construction personnel, and construction duration are not available. Therefore, prior to construction at these segments, relevant resource agencies would be notified and an addendum to this EA would be prepared to comply with all applicable environmental laws and regulations.

6.10 SOCIOECONOMICS

JT041-94B (Road and Fence Construction West of Campo)

For this segment of the proposed project, personnel from the Army Reserve would be billeted in a camp on private land. Although this camp is intended to be self-contained, some daily needs may be met in the local community creating a short-term economic impact on the area. Most construction equipment already is publicly owned, however additional equipment may be rented in the San Diego area creating short-term economic opportunities there.

Upon completion of road repair and construction, the effectiveness of U.S. Border Patrol agents would be increased; and at completion of fence construction, traffic of illegal narcotics would be reduced. Together, these two beneficial long-term impacts of the project would improve the quality of life for residents throughout the region.
JT041-94C (Fence Construction East of Campo)

Potential short- and long-term impacts to area socioeconomics arising from construction and establishment of new roads and fencing and from repair and possible realignment of existing roads are the same as those discussed above for project segment JT041-94B.

JT041-94D through G

Potential short- and long-term impacts to area socioeconomics for this segment of the project area would be similar to those impacts described above for the JT041-94B segment. However, at this time detailed information describing construction equipment, equipment staging and bivouac areas, construction personnel, and construction duration are not available. Therefore, prior to construction at this segment, relevant resource agencies would be notified and an addendum to this EA would be prepared to comply with all applicable environmental laws and regulations.

6.11 TRANSPORTATION

JT041-94B (Road and Fence Construction West of Campo)

Prior to construction, equipment would be brought to staging areas by road from San Diego. I-8, SR 94, Buckman Springs Road, and Old US Highway 80 would be the likely routes used. Required permits for any oversized or overweight loads would need to be obtained from the California Department of Transportation. During construction of this segment of the project, equipment and personnel would be transported from staging and bivouac areas to construction sites on existing roads. Although movement of equipment and personnel may create some short-term traffic congestion, these impacts would be temporary and not considered significant. No long-term adverse impacts to area transportation are expected.

JT041-94C (Fence Construction East of Campo)

Potential short- and long-term impacts to area transportation arising from construction and establishment of new roads and fencing and from repair and possible realignment of existing roads are the same as those discussed above for project segment JT041-94B.

JT041-94D through G

Potential short- and long-term impacts to area transportation for this segment of the project area would be similar to those impacts described above for the JT041-94B segment. However, at this time detailed information describing construction equipment, equipment staging and bivouac areas, construction personnel, and construction duration are not available. Therefore, prior to construction at this segment, relevant resource agencies would be notified and an addendum to this EA would be prepared to comply with all applicable environmental laws and regulations.
6.12 PUBLIC HEALTH AND SAFETY

JT041-94B (Road and Fence Construction West of Campo)

Some hazardous and toxic materials likely would be used during the course of project construction, including fuels, oils, and other chemical products. To minimize any short-term impacts related to these materials, maintenance and refueling of equipment would occur at equipment storage areas. Storage, handling, and disposal of petroleum, oil, lubricants, and other chemical products at this site would be performed in accordance with applicable regulations. Disposal of waste products would occur offsite at licensed facilities. No long-term impacts related to hazardous and toxic materials or waste is anticipated.

JT041-94C (Fence Construction East of Campo)

Potential short- and long-term impacts related to public health and safety arising from construction and establishment of new roads and fencing and from repair and possible realignment of existing roads are the same as those discussed above for project segment JT041-94B.

JT041-94D through G

Potential short- and long-term impacts related to public health and safety for these segments of the project area would be similar to those impacts described above for the JT041-94B segment. However, at this time detailed information describing construction equipment, equipment staging and bivouac areas, construction personnel, and construction duration are not available. Therefore, prior to construction at these segments, relevant resource agencies would be notified and an addendum to this EA would be prepared to comply with all applicable environmental laws and regulations.

6.13 CUMULATIVE IMPACTS

Aside from the proposed action, no other large-scale public or private development projects have been identified for the region. The potential short-term environmental impacts arising from implementation of each project segment (JT041-94B/C through JT041-94G) would not be compounded since these segments currently are not planned to occur simultaneously.

Long-term cumulative environmental consequences would be related to the permanent structure of the fence and establishment of new and improved roads. Cumulative impacts of fence construction would largely be those aesthetic impacts related to the eastward advance of metal fencing along the US-Mexico border in San Diego County. Improvements to existing roads taken together with new road construction in the region would facilitate access to the project areas. Given the existing limited recreational opportunities and attractions in the project areas, substantial increases in use of these border roads is unlikely. As stated above, these regional border road improvements would increase the effectiveness of the U.S. Border Patrol agents in the area.

Long term impacts to local biological resources will include the removal of vegetation from areas identified in the EA which will total approximately 65 acres of vegetation of varying quality. The net loss of vegetation may adversely impact local fauna through the loss of habitat for foraging, roosting, breeding, and inhabiting. The impacts to local flora will occur
over an extended period and impact a total area estimated to be 65 acres extended over 17 miles along the international border.

The greatest impact may be to wildlife whose movement across the border will be prevented in valleys where fences will be constructed. Wildlife will be able to migrate between the two countries by circumventing the fence at endpoints or traversing over higher elevation terrain which exists between proposed fence segments. This impact may be insignificant as wildlife movement currently is restricted by the existing agricultural fence which is aligned 60 feet north of the U.S.-Mexico border. Any specific impacts to wildlife movement across the border at sites proposed for fence construction is not known from available information. Improvements in habitat quality may arise from the restriction of cattle grazing in the border area following establishment of the fence.

Further removal of vegetation and continued associated loss of potential habitat for roosting, nesting, and foraging and the potential impedance of wildlife movement in these project areas are compounded by similar border fence and road projects either completed or under construction westward from Campo and at various sites to the east along the U.S.-Mexico border.
7. COORDINATION

The proposed project presented in this document is being or will be brought to the attention of and/or discussed with representatives of the following agencies: U.S. Border Patrol, Army Reserve, California National Guard, International Boundary and Water Commission, U.S. Soil Conservation Service, U.S. Bureau of Land Management, Regional Water Quality Control Board-San Diego, San Diego County Air Pollution Control District, California Department of Fish and Game, California State Historic Preservation Officer, and numerous departments of the San Diego County government.

Jerry Carrier, Senior Inspector for the San Diego County Air Pollution Control District, stated in a telephone conversation on 25 March 1994 that typical construction activities in San Diego County—such as grading and standard construction equipment—do not require permits. As construction activities increase in scale, permits do become required for stationary air contaminant sources. For example, permits are required for electrical generators exceeding 200 horsepower, large-scale concrete or asphalt batch plants, or sandscreens. He also explained that general guidelines by the San Diego County Air Pollution Control District encourage mitigation of all dust generated from construction activity.

Representatives from the San Diego County Air Pollution Control District Public Affairs Office stated by telephone on 24 March 1994 that the air quality monitoring station used by the APCD closest to the project area is located at Alpine. APCD reports that ozone (O3) levels at Alpine—with a maximum one-hour concentration of 17 parts per hundred million—exceed Federal standards 12 days per year and exceed state standards 30 days per year. No other pollutants are reported in excess of either Federal or state standards at Alpine. As a whole, San Diego County is a nonattainment area (i.e., does not meet Federal clean air standards) for ozone and particulate matter (PM-10).

Two representatives of the San Diego County Department of Public Works' Flood Control District have conveyed that mapping of potential floodplains has not been performed for any portion of the project area by either the county Flood Control District or by FEMA. Consultation with representatives of the Federal Emergency Management Agency by telephone on 24 March 1994 and inspection of FEMA floodplain map inventories corroborate the report of no floodplain maps.

On 1 April 1994, in a telephone conversation with Robert Morris, a Senior Engineer with the Regional Water Quality Control Board, San Diego (RWQCBSD), he stated that proposed project grading and soil disturbance would require Stormwater Pollution Prevention Plan for construction activities and associated permitting would be required by the State Water Resources Board. Since the proposed project calls for no discharge of waste into or disturbance of surface or groundwater, no additional concerns are held by RWQCBSD. However, if during the course of project construction illegal disposal sites of hazardous materials or unexpected sites of contaminated soils are discovered, RWQCBSD would need to be notified to assess any required cleanup procedures.

Allen Foraker, Patrol-Agent-in-Charge for U.S. Border Patrol, Campo Station, during field visits and telephone conversations in March 1994 has explained the necessity for the proposed project and statistics on illegal narcotics trafficking through the project area as well as logistics for proposed
construction, and equipment staging and bivouac sites, and water sources for construction of the JT041-94B and JT041-94C segments of the proposed project.

Mr. Foraker will coordinate with Mr. Butch Campbell of the California Department of Forestry to determine requirements for collecting and storing vegetation from the project area to be disposed as per phone conversation of April 22, 1994.

A telephone conversation on 28 March 1994 with Lt. Col. Woody Fogg of the 368th Engineering Battalion of the Army Reserve in Manchester, New Hampshire, confirmed locations of the bivouac site, equipment staging area, and construction water sources; personnel strength for construction; and type, sources, and delivery of construction equipment to be used for construction of the JT041-94B and JT041-94C segments of the proposed project.

During site visits with Carl Anderson of the California National Guard in November 1993 and March 1994, he explained personnel strength, construction equipment, and road engineering and realignment plans for upgrade of existing roads in the project area.

In a telephone conversation on 31 March 1994 with Howard Mueller of the Soil Conservation Service, Escondido Field Office, he reported that although some prime farmland soils (Reiff fine sandy loam and Indio silt loam) are found in the project area, construction of the proposed fence and access roads and upgrade of existing roads should have no adverse effect on the region's soils given the undeveloped nature of the region and the linear aspects of the construction proposals.

On 29 March 1994, Mike Selman, a Realty Specialist with the U.S. Bureau of Land Management in Palm Springs, stated that issues regarding BLM would be limited to road upgrade and new road construction on BLM land. Any road work performed on BLM land would require applications for rights-of-way (completion of Standard Form 299 [SF 299]) with terms of conditions addressing soil erosion and visual impacts.

Conrad G. Keyes, Jr., of the International Boundary and Water Commission in El Paso on 29 March 1994, expressed in a telephone conversation that the border fence setback should allow access to the international boundary monuments with lines-of-sight between those monuments remaining unobstructed. He previously has stressed the preservation of existing drainage patterns across the international boundary and the prevention of pollution along the border (regarding sanitation). Mr. Keyes requested a copy of the EA for review.

A letter requesting a list of endangered, threatened, and candidate species was requested from the U.S. Fish and Wildlife Service on January 20, 1994; a response was forwarded to the Corps on January 27, 1994.

The California Department of Forestry was contacted in March 1994 regarding disposal of vegetation removed from the project area. Mr. Butch Campbell agreed to provide guidance and supervision to the California National Guard for disposal of vegetation by controlled burns during the burning season. The removed vegetation will be stockpiled in appropriate locations until the burning will take place.

On May 4, 1994, the project was coordinated with Bruce Henderson of the Regulatory Branch of U.S. Army Corps of Engineers, Los Angeles, who stated
that the proposed action segments JT041-94B and C qualifies for under regulatory permit under the Nationwide Permit No. 14: Road Crossing (33 CFR Part 330). Further coordination will be performed with Regulatory Branch, San Diego, for segments JT041-94D through JT041-94G when more detailed information regarding construction of these segments becomes available.
8. COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS

8.1 National Environmental Policy Act (NEPA), as amended. This EA has been prepared in accordance with requirements set forth by the Act and with the Council of Environmental Quality (CEQ) Regulations for implementing NEPA.

8.2 Clean Water Act, as amended. Limited construction activity will occur near water channels; therefore, no changes to the water quality in the area are anticipated. In compliance with Section 404 of the Act, a 404(b) will be prepared and included as an appendix to this EA.

8.3 Clean Air Act, as amended. The limited amount of construction equipment needed for this project and the short duration of the work will not significantly impact the air quality of the area. This proposal is in compliance with the Act.

8.4 National Historic Preservation Act of 1966 (36 CFR 800). A letter dated April 29, was sent to the California State Historic Preservation Officer (SHPO) transmitting the Corps determination that the proposed project would not effect resources listed on, or eligible for, the National Register of Historic Places. Once the SHPO concurs with this determination, or the thirty day review lapses, JTF-6 will be in compliance with the act.

8.5 Endangered Species Act of 1973, as amended (Public Law 93-205). Section 7(c) of the Act requires consultation with the U.S. Fish and Wildlife Service in order to determine if a Federal action will potentially affect an endangered or threatened species in order to ensure that the proposed project will not jeopardize the continued existence of an listed species of result in the destruction of critical habitat. A letter requesting information regarding endangered, threatened and proposed species for the project area was sent to the U.S. Fish and Wildlife Service on January 20, 1994. A letter dated January 27, 1994 provided by USFWS listed the endangered, threatened, proposed, and candidate species. The proposed project is not expected to affect the continued existence of an endangered or threatened species with the potential to occur in the project area and formal consultation pursuant to section 7 of the Act is not required.

8.6 Fish and Wildlife Coordination Act, as amended (Public Law 95-217). This project has been formally coordinated with the U.S. Fish and Wildlife Service. While the views and recommendations of the USFWS have been requested, no Coordination Act report is necessary due to no development of water resources. The project is in compliance with this Act.

8.7 Executive Order 11900, Protection of Wetlands. Wetlands protection includes the avoidance to the maximum extent possible of long and short term adverse impacts associated with the destruction or modification of wetlands and avoidance of support of new construction in wetlands. The proposed project involves placement of culverts in washes.

8.8 Farmland Protection Policy Act, 1981 (Public Law 97-98). No unique farmland or farmland of statewide importance would be affected by the proposed project. The only prime farmland within the proposed project area (segment J041-94F) currently is not cultivated and is located on land within 60 feet of the international boundary reserved for Federal ownership. No adverse impacts would occur on rangeland used for grazing. The proposed project is in compliance with this Act.
8.9 Executive Order 11988, Floodplain Management. This Executive Order states that before an action may be undertaken, agencies will determine whether the action will occur in a floodplain. Such a determination would need to be accomplished prior to construction in project area segments JT041-94E and JT041-94F.

8.10 Nationwide Permit No. 14: Road Crossing (33 CFR Part 330). Installation or upgrade of as many as nine culverts would be required during the construction of new roads and existing road repair for segments JT041-94B and JT041-94C. The proposed project qualifies under regulatory permit under the Nationwide Permit No. 14: Road Crossing (33 CFR Part 330). For installation of each culvert, less than one-third acre of land would be disturbed. At this time, the construction will occur only for segments JT041-94B and JT041-94C. Further coordination would be conducted with the Regulatory Branch, San Diego, for segments JT041-94D through JT041-94G when more detailed information regarding construction of these segments becomes available.

8.11 Stormwater Pollution Prevention Plan. A Stormwater Pollution Prevention Plan will be prepared prior to construction and a Notice of Intent will be submitted to the California Water Quality Control Board prior to construction.
9. COMMITMENTS

The following commitments apply to each project segment JT041-94B through JT041-94B, as described in Section 3.1, independently, and must be accomplished for each segment of the proposed action.

9.1 Thirty days prior to construction, JTF-6 will inform IBWC of the approximate construction starting date, type of equipment to be used, and the number of personnel involved.

9.2 A qualified archaeological monitor will be on site to ensure that all sensitive areas will be flagged and avoided by construction crews. If buried archaeological deposits are encountered during ground disturbing activities, the archaeological monitor will halt all work in progress and ensure compliance with the provisions of 36 CFR 800.11–Properties discovered during implementation of an undertaking.

9.3 The proposed project will not disturb or alter existing drainage patterns and flow rates.

9.4 Appropriate control techniques, namely culverts, will be used during construction along and within washes to control potential erosion and guide surface water flow.

9.5 A watering program will be employed during construction to minimize dust and particulate matter; the water will be obtained from a local source and will be free of contaminants.

9.6 Clean material will be used to construct all structures; no polluted silts or other material will be placed in washes; debris and rock will be removed upon completion of the project.

9.7 During construction, any rocks, sand, oil, grease, or other debris will be removed and properly disposed.

9.8 Access roads parallel to the fence will be repaired and/or constructed to a width of approximately 24 feet including the fence alignment; road widening of existing unpaved roads and jeep trails will not exceed 24 feet from the current typical width of 12 feet.

9.9 A qualified biologist familiar with the Environmental Assessment, including commitments and mitigation, will be present at critical times of the project, including mobilization, construction in sensitive areas, and demobilization to provide guidance to construction personnel in order to avoid or minimize impacts to sensitive resources.

9.10 Qualified biologists will survey the site for biological resources, including threatened and endangered species, prior to construction in areas of the project where a specific road or fence alignment was not established during the planning stages. These surveys will ensure that no impacts will occur to federally listed, proposed, or candidate species and that no impacts impair the movement of deer or large predators across the international boundary.

9.11 A fire hazard will exist in and near the areas where welding equipment will be used, such as the panel assembly areas and fence erection areas.
Suitable fire suppression precautions and/or equipment will be readily available in these areas.

9.12 The U.S. Border Patrol will coordinate this project with any entity from Mexico with an interest in this proposed project.

9.13 Mature oak trees in the project vicinity will be avoided and will not be disturbed. Exotic trees which occur in the project will be avoided, if possible.

9.14 Large debris found in the proposed fence corridor will be collected from the project area by construction personnel and arrangements for debris disposal will be made by the U.S. Border Patrol. No hazardous waste will be collected during the course of the project.

9.15 Within the 60-foot international boundary strip, BLM is not the administering agency, therefore construction can proceed in this area. JTF-6/California National Guard will submit required permit applications to BLM to work on BLM-administered land. Road repair and construction on BLM land will not occur until permission is obtained from BLM.

9.16 An evaluation will be made at the inception of the construction of the fence across the Oneill Valley (JT041-94G) to determine if the project area is suitable habitat for the proposed endangered species, the flat tailed lizard.

9.17 Storage of vegetation until a burning program can be initiated will follow guidelines set forth by the California Department of Forestry and will utilize land that is already degraded for storage.

9.18 Gray water will be stored in tanks; a contractor will transport and dispose of gray water in an approved manner.
10. LIST OF PREPARERS AND REVIEWERS


Emily Carter, Ecologist
Richard Perry, Archeologist
Steve Dibble, Senior Archeologist

Preparers. Robert D. Niehaus, Inc. Santa Barbara, California.

Aaron Goldschmidt, Environmental Scientist

10.2 Reviewers. U.S. Army Corps of Engineers, Los Angeles District.

Laura Tschudi, Chief, Environmental Design Section
Joy Jaiswal, Environmental Protection Specialist
Ron McDonald, Senior Ecologist
Steve Dibble, Senior Archeologist

10.3 Technical Reviewers. The Draft Environmental Assessment was reviewed by JTF-6 Staff.

LTC. DeHarde, Staff Engineer
MAJ. Hearnberger, Deputy Staff Engineer
Milton Blankenship, Environmental Protection Specialist
11. REFERENCES


San Diego County Air Pollution Control District, 1994a. Telephone conversation with staff, Public Information Office, 619/694-3307. San Diego, CA.

San Diego County Air Pollution Control District, 1994b. Telephone conversation with Jerry Carrier, Senior Inspector, 619/495-5342. San Diego, CA.


Soil Conservation Service, 1973. Soil Survey, San Diego Area. Soil Conservation Service and Forest Service in cooperation with University of California Agricultural Experiment Station, United States Department of the Interior (Bureau of Indian Affairs), and the Department of the Navy (United States Marine Corps). United States Department of Agriculture. Washington, DC.


APPENDIX A

SECTION 404(b)(1) WATER QUALITY EVALUATION
(CLEAN WATER ACT)

Prepared By:
United States Army Corps of Engineers
Los Angeles District
Los Angeles, California

June 1994
THE EVALUATION OF THE EFFECTS
OF THE DISCHARGE OF DREDGED OR FILL MATERIAL
INTO THE WATERS OF THE UNITED STATES
(Section 404 Evaluation)
JTF-6
CAMPO TO JACUMBA, SAN DIEGO COUNTY, CALIFORNIA

I. INTRODUCTION. The following evaluation is provided in accordance with Section 404 (b)(1) of the Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500) as amended by the Clean Water Act of 1977 (Public Law 95-217). Its intent is to succinctly state and evaluate information regarding the effects of discharge of dredged or fill material into the waters of the United States. As such, it is not meant to stand alone and relies heavily upon information provided in the environmental document to which it is attached. Citation in brackets [ ] refer to expanded discussion found in the Environmental Assessment (EA), to which the reader should refer for details.

II. PROJECT DESCRIPTION.

A. Location [1.2]: The project is located between Campo and Jacumba in eastern San Diego County, California, along the U.S. and Mexico border (See EA Map 1).

B. General Description [3.0]: This project entails limited repairs and improvements to existing roads; construction of new road segments; installation of fencing; and installation of culverts along approximately 28 miles of the border. This project also will include some realignment, widening, and superelevation adjustment of existing roads. Section 3 describes the project. The segments of the border proposed for fencing are those that currently allow illegal vehicular cross-border drive-through traffic. The fence proposed for construction is similar to that now in place or under construction in the vicinity of Tecate, Otay Mesa, and Imperial Beach in that it would consist of concrete-emplaced upright metal pipe posts supporting sections of welded solid steel landing mats. The proposed fence would have a maximum height of 10-feet; however, plans may call for a 5-foot-high fence in rural areas (U.S. Border Patrol, 1994).

The duration of all phases of the project currently is undetermined. Construction of the first phase of 4.0 miles of new fence and new access road would occur in June 1994. No scheduling of construction periods or construction personnel of other project phases have been identified. However, future project schedules will be affected by funding availability, weather conditions, and availability of construction personnel. Construction activity would be reduced or suspended during heavy rains or floods to reduce any potential adverse impacts to water quality. COE personnel would notify appropriate resource agencies and concerned individuals by telephone regarding any delays in project construction.
The proposed project is divided into 6 segments (JT041-94B, 94C, 94D, 94E, 94F, and 94G) and the detailed descriptions are as follows:

1) Fence construction, west of Campo, Old Port of Entry, 2.5 miles (JT041-94B, part). Construct approximately 2.5 miles of 10-foot high steel fence, near to and parallel to the border, from the Old Campo Port of Entry westward to the eastern base of the hill mounted by Border Monument 241—in Township 18 South, Range 5 East, Section 20.

1.1) Road construction, west of Campo, Old Port of Entry, 5.5 miles (JT041-94B, part). Repair or construct about 5.5 miles of roadway west from the Old Campo Port of Entry. The first 2.5 miles would parallel the proposed border fence west of the Old Campo Port of Entry, with the remaining 3.0 miles terminating southeast of Canyon City at the boundary of Sections 19 and 20 in Township 18 South, Range 5 East.

2) Fence construction, east of Campo, Old Port of Entry, 1.5 miles (JT041-94C). Construct about 1.5 miles of 10-foot-high steel fence near to and parallel to the border, from the Old Campo Port of Entry eastward to the rim of La Gloria Canyon—at the boundary between Sections 23 and 24, in Township 18 South, Range 5 East.

2.1) Fence construction, Smith Canyon to Rattlesnake Mountain, 7.0 miles (JT041-94D, part). Construct approximately 7.0 miles of 10-foot-high steel fence near to and parallel to the border, from the eastern rim of Smith Canyon, at the southern midpoint of Section 19 in Township 18 South, Range 6 East, eastward to the western base of Rattlesnake Mountain, approximately at the border of Sections 17 and 18 in Township 18 South, Range 7 East.

3.3) Road construction, east of Campo, Old Port of Entry, 22.5 miles (JT041-94D, part). Repair or construct approximately 22.5 miles of roadway east from the Old Campo Port of Entry to the Imperial County line. The border road segment beginning at the Old Campo Port of Entry parallels the International Boundary eastward for approximately 16.5 miles, over Rattlesnake Mountain, and terminates at the Lakeside Sportsman Club, just east of Jewell Valley.

3) Fence construction, west of Jacumba, Old Port of Entry, 2.0 miles (JT041-94E). Construct about 2.0 miles of 10-foot-high steel fence near to and parallel to the border, from the Old Jacumba Port of Entry westward to the base of hills known as the Chimneys, located near the western edge of Section 13 in Township 18 South, Range 7 East—upon which sits Border Monument 234.

3.1) Fence construction, east of Jacumba, Old Port of Entry, 2.0 miles (JT041-94F). Construct about 2.0 miles of 10-foot high steel fence near to and parallel to the border, from the Old Jacumba Port of Entry eastward to the western foot of Airport Mesa, upon which sits Border
Monument 232, located in the western half of Section 10 of Township 18 South, Range 8 East.

3.2) Fence construction, Airport Mesa to Carrie's Mountain, 2.0 miles (JT041-94G). Construct about 2.0 miles of 10-foot-high steel fence near to and parallel to the border, from the eastern foot of Airport Mesa to the western base of Carrie's Mountain, or from the western edge of Section 11 to the southern midpoint of Section 12 in Township 18 South, Range 8 East.

C. Authority and Purpose [1.1]: The Secretary of Defense established Joint Task Force Six (JTF-6) on 13 November 1989. The purpose of Joint Task Force Six (JTF-6) is to provide the U.S. Border Patrol, and other concerned agencies, with improved access to the border areas to spot and interdict illegal drug trafficking.

D. Description of the Proposed Discharge Sites [5.0]: The proposed discharge sites are located in the vicinity of Campo, California, for segments JT041-94B and 94C. At this time three ephemeral streams have water in their channels. However, the USGS 7.5' topographic maps of the area (Portrero and Campo) do not show any of these streams as perennial. Several gully crossings are planned for erosion control (culverts or rock emplacement). Sand bags will be used to protect banks were needed. Little, if any, discharge of materials or debris will take place. Specific information detailing proposed discharge site for segments JT041-94D through G have not been refined; however, similar erosion control measures and little discharge of materials or debris are anticipated for these project segments. reuse of discharge materials or

E. Description of Disposal Method: Any materials needing disposal will be utilized in the grading and filling of the nearby roadway during construction. Specific information detailing proposed discharge site for segments JT041-94D through G have not been refined; however, reuse of discharge materials would be performed for these segments.

III. FACTUAL DETERMINATIONS.

A. Disposal Site Physical Substrate Determinations:

1. Substrate Elevation and Slope: The project is located in the fairly rugged terrain of eastern San Diego County. The area is rather mountainous where elevations range between 2,200 and about 4,000 feet above mean sea level.

2. Sediment type: During construction of culverts sand and/or dirt particles may fall from construction materials, therefore, sediment will be compatible with the material found in the walls of the streams.
3. Dredged/Fill Material Movement: All materials to be utilized on this road (stones, sand or gravel) will be obtained from the road surface itself. In the event of heavy rains, construction would be postponed until the project areas were suitable for machines and materials. Any silt or debris that might fall into any of the streams will be removed and used for nearby road repairs.

4. Physical Effects on Benthos: Not applicable to the proposed project.

5. Other effects:

   Impact: _X_ N/A _____ Insignif. _____ Signif.

6. Action Taken to Minimize Impacts:

   Needed: _X_ Yes ____ No

Effect on Water Circulation, Fluctuation, and Salinity Determinations:

A. Effect on Water [6.3]. The following potential impacts were considered:

   a. Salinity ______N/A X INSIGNIF. SIGNIF.
   b. Water Chemistry (pH, etc.) ______N/A X INSIGNIF. SIGNIF.
   c. Clarity ______N/A X INSIGNIF. SIGNIF.
   d. Color ______N/A X INSIGNIF. SIGNIF.
   e. Odor ______N/A X INSIGNIF. SIGNIF.
   f. Taste ______N/A X INSIGNIF. SIGNIF.
   g. Dissolved gas levels ______N/A X INSIGNIF. SIGNIF.
   h. Nutrients ______N/A X INSIGNIF. SIGNIF.
   i. Eutrophication ______N/A X INSIGNIF. SIGNIF.
   j. Others ______N/A X INSIGNIF. SIGNIF.

B. Effect on Current Patterns and Circulation. The potential of discharge or fill on the following conditions were evaluated:

   1. Current Pattern & Flow ______N/A X INSIGNIF. SIGNIF.
   2. Velocity ______N/A X INSIGNIF. SIGNIF.
   3. Stratification ______N/A X INSIGNIF. SIGNIF.
   4. Hydrology Regime ______N/A X INSIGNIF. SIGNIF.
C. Effect on Normal Water Level Fluctuations: The potential effect of discharge or fill on tide and river stages is not applicable to this project.

IV. Suspended Particulate/Turbidity Determinations at the Disposal Site.

Project construction for segment JT041-94B and 94C will occur between June and August 1994. Channels will be dry for most of this period (precipitation ranges from 2 to 3 inches per month, only in the wettest months). In the event of heavy rains/flooding construction would be stopped until conditions are suitable for personnel and machines. Construction of culverts will reduce erosion, therefore, turbidity will be controlled. Disturbed areas will be seeded for erosion control.

A. Expected Change in Suspended Particulate and Turbidity levels in Vicinity of Disposal Site: These impacts are considered insignificant because they will be distributed over a relatively small area and will be short term in duration.

Impact: ______N/A_ X_ INSIGNIF. _____SIGNIF.

B. Effects (degree and duration) on Chemical and Physical Properties of the Water Column.

a. Light Penetration ______N/A_ X_ INSIGNIF. _____SIGNIF.
b. Dissolved Oxygen ______N/A_ X_ INSIGNIF. _____SIGNIF.
c. Toxic Metals & Organic ______N/A_ X_ INSIGNIF. _____SIGNIF.
d. Pathogen ______N/A_ X_ INSIGNIF. _____SIGNIF.
e. Esthetics ______N/A_ X_ INSIGNIF. _____SIGNIF.
f. Others ______N/A_ X_ INSIGNIF. _____SIGNIF.

1. Effects of Turbidity on Biota: These impacts are considered insignificant because streams within the project area are dry most of the time, involve a relatively small area and will be short term in duration.

a. Primary Productivity ______N/A_ X_ INSIGNIF. _____SIGNIF.
b. Suspension/Filter Feeders ______N/A_ X_ INSIGNIF. _____SIGNIF.
c. Sight feeders ______N/A_ X_ INSIGNIF. _____SIGNIF.

2. Actions taken to minimize impacts: In case of a flood occurrence, the project construction will be postponed until the streams areas are suitable for personnel and machines.
Robert S. Joe  
Chief, Planning Division  
Department of the Army  
Los Angeles District, Corps of Engineers  
P.O. Box 2711  
Los Angeles, CA 90053-2325  

Attn: Emily Carter, Project Ecologist  

Re: Request for Candidate, Threatened, or Endangered Species for Joint Task  
Force Six Border Fence Construction and Road Improvement/Construction  
Project, San Diego County, California (1-6-94-SP-70).  

This letter is in response to your letter requesting information on  
endangered, threatened, proposed, and candidate species, and proposed and  
listed critical habitats which may be present within the area of the above  
referenced project areas. The attached list of species fulfills the  
requirements of the Fish and Wildlife Service (Service) under section 7(c) of  

Federal agencies have the responsibility to prepare a Biological Assessment if  
the project is a construction project which may require an Environmental  
Impact Statement. If a Biological Assessment is not required, the Federal  
agency still has the responsibility to review its proposed activities and  
determine whether the listed species may be affected.  

During the assessment or review process the Federal agency or applicant may  
engage in planning efforts, but may not make any irreversible commitment of  
resources such as initiating work on the proposed project. Such a commitment  
could constitute a violation of section 7(a) of the Endangered Species Act.  
If a listed species may be affected, the Federal agency should request, in  
writing through our office, formal consultation pursuant to section 7 of the  
Act. Informal consultation may be used to exchange information and resolve  
conflicts with respect to listed species prior to a written request for formal  
consultation.  

A Federal agency is required to confer with the Service when the agency  
determines that its action is likely to jeopardize the continued existence of  
any proposed species or result in the destruction or adverse modification of  
proposed critical habitat. Conferences are informal discussions between the  
Service and the Federal agency, designed to identify and resolve potential  
conflicts between an action and proposed species or proposed critical habitat  
at an early point in the decision making process. The Service makes  
recommendations, if any, on ways to minimize or avoid adverse effects of the  

January 27, 1994  

United States Department of the Interior  
FISH AND WILDLIFE SERVICE  
ECOLOGICAL SERVICES  
Carlsbad Field Office  
2730 Loker Avenue West  
Carlsbad, California 92008  

Robert S. Joe  
Chief, Planning Division  
Department of the Army  
Los Angeles District, Corps of Engineers  
P.O. Box 2711  
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proposed critical habitat. Conferences are informal discussions between the  
Service and the Federal agency, designed to identify and resolve potential  
conflicts between an action and proposed species or proposed critical habitat  
at an early point in the decision making process. The Service makes  
recommendations, if any, on ways to minimize or avoid adverse effects of the
action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) does not apply until the species is listed or the proposed critical habitat is designated. If the proposed species is listed or the proposed habitat designated, the Federal agency determines whether or not formal consultation is required. The conference process fills the need to alert Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

Candidate species are included for the purpose of notifying a project proponent in advance of possible proposals and listings which at some time in the future may have to be considered in your planning activities. If early evaluation of a project indicates that it is likely to adversely impact a candidate species, we recommend that the Federal agency seek technical assistance from this office in an effort to avoid or reduce impacts to such species.

We want to closely coordinate with the Federal agency and applicant during the preparation of the biological assessment. Our goal would be to provide technical assistance that identifies specific features that could be incorporated into the project to avoid adverse impacts to listed species.

Should you have any questions regarding the species list provided or your responsibilities under the Act, please contact Marjorie Nelson of my office at (619) 431-9440.

Sincerely,

Gail C. Kobetich
Field Supervisor

Enclosure

"Construction Project" means any Federal action which significantly affects the quality of the human environment designed primarily to result in the building or erection of man-made structures such as dams, buildings, roads, pipelines, channels, and the like. This includes Federal actions such as permits, grants, licenses, or other forms of Federal authorizations or approval which may result in construction.
FEDERAL THREATENED, ENDANGERED, PROPOSED, AND CANDIDATE TAXA THAT OCCUR OR ARE ANTICIPATED TO OCCUR IN THE VICINITY OF THE JOINT TASK FORCE SIX BORDER FENCE PROJECT, SAN DIEGO COUNTY, CALIFORNIA (1-6-94-SP-70)

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LISTED SPECIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Birds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aleutian Canada goose</td>
<td><em>Branta canadensis tundrius</em></td>
<td>T</td>
</tr>
<tr>
<td>American peregrine falcon</td>
<td><em>Falco peregrinus anatum</em></td>
<td>E</td>
</tr>
<tr>
<td>Artic peregrine falcon</td>
<td><em>Falco peregrinus tundrius</em></td>
<td>T</td>
</tr>
<tr>
<td>Peregrine falcon</td>
<td><em>Falco peregrinus</em></td>
<td>E</td>
</tr>
<tr>
<td>Bald eagle</td>
<td><em>Haliaeetus leucocephalus</em></td>
<td>E</td>
</tr>
<tr>
<td>Least Bell’s vireo</td>
<td><em>Vireo bellii pusillus</em></td>
<td>E</td>
</tr>
<tr>
<td><strong>Plants</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gambell’s watercress</td>
<td><em>Rorippa gambellii</em></td>
<td>E</td>
</tr>
<tr>
<td><strong>PROPOSED SPECIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mammals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peninsular bighorn sheep</td>
<td><em>Ovis canadensis cremnobates</em></td>
<td>PE</td>
</tr>
<tr>
<td><strong>Birds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southwestern willow flycatcher</td>
<td><em>Empidonax traillii extimus</em></td>
<td>PE</td>
</tr>
<tr>
<td><strong>Reptiles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flat-tailed horned lizard</td>
<td><em>Phrynosoma mcallii</em></td>
<td></td>
</tr>
<tr>
<td><strong>Amphibians</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arroyo southwestern toad</td>
<td><em>Bufo microscaphus californicus</em></td>
<td>PE</td>
</tr>
<tr>
<td>California red legged frog</td>
<td><em>Rana aurora draytoni</em></td>
<td>PE</td>
</tr>
<tr>
<td><strong>CANDIDATE SPECIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mammals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexican long-tongued bat</td>
<td><em>Choenecteris mexicana</em></td>
<td>2</td>
</tr>
<tr>
<td>Greater western mastiff bat</td>
<td><em>Eumops perotis californicus</em></td>
<td>2</td>
</tr>
</tbody>
</table>
(1-6-94-SP-70)

| Spotted bat | Euderma maculatum | 2 |
| San Diego black tailed jackrabbit | Lepus californicus bennettii | 2 |
| California leaf nosed bat | Macrotes californicus | 2 |
| Occult little brown bat | Myotis lucifugus occultus | 2 |
| San Diego desert woodrat | Neotoma lepida intermedia | 2 |
| Southern grasshopper mouse | Onychomys torridus ramona | 2 |
| Pacific western big-eared bat | Plecotus townsendii townsendii | 2 |

**Birds**

| Northern goshawk | Accipiter gentilis | 2 |
| Tricolored blackbird | Agelaius tricolor | 2 |
| Southern California rufous crowned sparrow | Aimophila ruficeps canescens | 2 |
| Bell’s sage sparrow | Amphispiza bellii bellii | 2 |
| Ferruginous hawk | Buteo regalis | 2 |
| Western snowy plover (interior population) | Charadrius alexandrinus nivosus | 2 |
| Mountain plover | Charadrius montanus | 2 |
| Black tern | Chlidonias niger | 2 |
| Reddish egret | Egretta rufescens | 2 |
| California horned lark | Eremophila alpestris actia | 2 |
| Harlequin duck | Histrionicus histrionicus | 2 |
| Western least bittern | Ixobrychus exilis hesperis | 2 |
| Loggerhead shrike | Lanius ludovicianus | 2 |
| Black rail | Laterallus jamaicensis coturniculus rostratus | 2 |
| Long billed curlew | Numenius americanus | 3c |
| Mountain quail | Oreortyx pictus | 2 |
| Large-billed savannah sparrow | Passerculus sandwichensis rostratus | 2 |
| California spotted owl | Strix occidentalis occidentalis | 2 |

**Reptiles**

| Southwestern pond turtle | Clemmys marmorata pallida | 1 |
| Orange throated whiptail | Cnemidophorus hynerythrus | 2 |
| Coastal western whiptail | Cnemidophorus tigris multiscutatus | 2 |
| Barefoot gecko | Coleonyx switaki | 2 |
| San Diego banded gecko | Coleonyx variegatus abbotti | 2 |
| Northern red diamond rattlesnake | Crotalus ruber ruber | 2 |
| San Diego ringneck snake | Diadophis punctatus similis | 2 |
| Coronado skink | Eumeces skiltonianus interparietalis | 2 |
| San Diego Mountain king snake | Lampropeltis zonata pulchra | 2 |
| Coastal rosy boa | Lichanura trivirgata rosafusca | 2 |
| San Diego horned lizard | Phrynosoma coronatum blainvillei | 2 |
| Coast patch nose snake | Salvadora hexalepis virgultea | 2 |
### Amphibians

<table>
<thead>
<tr>
<th>Species</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chuckwalla</td>
<td>Sauromalus obsesus</td>
</tr>
<tr>
<td>Southern sagebrush lizard</td>
<td>Sceloporus graciusus</td>
</tr>
<tr>
<td>Two striped garter snake</td>
<td>Thamnophis hammondii</td>
</tr>
<tr>
<td>Colorado fringe-toed lizard</td>
<td>Uma notata notata</td>
</tr>
</tbody>
</table>

### Insects

<table>
<thead>
<tr>
<th>Species</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large blotched ensatina</td>
<td>Ensatina eschscholtzi klauberi</td>
</tr>
<tr>
<td>Western spadefoot toad</td>
<td>Scaphiopus hammondii</td>
</tr>
<tr>
<td>Quino (Wright's) checkerspot</td>
<td>Euphydryas editha quino</td>
</tr>
<tr>
<td>Harbison's dun skipper</td>
<td>Euphyes vestris harbisoni</td>
</tr>
<tr>
<td>Hermes copper</td>
<td>Lycaena hermes</td>
</tr>
<tr>
<td>Thorne's hairstreak</td>
<td>Mitoura thornei</td>
</tr>
<tr>
<td>Cheeseweed moth lacewing</td>
<td>Oliarces clara</td>
</tr>
<tr>
<td>Wandering skipper</td>
<td>Pseudocopaeodes eunus eunus</td>
</tr>
<tr>
<td>Brown-tassel trigonoscuta beetle</td>
<td>Trigonoscuta brunnotasselata</td>
</tr>
</tbody>
</table>

### Plants

<table>
<thead>
<tr>
<th>Species</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Diego thornmint</td>
<td>Acanthomintha ilicifolia</td>
</tr>
<tr>
<td>Dean's milk vetch</td>
<td>Astragalus deanei</td>
</tr>
<tr>
<td>Round podded (Jacumba) milk vetch</td>
<td>Astragalus douglasii perstrictus</td>
</tr>
<tr>
<td>Descanso milk vetch</td>
<td>Astragalus oocarpus</td>
</tr>
<tr>
<td>Orcutt's Brodiaea</td>
<td>Brodiaea orcuttii</td>
</tr>
<tr>
<td>Dense reed grass</td>
<td>Calamagrostis densa</td>
</tr>
<tr>
<td>Dunn's mariposa lily</td>
<td>Calochortus dumii</td>
</tr>
<tr>
<td>Payson's jewelflower</td>
<td>Caulanthus simulans</td>
</tr>
<tr>
<td>Tecate cypress</td>
<td>Cupressus forbesii</td>
</tr>
<tr>
<td>California barrel cactus</td>
<td>Ferocactus acanthodes acanthodes</td>
</tr>
<tr>
<td>Mexican flannelbush</td>
<td>Fremontodendron mexicanum</td>
</tr>
<tr>
<td>Mission Canyon bluecup</td>
<td>Githopsis diffusa filicaulis</td>
</tr>
<tr>
<td>San Diego gumplant</td>
<td>Grindelia hallii</td>
</tr>
<tr>
<td>Palmer's Haplopappus</td>
<td>Haplopappus palmeri palmeri</td>
</tr>
<tr>
<td>Palmer's grappling-hook</td>
<td>Harpagonella palmeri palmeri</td>
</tr>
<tr>
<td>Tecate tarplant</td>
<td>Hemizonia floribunda</td>
</tr>
<tr>
<td>Smooth spikeweed</td>
<td>Hemizonia pungens laevis</td>
</tr>
<tr>
<td>Curving tarweed</td>
<td>Holocarpophyllum virgata elongata</td>
</tr>
<tr>
<td>San Diego hulsea</td>
<td>Hulsea californica</td>
</tr>
<tr>
<td>Heart-leaved pitcher-sage</td>
<td>Lepechinia cardiophylla</td>
</tr>
<tr>
<td>Humboldt's tiger lily</td>
<td>Lilium humboldtii ocellatum</td>
</tr>
<tr>
<td>San Diego tiger lily</td>
<td>Lilium fairchildii</td>
</tr>
<tr>
<td>Lemon lily</td>
<td>Lilium perry</td>
</tr>
<tr>
<td>Cuyamaca meadowfoam</td>
<td>Limnanthes gracilis parishii</td>
</tr>
<tr>
<td>desert beauty</td>
<td>Linanthus bellus</td>
</tr>
<tr>
<td>Orcutt's Linanthus</td>
<td>Linanthus orcuttii</td>
</tr>
<tr>
<td>Species/Flower Name</td>
<td>Scientific Name</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>Mountain Springs bush lupine</td>
<td><em>Lupinus excubitus medius</em></td>
</tr>
<tr>
<td>Laguna Mountains aster</td>
<td><em>Machaeranthera asteroides</em></td>
</tr>
<tr>
<td>Felt-leaf Monardella</td>
<td><em>Monardella hypoleuca lanata</em></td>
</tr>
<tr>
<td>San Felipe Monardella</td>
<td><em>Monardella nana leptosiphon</em></td>
</tr>
<tr>
<td>San Diego golden star</td>
<td><em>Muilla clevelandii</em></td>
</tr>
<tr>
<td>Little mouse tail</td>
<td><em>Myosurus minimus apus</em></td>
</tr>
<tr>
<td>California adder's tongue</td>
<td><em>Ophioglossum lusitanicum</em></td>
</tr>
<tr>
<td>Hoffmann's cholla</td>
<td><em>Opuntia bigelovii hoffmannii</em></td>
</tr>
<tr>
<td>Gairdner's yampah</td>
<td><em>Perideridia gairdneri gairdneri</em></td>
</tr>
<tr>
<td>San Bernardino blue grass</td>
<td><em>Poa atropurpurea</em></td>
</tr>
<tr>
<td>Cuyamaca raspberry</td>
<td><em>Rubus glaucifolius ganderi</em></td>
</tr>
<tr>
<td>Sunny sage</td>
<td><em>Salvia eremostachya</em></td>
</tr>
<tr>
<td>Davidson's stonecrop</td>
<td><em>Sedum nivum</em></td>
</tr>
<tr>
<td>Gander butterweed</td>
<td><em>Senecio ganderi</em></td>
</tr>
<tr>
<td>San Bernardino jewelflower</td>
<td><em>Streptanthus bernardinus</em></td>
</tr>
<tr>
<td>San Diego button bush</td>
<td><em>Tetracoccus dioicus</em></td>
</tr>
<tr>
<td>Velvety false lupine</td>
<td><em>Thermopsis macrophylla semota</em></td>
</tr>
<tr>
<td>Orcutt's aster</td>
<td><em>Xylorhiza orcuitii</em></td>
</tr>
</tbody>
</table>

*(E) - Endangered *(T) - Threatened*

**(PE) - Proposed for listing as endangered**

**(PT) - Proposed for listing as threatened**

**Category 1:** Taxa for which the Fish and Wildlife Service has sufficient biological information to support a proposal to list as threatened or endangered.

**Category 2:** Taxa for which existing information indicates listing may be warranted, but for which substantial biological information to support a proposed rule is lacking.

**Category 3:** Taxa that are not currently being considered for listing as threatened or endangered:

3a - Taxa for which the Service has persuasive evidence of extinction; however, any such taxon is certain to be a high priority for listing if rediscovered.

3b - Taxa that currently do not meet the Act's definition of "species". Any such taxon could be re-evaluated in the future as a result of subsequent research.

3c - Taxa that appear to be more common than previously thought and thus are not under current consideration for listing as threatened or endangered.
APPENDIX C

DISTRIBUTION LIST
DISTRIBUTION LIST

Federal:

Colonel Mark DeHarde/Mr. Milton Blankenship
Joint Task Force Six
Fort Bliss, TX 79916

U.S. Army Corps of Engineers
Regulatory Branch
San Diego Field Office
9808 Scranton Road
Suite 430
San Diego, CA 92121

Mr. Conrad Keyes
U.S. International Boundary
and Water Commission
4171 Mesa, Suite C-310
El Paso, TX 79902-1441

Mr. Charles Jacobs
U.S. International Boundary
and Water Commission
P.O. Box 434232
San Diego, CA 92143-4232

Mr. Ted Hampton
U.S. Border Patrol
225 Kenney Street
El Cajon, CA 92020

Mr. Allen Foraker
U.S. Border Patrol
P.O. Box 68
Campo, CA 91906

Mr. Miguel A. Vallina
U.S. Border Patrol
San Diego Sector Headquarters
P.O. Box 439022
San Diego, CA 92143-9022

Mr. Allan Stein/Ms. Joan Oxendine
U.S. Bureau of Land Management
P.O. Box 2000
North Palm Springs, CA 92258-2000

Ms. Beverly Getzen
Environmental Resources Branch
U.S. Army Corps of Engineers
630 Sansome Street
San Francisco, CA 94111
Mr. James B. Turnage, Jr.
U.S. Immigration and Naturalization Service
880 Front Street
San Diego, CA 92188
ATTN: Pete Saldana

Congressman Duncan Hunter
366 South Pierce
El Cajon, CA 92020

Mr. Allen Campbell, Planner
General Services Administration
525 Market Street, 35th Floor, 9PL
San Francisco, CA 94105

Mr. Doug Eberhart
Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Lt. Col. Woody Fogg
368th Engineer Battalion
Army Reserve
Manchester, NH

Mr. Richard Zembal, Deputy Field Supervisor
U.S. Fish and Wildlife Service
2730 Locker Ave.
Carlsbad, CA 92008

Ms. Martha Gonzalez, Postmaster
U.S. Post Office
441 Tecate Road
Tecate, CA 91980

State:

Ms. Cheryl Heffley
California Department of Fish and Game
330 Golden Shore, Suite 50
Long Beach, CA 90802

Mr. Carl Anderson
California National Guard
Team Engineers
2251 Dairy Mart Road
San Ysidro, CA 92173-2840

Mr. Rick Hopkins
California Department of Transportation
P.O. Box 85406
San Diego, CA 92186-5406

Capt. Wade Rowley
3080 Buckman Springs Road
Campo, CA 91906
State Clearing House
Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814

Mr. Butch Campbell
California Department of Forestry
2550 McCain Valley Road
Boulevard, CA 91906

Ms. Cherilyn Widell
State Historic Preservation Office
Office of Historic Preservation
P.O. Box 942896
Sacramento, CA 94296-0001

Ms. Anita Casto
Southern California
Tribal Chairman’s Association
P.O. Box 1470
Valley Center, CA 92082

County:

Mr. Bruce Posthumus
Regional Water Quality Control Board
9771 Clairemont Mesa Boulevard
San Diego, CA 92124

Mr. Mark Carroll
San Diego County DPLU
5201 Ruffin Road, Suite B
San Diego, CA 92123-1666

Mr. Jerry Brull
San Diego Gas & Electric
P.O. Box 1831
San Diego, CA 92112

County of San Diego
Mr. Mike Lake, Chief of Engineering
San Diego Air Pollution District
9150 Chesapeake Drive
San Diego, CA 92123-1095

Mr. Ralph Goff
Tribal Chairman
Campo Band of Mission Indians
1779 Campo Truck Trail
Campo, CA 91906

Librarian
San Diego County Library
31466 Highway 94
Campo, CA 91906
Librarian
San Diego County Library
5555 Overland Ave.
Building 15
San Diego, CA 92123

Librarian
San Diego County Library
44511 Old Highway 80
Jacumba, CA 91934 619-766-4608

Postmaster
U.S. Post Office
J.E.B. Stuart Road
Campo, CA 91906 619-478-5466

Postmaster
U.S. Post Office
1209 N. Railroad Street
Jacumba, CA 91934 619-766-4432

Other Organizations:
Mr. Chris Ransom
Sierra Club
3820 Ray Street
San Diego, CA 92104

Ms. Norma Sullivan
Audubon Society
2321 Moreno Boulevard
San Diego, CA 92110

Editor
Mountain Empire Press
P.O. Box 1636
Boulevard, CA 91905

Editor
The Alpine Sun
2144 Alpine Boulevard
Alpine, CA 91901 619-445-3288
APPENDIX D

COMMENT LETTERS AND COMMENT RESPONSES

2. The Joint Task Force Six will need to apply for a right-of-way grant before fence and road construction can proceed on the BLM-managed public lands outside of the 60-foot international strip. A right-of-way application is enclosed.

3. The cumulative impacts section on page 67 should also analyze the cumulative impacts to wildlife and wildlife movement corridors.

4. We recommend adequate Least Bell's Vireo surveys be conducted for those riparian areas identified as willow riparian communities that may be directly or indirectly affected by fence and road construction.

5. We recommend that the amount of acres of riparian habitat impacted by the development be identified.

Thank you for considering our comments. If you have any questions, please give me a call at (619) 251-0812.

Sincerely,

Julia Dougan
ACTING Area Manager

Enclosure
ROW application

CC: CDD (CA-061 and CA-062)
RESPONSES TO COMMENT LETTER FROM
U.S. BUREAU OF LAND MANAGEMENT

Response to Comment #1:

The continuation of the border road and fence farther east from its present termination point is not proposed at this time. The presence of the Peninsular Ranges desert bighorn sheep and the potentially adverse impacts of construction will taken examined if future construction is planned. Suggested text changes to correct inaccuracies noted in the text have been incorporated into the final EA.

Response to Comment #2:

A right-of-way grant (SF 299) will be applied for when the proposed construction will impact BLM-managed land beyond the 60 foot international strip. A copy of SF 299 was requested from the Realty Division of the Bureau of Land Management’s North Palm Springs Office on 22 April 1994 and by 1 June 1994 SF 299 still had not yet been received.

Response to Comment #3:

The final EA will resummarize the cumulative impacts to biological resources, currently contained in Section 6.5, in Cumulative Impacts Section 6.13.

Response to Comment #4:

Two sites within the project area (JT041-94B) contain permanent water and support the growth of willows which provides the canopy layer of each site. The South Coast Resource Management Plan and Final EIS (BLM, 1992) describes least Bell’s vireo habitat as that characterized by a dense understory of vegetation approximately 0.6 to 3.0 meters in height. The sites in question contain an overstory of willows but the understory contains numerous small perennials and annuals less than one foot in height. The South Coast Management Plan states that no known sightings of the vireo have occurred on BLM parcels in San Diego County; the riparian areas in question are situated between two BLM parcels: #302-241 and #303-191. The construction across each riparian area is not expected to have an adverse impact on vireos. The corps proposes to conduct a site visit with a BLM biologist to assess the impact to least Bell’s vireo which may be present at the time of initiation of road construction which will traverse riparian areas prior to crossing BLM property.

Response to Comment #5:

The proposed action within the two riparian areas is the placement of a culvert over the permanent streams and may impact an area estimated to be 0.5 acre.
Regarding the visibility and permanency of the international boundary monuments, the United States and Mexico, through this and predecessor joint commissions, placed and jointly maintain monuments in this area. Diplomatic protests by the Government of Mexico have been raised regarding the intrusion of the steel fence on the visibility of the U.S./Mexico monuments that mark the international boundary. Under no circumstances would the Government of Mexico permit the incursion of personnel and equipment into Mexico to perform the metallic fence construction. The Mexican government considers the steel fence to be a barrier to the amicable and friendly relations between the governments and, therefore, it would be most improper for Mexico to cooperate with the United States in the construction of this steel fence. We will appreciate your cooperation in confining activities by equipment, materials, or personnel associated with this activity completely to United States territory and that to prevent any encroachment into Mexico, no fence be constructed or any materials placed any closer than 0.60 meters (2 feet) north of the international boundary. Where the fence is to be constructed next to the monuments themselves, it must be installed a minimum of 1.22 meters (4 feet) from the monument on a radius beginning and ending 1.83 meters (6 feet) from the monument to allow adequate room to set up survey instruments. A gate must also be installed to allow access to the monuments.

In lieu of the fence, a proposal has been tendered to consider the installation of larger, more visible, and more permanent monuments to better demarcate the international boundary. The DEA does not consider this improved boundary demarcation as having a secondary border control benefit that may satisfy the purpose and need of the proposed action. It has further been suggested that there be an 18.3-meters (60-feet) open zone to either side of these larger markers within which there would be no construction of any works by either country, including fences. We urge you to consider this improved boundary demarcation among the alternatives for the proposed action.

Regarding transboundary drainage issues, we note that your operation will involve the installation of culverts, and grading and shaping for drainage. Section 9, Commitments, of the DEA, states that the proposed project will not disturb or alter existing drainage patterns and flow rates. The governments of the United States and Mexico rely on the International Boundary and Water Commission (IBWC), United States and Mexico, to exchange and review information on transboundary drainage issues. The design of the culverts should be adequate to handle a 25-year flood event and all structures designed to prevent impediment to the free passage of flows across the international boundary. We note in Section 6.1, Physical Setting, of the DEA, that you will furnish engineering drawings, hydrology reports, and seek coordination with our agency prior to finalizing road and fence construction plans. We look forward to working with you in reviewing these plans.
INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO

MAY 20, 1994

Colonel R.L. VanAntwerp
District Engineer
U.S. Army Corps of Engineers
Los Angeles District
ATTN: Ms. Laura Tschudi
Chief, Environmental Design Section
P.O. Box 2711, Room 6650
Los Angeles, California 90053-2711

Dear Colonel VanAntwerp,

Thank you for the opportunity to review the Draft Environmental Assessment (DEA) and Draft Finding of No Significant Impact for the Border Road and Fence: Construction and Repair, Campo to Jacumba, San Diego County, California, JT041-94B/C/D/E/F/G, dated May 1994.

We note that the proposed project consists of repairs and improvements to existing roads, construction of new road segments, installation of culverts along approximately 45 kilometers (28 miles) from south of Canyon City to the San Diego County-Imperial County line. The road repair will consist of slight grading, installation of culverts, and grading and shaping for drainage. The road construction is to be adjacent to the border. Construction and placement of a 3-meter (10-foot) high border fence will take place over approximately 5.2 kilometers (17 miles) of the total distance, distributed over six locations. The fence is to be 2.5 meters (5 feet) in height in rural areas. The purpose of the project is to assist law enforcement agencies in the prevention of illegal importation of drugs along the border with Mexico.

As you are aware, the United States Section of the International Boundary and Water Commission (USBWC) by virtue of the 1944 Water Treaty (TS 994; 59 Stat. 1219) and agreements concluded thereunder by the United States and Mexico is responsible for ensuring that the United States Government meets the obligations incurred in those agreements. In this respect, we continue to ask that all work you propose along the U.S./Mexico border be performed in a manner that will not adversely impact upon: (1) the visibility and permanency of the international boundary monuments; (2) the present drainage patterns to and from Mexico, and (3) that all potential sanitation problems be properly addressed to ensure that no pollution occurs in either country.
Finally, we note that your operation will inform us thirty days in advance of the project's proposed start date, and detail the type of equipment and number of personnel to be involved. We thank you for this courtesy.

Thank you again for the opportunity to review and comment on your proposed action. Please send us two (2) copies of the final Environmental Assessment (EA) when it becomes available and please forward the engineering plans for the culvert installation and hydrology reports at your earliest possible convenience.

Sincerely,

[Signature]

Conrad G. Kayos, Jr.
Principal Engineer, Planning
Response to Comment #1:

Personnel and equipment will maintain as much distance from the monuments as possible during the periods of construction. The proposed fence will be offset from the international border and will affect neither the permanency nor the visibility of the international boundary monuments.

Response to Comment #2:

Drainages will not be changed in any part of the project area. Culverts, or other drainage features, will be constructed to protect roads and slope stability while not altering the direction of water flow.

Response to Comment #3:

Sanitation services at the billeting area for Army Reserve personnel and Marine personnel will be serviced regularly. Equipment storage sites and maintenance areas will be supervised and monitored by Officers in charge. A Storm Water Pollution Prevention Plan, under guidance of the California Regional Water Quality Control Board, also has been prepared for the proposed action.

Response to Comment #4:

Plans and specifications have been prepared to allow for these distances as minimum clearance for these features.

Response to Comment #5:

Please see response to Comment #6.

Response to Comment #6:

The steel panel fence that will be installed will be approximately 6 to 10 feet in height. JTF-6 staff have and will continue to work with the IBWC to provide access (steel doors, gates) near the international boundary monuments to allow IBWC personnel to continue maintaining and using these markers to determine the legal boundary line between the U.S. and Mexico. A gate will be installed adjacent to all monuments in the fence construction zone.

Response to Comment #7:

Culverts will be designed to accommodate 25-year flood events and no structures will impede the free passage of flow across the international boundary. As noted in Section 6.1, Physical Setting, coordination with IBWC and other interested agencies will be performed prior to finalizing road and fence construction plans (including provision of engineering drawings and hydrology reports) particularly near Jacumba when construction activities may fall within the floodplain of Boundary Creek. Currently, construction would commence only for project segments JT041-34B and C; in the future, JTF-6 staff will continue to coordinate with IBWC when construction for other project segments is scheduled at locations east of Campo, near Jacumba, or within the Boundary Creek floodplain.
United States Department of the Interior
FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
CARLSBAD FIELD OFFICE
2730 Loker Avenue West
Carlsbad, California 92008

May 23, 1994

Colonel Robert VanAntwerp, District Engineer
Los Angeles District, Corps of Engineers
P.O. Box 2711
Los Angeles, California 90053-2325

Attn: Ms. Laura Tschudi, Chief, Environmental Design Section

Re: Draft Environmental Assessment for Border Road and Fence: Construction and Repair, Campo to Jacumba, San Diego County, California (JTO41-94B/C/D/E/F/G)

Dear Colonel VanAntwerp:

The Fish and Wildlife Service (Service) has reviewed the draft Environmental Assessment (EA) prepared by the U.S. Army Corps of Engineers (Corps) for the Joint Task Force Six (JTF-6) project in San Diego County, California. The proposed project consists of repairs and improvements to existing roads; construction of new road segments; installation of fencing; and installation of culverts along approximately 28 miles of the border between the towns of Campo and Jacumba. The proposed road construction will be adjacent to and parallel to the border. The roads will have a maximum width of 24 feet and be utilized for the construction and placement of a 10 foot high border fence except in rural areas where a five foot high fence will be installed. An overall assessment of project impacts to biological resources, and recommendations to mitigate those impacts are presented below.

The dominant plant community which would be impacted by the project consists of chaparral vegetation. Approximately 48.55 acres of chaparral would be eliminated by fence and road construction. An additional 10.80 acres of creosote scrub and desert transition chaparral communities would be impacted by the project.

Project construction activities would also cross 27 drainages, with 24 being ephemeral streams and three of the drainages having permanent water. Permanent water is contained in two drainages that flow north from Mexico into Campo Creek and one drainage between Smith Canyon and Monument #237. The project would impact an undisclosed number of willow, mulefat and oaks found within these drainages.

Impacts to wildlife will result from the direct removal of chaparral, creosote scrub, and riparian habitat. The EA did not address a proposed revegetation program to offset the habitat that would be permanently destroyed by the proposed project. The Biological Resources section of the EA, (e.g. pages 29-33) describe a wide diversity of plant species located...
Colonel Robert VanAntwerp

within a segment of the County which has been relatively undisturbed. The Service believes the final EA must address the projected losses of native vegetation given the cumulative losses of habitat that would occur with this project and the previously completed segments of JTP-6 fence and road adjacent to the Tijuana River Valley, Otay Mesa, Tijuana, and San Ysidro. A revegetation plan for the project should be incorporated into the final EA and be a specific commitment in Section 9 of your document.

The project should result in no net loss of riparian habitat. This habitat supports a greater diversity of migratory birds than other habitat found in southern California. Any loss of riparian habitat should be replaced at a 3:1 ratio. Any willow or sagebrush vegetation removed by construction activities should be used in the revegetation effort for the project.

Impacts to all oaks found in the construction corridor should be avoided and not solely be limited to mature individuals as identified on page 77. commitment 9.13 of your draft EA. This commitment also discussed the avoidance of “exotic trees”. If “exotic trees” refers to non-native species, it is recommended this vegetation be removed from the project area, unless it is determined that they provide important migratory bird nesting habitat.

A 1:1 replacement ratio should be applied to all chaparral and creosote scrub habitats cleared by construction activities. Chaparral can be planted or seeded in areas recently disturbed and locations where exotic or non-native vegetation has become established.

A significant reduction in habitat losses could occur if the width of the proposed roads (i.e. 24 feet) could be reduced. It is stated on page 76, commitment 9.8 that “road widening of existing unpaved roads and jeep trails will not exceed 24 feet from the current typical width of 12 feet.” Why does the existing road width need to be doubled from 12 feet to 24 feet? There is no justification provided for this potential loss of habitat. In addition, we recommend that in constructing new roads or widening existing ones if necessary, that the vegetation not be cleared but simply driven over by construction vehicles. This would result in the roots of vegetation being left in the ground and increase the likelihood of plants particularly along the edge of the road or fence resprouting during the next rainy season.

Significant issue of concern to the Service is the likelihood of the fence to block wildlife movements between the United States and Mexico. A particular concern is the blockage of wildlife corridors, for mammals. Placement of a fence in natural wildlife corridors such as large drainages, canyons and along ridge tops could result in mammals being restricted from potential sources of water, food or shelter. During times of wildfires the fence could be a death trap for mammals attempting to escape the fire. The fence should be designed with periodic gaps to allow mammal movement along the border. The gaps could be designed to prevent vehicles from crossing the border. We recommend a meeting be immediately held with California State Parks, Anza-Borrego Desert, California (619/767-5311), Don Armentrout, Bureau of Land Management, Riverside, California (909/697-
Colonial Robert VanAntwerp

§239), California Department of Fish and Game and the Service to identify where gaps should be placed in the fence in order to allow wildlife movement. In addition, you should be aware the eastern terminus of the fence is adjacent to habitat of the Peninsular desert bighorn sheep, a proposed endangered species. Any proposed extension of the fence project to the east would result in a "may affect" situation for this species and would potentially result in the need for the Corps of Engineers to conference with the Service.

There is a potential for several proposed endangered species including the flat-tailed horned lizard, arroyo southwestern toad, and California red-legged frog to be present in the proposed construction corridor. In addition, the Service has identified 16 species of reptiles, and 2 species of amphibians that are currently candidate species which could occur within the project area. A commitment should be included in your final EA for a biologist who can identify these species to walk the construction corridor just prior to an area being disturbed for the purpose of relocating any proposed endangered or candidate species of reptiles or amphibians to prevent them being killed or injured by construction activities. The wording of commitment 9.10 on page 76 should be revised to ensure surveys will be made by qualified biologist(s) knowledgeable in the identification of reptiles and amphibians just prior to an area being disturbed.

A final concern is the potential for vegetation being removed containing active nests. The Migratory Bird Treaty prohibits the take of nests, eggs and young without a permit for take. Construction during the nesting season must avoid active nests and ensure that there is a sufficient buffer adjacent to active nests to protect the nest from being abandoned due to construction activities. This needs to be made a commitment in Section 9 of your final EA.

In conclusion, the Service believes the current project design is inadequate to protect resident and migratory wildlife species. The Corps of Engineers needs to specifically address above identified mitigation measures including the need to hold a meeting to identify the location of wildlife movement corridors that can be included within the proposed fence design. Provided these mitigation measures can be incorporated into the project and be reflected in your final EA, the Service would support the project as proposed. If you have any questions concerning these comments, please contact Martin Kenney of this office at (619) 421-9440.

Sincerely,

Gail C. Kobetich
Field Supervisor

cc: California State Parks, Anza-Borrego Desert, CA (Attn: M. Jorgensen)
    BLM, CA Desert District, Riverside, CA (Attn: D. Armantrount)
    CBPO, San Diego, CA (Attn: R. Botta)
RESPONSES TO COMMENT LETTER FROM
U.S. FISH AND WILDLIFE SERVICE

Response to Comment #1:
While there would be some minor impacts to chaparral and creosote scrub vegetation, these impacts are considered to be minor, due to the extent of these vegetation types occurring within the region. While the EA discusses the impacts to the chaparral and creosote scrub vegetation, no mitigation is proposed because of the insignificance of the impacts. Because this EA discussed only the impacts of segments JT041-94B and C, there would be no impacts to any significant vegetation types (e.g., riparian vegetation) which occur in other areas. The cumulative impacts of the project include the entire border area, and are discussed in the overall EIS for the JTF-6 project. Therefore, an exhaustive description of cumulative impacts is not included in this EA. Because there are no impacts to significant resources in the area, no specific commitment is made in Section 9.

Response to Comment #2:
There will be no loss of riparian habitat as a result of construction of project segment JT041-94B and C.

Response to Comment #3:
All oak trees will be avoided to the extent practicable. Any "exotic trees" that are non-native species will be removed from the project area.

Response to Comment #4:
There is no plan to replace chaparral and creosote scrub habitats because the impacts are not significant and the resources, as viewed in the regional context, are not significant.

Response to Comment #5:
Construction of the roads will be kept to the minimum possible width consistent with the JTF-6 mission.

Response to Comment #6:
Current studies indicate that the construction of project segments JT041-94B and C will not affect wildlife corridors. While project segments JT041-94D, E, F, and G have the potential to affect wildlife corridors, these project segments currently are deferred. An interagency meeting, as requested, will be held during planning for these project segments.

Response to Comment #7:
While the potential for impacts to these species is considered to be insignificant, a Corps biologist will survey the project area prior to construction to confirm that the species are not present.

Response to Comment #8:
All active nests will be avoided to the extent possible during construction.
June 1, 1994

Colonel R. L. VanAntwerp
District Engineer
U. S. Army Corps of Engineers
Attn: Ms. Laura Tschudi (CESPL-PD-RL)
P. O. Box 2711, Room 6650
Los Angeles, California 90053-2325

Dear Ms. Tschudi:

The State submitted a letter on May 25, 1994 on the Joint Task Force Six, Department of Defense, Draft Environmental Assessment for Border Road and Fence, Construction and Repair, Camp to Jacumba, San Diego County. Since that time the Department of Parks and Recreation has submitted the attached comments for your consideration.

Thank you for your additional attention to this matter.

Sincerely,

[Signature]

for James T. Burroughs
Deputy Secretary and General Counsel

Attachment

cc: Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814
(SCH 94044002)
May 27, 1994

Department of Water Resources
1416 Ninth Street, Room 449
Sacramento, CA 95814
ATTN: Nadell Gayou

Dear Ms. Gayou:

Re: Draft Environmental Assessment; Border Road and Fence: Contraction and Repair; Campo to Jacumba, San Diego County, California; JT 041-94B/C/D/E/F/G: SCH # 94054002.

Staff of the California Department of Parks and Recreation at Colorado Desert District has recently received and reviewed a copy of the above referenced Draft Environmental Assessment (DEA). Although the document is dated May 1994, we have been informed by Ms. Laura Tschudi of the U.S. Army Corps of Engineers that the project is scheduled to begin construction on June 1, 1994, a schedule which does not permit ample response time for interested agencies and other parties to review and provide input on the DEA.

Anza-Borrego Desert State Park (ABDSP), a unit of the Colorado Desert District, is a 600,000 acre park whose southern boundaries reach within two miles of the proposed fencing project. Of the entire U.S. population of Peninsular Bighorn Sheep, a federally listed proposed endangered species, approximately 80%, or 300-350, live within ABDSP, and utilize the Myers Valley-Pinto Wash area as a migratory corridor between the United States and Mexico. Although we agree that the project as delineated, ending at Jacumba Airport, will probably not affect bighorn sheep, any extension of the fence toward the east would definitely adversely impact the dwindling population, as well as limit the migratory range of other large mammals, including deer and mountain lion.

In the future, if consideration is given to extending the Border Fence Project farther to the east, the Colorado Desert District recommends development of a full EIS, and requests the opportunity to provide input at the early
stages, with ample time for public review. If you have any questions, please contact Bettina Townsend, Park Planner, at (613) 767-5311.

Sincerely,

[Signature]

David H. Van Cleve,
District Superintendent
RESPONSES TO COMMENT LETTER FROM
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

Response to Comment #1:

Please see response to Comment #1 of the U.S. Bureau of Land Management Comment Letter.

Response to Comment #2:

Please see response to Comment #1 of the U.S. Bureau of Land Management Comment Letter.