

IX. ALTERNATIVES TO THE PROPOSED PROJECT

This section discusses five alternatives to the proposed General Plan Update for the County of Imperial. The alternatives examined are the "Increased Agriculture Alternative," the "Increased Development Alternative", the "Modified Staff Alternative", the "Environmental/Open Space Alternative", and the required "No Project Alternative".

A. Increased Agriculture Alternative

1. Description

The Increased Agriculture Alternative designates more land as Agriculture than does the proposed Plan Update. Under this alternative, the size Urban Area of three cities and one unincorporated community would decrease, two Specific Plan Areas (SPAs) would be removed, and the size of two SPAs would be reduced. The area of Important Farmland designated as Agriculture is larger and, like the proposed Plan Update, no land shall be removed from the Agriculture category for a period of five years except where needed for use by a public agency, for geothermal purposes, where a mapping error may have occurred, or where a clear long term economic benefit to the County can be demonstrated through the planning and environmental review process. This alternative also designates a portion of the East Mesa as Agriculture, as it is under the existing 1973 General Plan, rather than as Recreation/Open Space. This distinction has no immediate or foreseeable effect on agricultural production or the preservation of Important Farmland. All other aspects of this alternative Plan would be the same as the proposed Plan Update.

The Increased Agriculture Alternative reduces several land use, agricultural, and other impacts. Agricultural development of the East Mesa would be limited to private lands and could cause yet undefined impacts to resources located within BLM Areas of Critical Environmental Concern (ACEC). As with the proposed Plan Update, this alternative also accommodates projected growth for the County. All goals, objectives, programs, and policies of the proposed Plan Update would be met through implementation of this alternative. The specific differences of this alternative, relative to the proposed Plan Update, are described below by land use classification.

a. Agriculture

The area designated as Agriculture increases from 588,417 acres under the proposed Plan Update to 761,422 acres under this alternative (Table 26). The majority of this 173,005-acre increase, however, is contributed by the designation of 163,585 acres in East Mesa as Agriculture rather than Recreation/Open Space (Figure 25). The designation of this East Mesa area as Agriculture is consistent with the existing 1973 General Plan, however, it is not consistent with BLM ACEC designations.

TABLE 26
LAND USE DISTRIBUTION FOR THE PROPOSED GENERAL PLAN UPDATE,
INCREASED AGRICULTURE ALTERNATIVE,
AND INCREASED DEVELOPMENT ALTERNATIVE (IN ACRES¹)

	Proposed Plan Update	Increased Agriculture Alternative	Increased Development Alternative	Modified Staff Alternative	Environmental Open Space Alternative
Agriculture	588,417	761,422	565,887	584,817	597,837
Community Area	136,862	136,862	29,700	136,862	136,862
Government/Special Public	550,464	550,464	550,464	550,464	550,464
Industry	600	600	600	600	600
Recreation/Open Space	1,558,507	1,394,922	1,655,837	1,558,507	1,558,507
Rural Residential	4,500	4,500	13,252	4,500	4,500
Specific Plan Area	22,520	19,160	29,420	23,620	19,160
Special Purpose Facility	1,970	1,970	1,970	1,970	1,970
Urban Area	78,240	72,180	94,950	80,740	72,180
Total	2,942,080	2,942,080	2,942,080	2,942,080	2,942,080

¹ All acreages are approximations and should only be used for informational purposes.

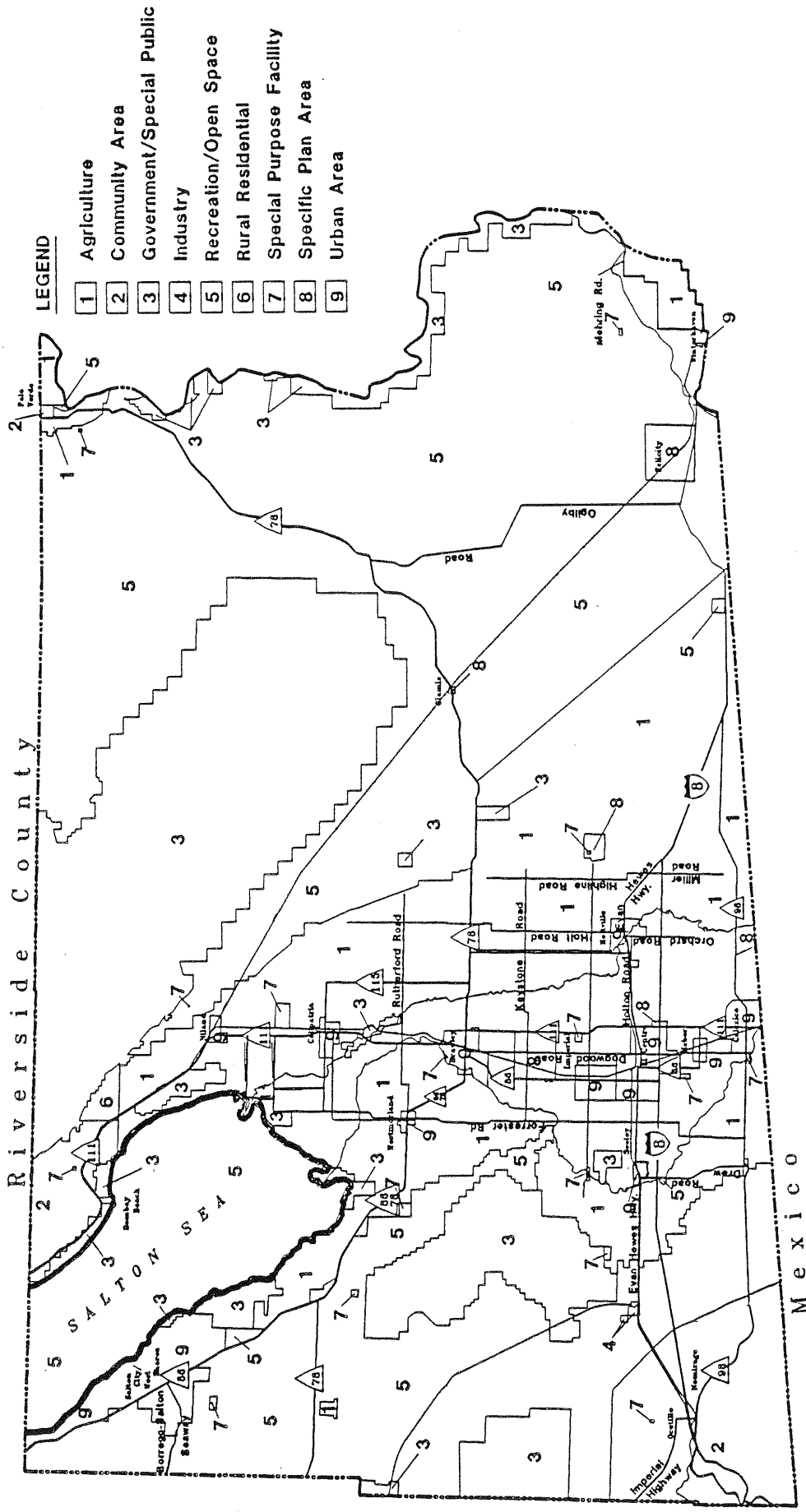
A more important distinction between this alternative and the proposed Plan Update is the designation of 9,420 additional acres of currently productive agricultural land in Imperial Valley as Agriculture. Virtually all this land is Important Farmland. The additional Agriculture area comes from decreased Urban Area land (6,060 fewer acres) and SPA land (3,360 fewer acres). As detailed below, the Tamarack Canyon Ranch SPA and Bravo Ranch SPA are excluded from this alternative; also excluded are small portions of the I-8/SR-111 SPA and East Border Crossing SPA.

b. Community Area

The areas encompassed by this land use classification for this alternative are the same as those for the proposed Plan Update.

c. Government/Special Public Category

The areas encompassed by this land use classification for this alternative are the same as those for the proposed Plan Update.



Imperial County
General Plan

Increased Agriculture Alternative

Figure
25

d. Industry

The areas encompassed by this land use classification for this alternative are the same as those for the proposed Plan Update.

e. Recreation/Open Space

Approximately 163,585 acres of the East Mesa area are designated as Agriculture under this alternative. This designation is consistent with the existing 1973 General Plan.

f. Rural Residential

The areas encompassed by this land use classification for this alternative are the same as those for the proposed Plan Update.

g. Specific Plan Area

Two SPAs in the proposed Plan Update are excluded from the Increased Agriculture Alternative, and the areas of an additional two SPAs are reduced. More specifically, the Tamarack Canyon Ranch SPA (1,200 acres) and the Bravo Ranch SPA (1,790) are excluded; the East Border Crossing SPA excludes land north of SR-98 and is reduced to 1,250 acres; and the I-8/SR-111 Interchange SPA excludes land west of SR-111 and is reduced to 160 acres. In all, this alternative has a combined area of 19,160 acres in SPAs versus a combined area of 22,520 acres for the proposed Plan Update.

h. Special Purpose Facility

The areas encompassed by this land use classification for this alternative are the same as those for the proposed Plan Update.

i. Urban Area

A principal difference between the Increased Agriculture Alternative and the proposed Plan Update is the decrease of Urban Areas for four cities: Brawley, Calexico, Imperial, and Seeley (see Figure 25). In all, approximately 6,060 fewer acres would be designated as Urban Area under this alternative (Table 26); virtually all this acreage would be designated as Agriculture. Under this alternative, the Urban Area boundaries would remain the same for Calipatria, El Centro, Heber, Holtville, Niland, Westmorland, West Shores/Salton City, and Winterhaven. The Urban Area boundaries and sizes for the cities that would be reduced are as follows:

Brawley Urban Area. This 6,000-acre area includes the City of Brawley and is generally bounded on the west by the New River; on the north by Shank Road; on the east by Dogwood Road, State Highway 111, and Best Road; and on the south by Mead Road.

Calexico Urban Area. This 5,650-acre area includes the City of Calexico, with the City of Mexicali, Republic of Mexico, located to the south. The Plan Area is generally bounded on the west by Kloke Road, State Route 31, and the New River; on the north by the Central Main Canal; and on the east by Bowker Road.

Imperial Urban Area. This 5,420-acre area includes the City of Imperial. It is bounded on the west by Austin Road; on the north by Neckel Road; on the east by the northerly extension of Cross Road; and on the south by the Central Drain, approximately one-half mile south of Aten Road.

Seeley Urban Area. This 980-acre area includes the unincorporated community of Seeley, located west of the City of El Centro and south of the Naval Air Facility. It is bounded on the west by the New River; on the north by El Centro Street; on the east by Bennett Road; and on the south by Evan Hewes Highway.

2. Environmental Analysis

The most important environmental advantage of the Increased Agriculture Alternative is that it significantly reduces the loss of Important Farmland; the alternative also reduces Urban/Agriculture land use conflicts. Future population growth, economic growth, economic diversification, and other factors in the County are not expected to be substantially influenced any differently under this alternative than they would be under the proposed Plan Update. The specific impacts and recommended mitigation measures associated with each environmental issue are addressed below.

a. Land Use

Environmental Impacts

Land Use conflicts would be significantly reduced under the Increased Agriculture Alternative. In particular, fewer people and considerably less area of urban use would be exposed to and annoyed by agricultural operations, since future urban uses would be relatively closer to existing urban uses. All projected population growth, economic growth, and urban development would easily be accommodated in the Urban Areas and SPAs identified for this alternative.

Conflicts between cities' spheres of influence and proposed Urban Area designations would also be reduced under this alternative. All Urban Area boundaries for cities lie along or within their adopted spheres of influence.

Other land use impacts identified for the proposed Plan Update would remain the same under this alternative. Overall, the reduction in significant land use impacts associated with this alternative make it environmentally superior to the proposed Plan Update and the Increased Development Alternative.

Mitigation Measures

The mitigation measures recommended for the Land Use section of this EIR shall apply to this alternative.

b. Agriculture

Environmental Impacts

Implementation of this alternative would designate an additional 9,420 acres of productive agricultural land in Imperial Valley and 163,585 acres on East Mesa as Agriculture. The contribution of the Important Farmland, which would result from decreased Urban Area boundaries and the removal/reduction of four SPAs, would significantly reduce the impacts associated with the loss of Important Farmland under the proposed Plan Update. Whereas approximately 28,000 acres, or about 5% of the 560,000 acres currently under production in the County would be lost by the proposed Plan Update, only a little over 3% would be lost under this alternative. The area of currently producing agricultural land that would be lost, approximately 18,580 acres, would be significant but mitigable.

Aside from the reduced direct loss of agricultural land and products that would occur from implementation of this alternative, the annual economic loss to the County would decline by about 20 million dollars based on the average one billion dollar gross annual value achieved for the last several years. This reduced economic loss would be accompanied by reduced declines in agriculturally-related employment and the economic viability of local support services.

Associated with the reduced Urban Area boundaries, removal of the Bravo Ranch SPA and Tamarack Canyon Ranch SPA, and reduction of the East Border Crossing SPA, would be a significant decrease in indirect land use impacts to agricultural operations under this alternative. Normal agricultural operations such as aerial spraying, irrigation, and the transportation of farm equipment would be disrupted less. Production costs due to rising property values, theft and vandalism of farm equipment, crop pilferage, road congestion, and personal injury liability associated with farm trespass would also be reduced.

The significantly reduced direct and indirect agricultural impacts associated with the Increased Agriculture Alternative contribute to the conclusion that this alternative is environmentally superior to the proposed Plan Update and Increased Development Alternative, from an agricultural preservation perspective.

Mitigation Measures

The mitigation measures stated in the Agriculture section of this EIR shall pertain to this alternative and would fully mitigate the direct and indirect impacts to agricultural production.

c. Traffic Circulation**Environmental Impacts**

Reduced traffic circulation impacts would occur along roadways located between existing urban uses and the proposed Tamarack Canyon Ranch and Bravo Ranch SPAs, and between existing urban uses and the Urban Area boundaries identified under the proposed Plan Update. These reductions may be offset by minor increases within Urban Area boundaries.

Mitigation Measures

The mitigation measures stated in the Traffic Circulation section for the proposed Plan Update shall pertain to this alternative.

d. Noise**Environmental Impacts**

The noise impacts of the Increased Agriculture Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Noise section of this EIR shall apply to this alternative.

e. Biological Resources**Environmental Impacts**

The biological impacts of the Increased Agriculture Alternative will be slightly greater than those of the proposed Plan Update because a substantial amount of land in East Mesa would be taken out of the Recreation/Open Space designation. Much of this area corresponds to habitat used by the sensitive flat-tailed horned lizard. It must be noted, however, that agriculture would also be allowed in this area under the Recreation/Open Space designation. Furthermore, the vast majority of land in this area is in fact public land administered by the BLM. Land uses are governed by the Multiple Use Classifications established by the California Desert Plan (Bureau of Land Management 1980), as well as the various subsidiary planning documents maintained and administered by the BLM. The BLM is the permitting authority for most land in this area and therefore is the principal entity charged with the protection of its natural resources. In addition, any projects that would affect flat-tailed horned lizard habitat would require formal consultation with the USFWS since the lizard is now a candidate for listing. Therefore, limited adverse land use effects are anticipated.

Mitigation Measures

The mitigation measures recommended for the Biological Resources section of this EIR shall apply to this alternative.

f. Cultural Resources**Environmental Impacts**

The cultural resource impacts of the Increased Agriculture Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Cultural Resources section of this EIR shall apply to this alternative.

g. Public Services**Environmental Impacts**

The public services impacts of the Increased Agriculture Alternative would be similar to those described for the proposed Plan Update. However, since the development associated with the Tamarack Canyon Ranch and Bravo Ranch SPAs would be eliminated, and the development of the Urban Areas for Brawley, Calexico, Imperial, and Seeley would be reduced from that of the proposed Plan Update, the provision of many services such as police and fire protection, natural gas, treated water, sewer, and transportation of school children would be better facilitated and less expensive.

Mitigation Measures

The mitigation measures recommended for the Public Services section of this EIR shall apply to this alternative.

h. Air Quality**Environmental Impacts**

The air quality impacts of the Increased Agriculture Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Air Quality section of this EIR shall apply to this alternative.

i. Visual Resources

Environmental Impacts

The visual impacts of the Increased Agriculture Alternative would be similar to those described for the proposed Plan Update. However, the reduction of urban uses into agricultural areas would maintain the existing scenic characteristics associated with farmland and agricultural production in these areas.

Mitigation Measures

The mitigation measures recommended for the Visual section of this EIR shall apply to this alternative.

j. Water Quality

Environmental Impacts

The water quality impacts of the Increased Agriculture Alternative would be virtually identical to the impacts described for the proposed Plan Update, although relatively more fertilizer and pesticide residue would be discharged to the drainage system under this alternative. This impact would be less serious than currently exists, however, and would not be a significant increase over that of the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Water Quality section of this EIR shall apply to this alternative.

k. Geology/Soils

Environmental Impacts

The geology/soils impacts of the Increased Agriculture Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Geology/Soils section of this EIR shall apply to this alternative.

I. Hydrology/Flood Control

Environmental Impacts

The hydrology/flood control impacts of the Increased Agriculture Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Hydrology/Flood Control section of this EIR shall apply to this alternative.

B. Increased Development Alternative

The Increased Development Alternative would, in comparison with the proposed Plan Update, allow for intensified development in the County. This would be accomplished primarily through the expansion of Urban Areas, the addition of four Specific Plan Areas (SPAs), and a significant reduction of Important Farmland.

The specific differences of this alternative, relative to the proposed Plan Update, are described below by land use classification.

a. Urban Area

A principal difference between the Increased Development Alternative and the proposed Plan Update is the expansion of Urban Area for six cities. Specifically, the Urban Areas are proposed to be larger in this alternative for Brawley, Calexico, El Centro, Holtville, Imperial, and Westmorland (Figure 26). In all, approximately 16,710 more acres would be designated as Urban Area under this alternative (see Table 26). Urban Area would remain the same for Calipatria, Heber, Niland, Seeley, West Shores/Salton City, and Winterhaven. The Urban Area boundaries and sizes for the cities that would change are as follows:

Brawley Urban Area. This 18,650-acre area surrounds the City of Brawley. It is bounded on the west by Kalin Road; on the north by Andre Road and Ward Road; on the east by Dietrich Road; and on the south by Schartz Road.

Calexico Urban Area. This 6,870-acre area surrounds the City of Calexico and is generally bounded on the west by State Route 31; on the north by Jasper Road; and on the east by Bower and Meadows Roads. This Urban Area is bounded on the south by the International Boundary with Mexico.

El Centro Urban Area. This 15,020-acre area surrounds the City of El Centro and is bounded on the west by Austin Road and on the east by State Route 111. The northern boundary of El Centro is the Central Drain approximately one-half mile south of Aten Road, and the southern boundary lies approximately one-fourth mile north of McCabe Road.

Holtville Urban Area. This 4,980-acre area surrounds the City of Holtville and is generally bounded on the west by Barbara Worth Road and State Route 115. This Urban Area is bounded on the north by Kamm Road; on the east by Bridenstein Road; and on the south by Haven and Hoyt Roads.

Imperial Urban Area. This 9,640-acre area surrounds the City of Imperial. It is bounded on the west by Austin Road; on the north by Harris Road; and on the east by State Route 31. The southern boundary is the Central Drain approximately one-half mile south of Aten Road.

Westmorland Urban Area. This 1,080-acre area surrounds the City of Westmorland and is generally bounded on the west by Griswold and Kingsley Roads; on the north by Howenstein and Bannister Roads; on the east by Dean Road; and on the south by Baughman Road.

b. Community Area

The Ocotillo/Nomirage Community Area is reduced under this alternative from an area of approximately 108,132 acres under the proposed Plan Update to a Community Area of about 670 acres for Ocotillo and a Community Area of about 300 acres for Nomirage. The remaining area is designated as Rural Residential (8,752 acres) and as Recreation/Open Space (98,410 acres), which would restrict the intensity of residential, commercial, and other land uses but allow for light to medium agricultural uses.

c. Rural Residential

Rural Residential area for this alternative would increase to 13,252 acres. This increase of 8,752 acres would be for an area surrounding the Community Areas of Ocotillo and Nomirage.

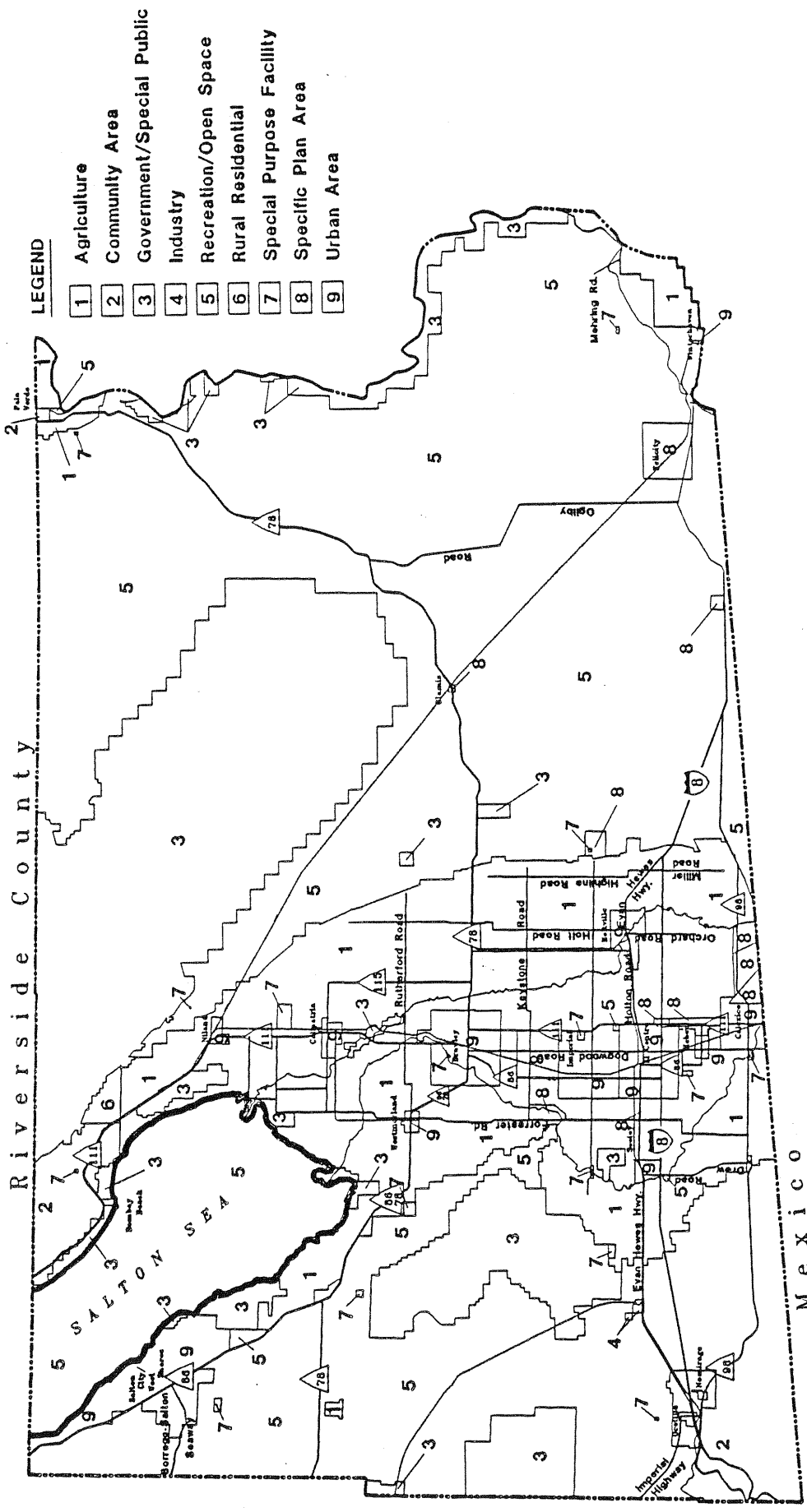
d. Industry

The areas encompassed by this land use classification for this alternative are the same as those for the proposed Plan Update.

e. Agriculture

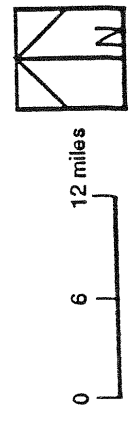
Under the Increased Development Alternative, the area designated as Agriculture is significantly reduced from that of the proposed Plan Update. A total area of 94,950 acres, or an increase of 16,710 acres from the proposed Plan Update, would be designated as Urban Area under this alternative. This expansion of Urban Areas is associated with 16,710 fewer acres designated as Agriculture, most of which is Important Farmland.

Agriculture area would also be reduced under this alternative due to adoption of the East Border Crossing, Mesquite Lake, I-8/SR-111 Interchange, Tamarack Canyon Ranch, Bravo Ranch, West Ross Road Corridor, Imperial County Land Company, and SR-111 Corridor SPAs. The Mesquite Lake SPA (6,800 acres) is currently designated as Industrial under the existing 1973 General Plan; the remaining SPAs listed above represent a combined 10,430 acres of land



LEGEND

- 1 Agriculture
- 2 Community Area
- 3 Government/Special Public
- 4 Industry
- 5 Recreation/Open Space
- 6 Rural Residential
- 7 Special Purpose Facility
- 8 Specific Plan Area
- 9 Urban Area



**Imperial County
General Plan**

Increased Development Alternative

**Figure
26**

currently designated as General Agriculture. Three of these SPAs -- the West Ross Road Corridor, Imperial County Land Company, and SR-111 Corridor SPAs -- are not included under the proposed Plan Update, and represent a total of 5,660 acres (see Specific Plan Area, below).

Under this alternative, an additional 160 acres located at the southwest corner of SR-111 and Aten Road are designated as Recreation/Open Space, rather than as Agriculture as in the proposed Plan Update.

In effect, compared with the proposed Plan Update, 16,710 acres of Agriculture land would be lost to Urban Area; 5,660 additional acres of Agriculture land would be lost to SPAs; and 160 acres of Agriculture land would be redesignated as Recreation/Open Space. These differences amount to a combined reduction of 22,530 acres of Agriculture area.

f. Recreation/Open Space

Compared with the proposed Plan Update, the amount of area designated as Recreation/Open Space is significantly higher under this alternative. This is largely because, in the Ocotillo/Nomirage region, approximately 98,410 acres are designated as Recreation/Open Space rather than as Community Area (an additional 8,752 acres in this area are designated as Rural Residential; 970 acres remain Community Area).

An additional 160 acres located at the southwest corner of SR-111 and Aten Road are designated as Recreation/Open Space, rather than as Agriculture under the proposed Plan Update. Approximately 140 acres of this property are proposed for a R.V. park, golf course, lakes, clubhouse, and other recreational facilities. The remaining area contains the new Pioneer Museum.

g. Government/Special Public Category

The areas encompassed by this land use classification for this alternative are the same as those for the proposed Plan Update.

h. Specific Plan Area

In addition to the SPAs described for the proposed Plan Update, another four SPAs are proposed in the Increased Development Alternative. These additional SPAs are the Gordon's Well SPA, Imperial County Land Company SPA, West Ross Road Corridor SPA, and SR-111 Corridor SPA, which together represent a total of 5,660 acres. The locations and proposed uses of these SPAs are as follows:

Gordon's Well SPA

The Gordon's Well SPA encompasses 640 acres located along the north side of Interstate 8, approximately 18 miles east of the East Highline Canal. The site is a historic water and rest stop along the old highway which served eastbound travelers before they encountered the

Algodones Sand Dunes. It is now used primarily for camping by off-road vehicle enthusiasts. An RV park and storage area, jojoba grove, and ranch house exist at the site. The Gordon's Well SPA is intended to accommodate recreation-supporting land uses including recreational vehicle and mobilehome parks, and visitor-serving commercial. No agricultural land would be affected by the SPA.

Imperial County Land Company SPA

The Imperial County Land Company SPA encompasses approximately 3,300 acres located between the East Border Crossing SPA and the Bravo Ranch SPA described for the proposed Plan Update. More specifically, the Imperial County Land Company SPA is bounded on the south by the International Boundary; on the east by Ash Canal; on the west by the Central Main Canal; and on the north by a line approximately 1,500 feet north of Highway 98. The area is designated as General Agriculture in the existing 1973 General Plan and includes approximately 3,180 acres of Important Farmland currently under agricultural production. The Imperial County Land Company SPA is proposed to be a Master Planned estate development with lot sizes ranging from 1.0 to 5.0 acres, and neighborhood and border-oriented commercial uses at the major intersections. Residential neighborhoods will include recreational amenities and all development will require public facilities for sewer and water.

West Ross Road Corridor SPA

The West Ross Road Corridor SPA encompasses approximately 1,680 acres located between El Centro and Seeley, and bisected by Ross Road. The SPA is bounded on the north by the railroad line located one-fourth mile north of Evan Hewes Highway; on the east by Austin Road; on the south by Interstate 8; and on the west by Forrester Road. The area is designated as General Agriculture in the existing 1973 General Plan and includes approximately 1,600 acres of Important Farmland currently under agricultural production. The West Ross Road Corridor SPA is proposed to allow Master Planned estate residential communities ranging in density from 0.4 to 2.0 units per acre, and regional or community commercial uses at the junction of Interstate 8 and Forrester Road. Development will be required to be compatible with the *Air Installation Compatible Use Zones* report (Naval Facilities Engineering Command 1990) for the El Centro Naval Air Facility. Residential communities should include neighborhood amenities such as parks and recreational facilities, and all development will require public facilities for sewer and water.

SR-111 Corridor SPA

The SR-111 Corridor SPA encompasses approximately 1,280 acres located along SR-111 between the southern boundary of the I-8/SR-111 SPA described in the proposed Plan Update and Jasper Road near the northern Urban Area boundary proposed for Calexico. The proposed SPA extends one-fourth mile east and one-fourth mile west from SR-111. The area is designated as General Agriculture in the existing 1973 General Plan and includes approximately 1,260 acres of Important Farmland currently under agricultural production; approximately 20 acres are occupied by the Mountain View Cemetery. A few single family residences are scattered

throughout the proposed SPA. The SR-111 Corridor SPA is proposed to feature mixed commercial and light industrial uses. Strict design controls would limit driveways and assure that architecture, landscaping and parking are coordinated. Agricultural lands would be preserved within the SPA to limit the effect of a strip commercial corridor. All development must be served by public water and sewer.

i. Special Purpose Facility

The areas encompassed by this land use classification for this alternative are the same as those for the proposed Plan Update.

2. Environmental Analysis

Several important differences in environmental impacts exist between the Increased Development Alternative and the proposed Plan Update. First, this alternative would significantly reduce the availability of Important Farmland and increase Urban/Agriculture land use conflicts. Second, the border area would experience intense commercial development and urbanization and would draw business from existing commercial establishments in El Centro and other areas to the north. Third, traffic circulation impacts would intensify in the border area. These impacts would be significant. The specific impacts and recommended mitigation measures associated with each environmental issue are addressed below.

a. Land Use

Environmental Impacts

Land use impacts would intensify under the Increased Development Alternative. In particular, commercial and other urban development would intensify in the border area due to the SR-111 Corridor and Imperial County Land Company SPAs and the increased Urban Area of Calexico. The intense development of this area would result in significant direct and indirect impacts. The significant direct impacts would be the loss of Important Farmland (see Agriculture, below) and the intensification of traffic congestion in this area (see Traffic Circulation, below). A significant indirect impact would be a detrimental loss of business by existing commercial establishments, especially in the El Centro area. Businesses in El Centro and other cities north of Calexico would experience significant economic losses under this alternative as new commercialization concentrated near the border attracts customers from both sides of the border.

Land use conflicts would also increase significantly between Agriculture areas and Urban Areas, and between Agriculture areas and SPAs. More people would be brought into close contact with agricultural operations due to a combined expansion of 16,710 acres of Urban Area, and also due to the inclusion of an additional 5,660 acres of Specific Plan Area represented by the West Ross Road Corridor SPA, Imperial County Land Company SPA, and SR-111 Corridor SPA. The land use impacts described above are considered significant.

Conflicts between cities' spheres of influence and proposed Urban Area designations would also be more adverse under this alternative. The Urban Area boundaries for several cities would lie outside their adopted spheres of influence.

Other land use impacts identified for the proposed Plan Update would remain the same under this alternative. The significant land use impacts associated with this alternative make the adoption of this alternative environmentally less preferable.

Mitigation Measures

The significant land use impacts associated with this alternative are not fully mitigable. The indirect economic losses to existing businesses in the central cities of the County could only be mitigated by avoiding this alternative.

The direct and indirect Agriculture/Urban Area and Agriculture/SPA land use conflicts associated with this alternative would be partially mitigated by adoption of the policies and programs of the Agricultural Element of the proposed Plan Update and by implementation of the mitigation measures stated in the Agriculture section of this EIR. Significant land use impacts would remain, however. Similarly, the significant traffic circulation impacts associated with this alternative would not be fully mitigable along SR-111.

Impacts associated with the discrepancies between spheres of influence and Urban Area boundaries should be mitigated through the processing by LAFCO of an amendment to the spheres of influence that would extend the spheres to cover the additional areas affected.

Additional potentially significant adverse land use impacts that may result between the development of SPAs and immediately adjacent lands shall be mitigated through the inclusion, in each Specific Plan prepared for each SPA, of a land use compatibility study. This study will analyze the compatibility of land uses proposed along the perimeter of the SPA with existing and future uses on adjacent land. The identification of potential land use conflicts would necessitate revisions to the arrangement of planned uses within the SPA.

All other mitigation measures described in the Land Use section of this EIR would pertain to this alternative.

b. Agriculture

Environmental Impacts

Implementation of this alternative would remove an additional 22,530 acres from Agriculture. This would result from the designation of an additional 16,710 acres of Agriculture area as Urban Area, an additional 5,660 acres as SPA, and 160 acres as Recreation/Open Space. The majority of this total area, approximately 21,000 acres, consists of Important Farmland. This additional loss of 21,000 acres would constitute a significant impact, making this alternative considerably less environmentally acceptable than the proposed Plan Update or the Increased

Agriculture Alternative. In all, this alternative would lose 9% (49,000 acres) of existing Important Farmland in the County. This impact would be significant and not fully mitigable.

Aside from the direct loss of agricultural products that would occur from this loss of agricultural land, an annual economic loss to the County of 90 million dollars would occur, considering that the gross annual value of agricultural production has hovered around one billion dollars for the last several years. This is considered a significant economic loss that would be accompanied by significant declines in agricultural-related employment and the economic viability of local support services.

Associated with the expansion of Urban Area boundaries and the addition of the West Ross Road Corridor SPA, Imperial County Land Company SPA, and SR-111 Corridor SPA, a significant increase in indirect land use impacts to existing agricultural operations would occur under this alternative. Normal agricultural operations such as aerial spraying, irrigation, and the transportation of farm equipment would be disrupted. In addition, production costs would increase due to rising property values, theft and vandalism of farm equipment, crop pilferage, road congestion, and personal injury liability associated with farm trespass.

Mitigation Measures

The mitigation measures stated in the Agriculture section of this EIR shall pertain to this alternative. The cumulative loss of 9% of existing Important Farmland in the County would not be fully mitigable, however.

c. Traffic Circulation

Environmental Impacts

Implementation of the Increased Development Alternative would significantly increase traffic circulation impacts in the border area, especially from build-out of the SR-111 Corridor SPA and the Imperial County Land Company SPA. These impacts would not be fully mitigable.

In general, traffic circulation impacts of the County would increase, particularly along roadways located between existing urban uses and the proposed additional SPAs, and between existing urban uses and the expanded Urban Area boundaries. These impacts would not be significant, with the exception of those in and adjacent to Calexico.

Mitigation Measures

The mitigation measures stated in the Traffic Circulation section of the EIR shall pertain to this alternative. The significant traffic circulation impacts that would occur in the border area would not be fully mitigable.

d. Noise

Environmental Impacts

The noise impacts of the Increased Development Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Noise section of this EIR shall apply to this alternative.

e. Biological Resources

Environmental Impacts

The biological impacts of the Increased Development Alternative would be virtually identical to the impacts described for the proposed Plan Update. In the Ocotillo/Nomirage area, an additional 98,410 acres of land would be designated as Recreation/Open Space rather than as Community Area, but this change is not expected to significantly affect biological resources. Most of the undeveloped land in this area is public land administered by the Bureau of Land Management, which is the principal entity charged with protecting resources in this region.

Mitigation Measures

The mitigation measures recommended for the Biological Resources section of this EIR shall apply to this alternative.

f. Cultural Resources

Environmental Impacts

The cultural resource impacts of the Increased Development Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Cultural Resources section of this EIR shall apply to this alternative.

g. Public Services**Environmental Impacts**

The public services impacts of the Increased Development Alternative would be similar to those described for the proposed Plan Update. However, since the development associated with the proposed SPAs and expanded Urban Area boundaries would be more distantly located from existing urban uses, the provision of many services such as police and fire protection, natural gas, treated water, sewer, and transportation of school children would be more demanding and expensive.

Mitigation Measures

The mitigation measures recommended for the Public Services section of this EIR shall apply to this alternative.

h. Air Quality**Environmental Impacts**

The air quality impacts of the Increased Development Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Air Quality section of this EIR shall apply to this alternative.

i. Visual Resources**Environmental Impacts**

The visual impacts of the Increased Development Alternative would be similar to those described for the proposed Plan Update. However, the expansion of urban uses into agricultural areas would incrementally impact the existing scenic characteristics associated with farmland and agricultural production. These impacts would not be considered significant.

Mitigation Measures

The mitigation measures recommended for the Visual section of this EIR shall apply to this alternative.

j. Water Quality

Environmental Impacts

The water quality impacts of the Increased Development Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Water Quality section of this EIR shall apply to this alternative.

k. Geology/Soils

Environmental Impacts

The geology/soils impacts of the Increased Development Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Geology/Soils section of this EIR shall apply to this alternative.

l. Hydrology/Flood Control

Environmental Impacts

The Hydrology/Flood Control impacts of the Increased Development Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Hydrology/Flood Control section of this EIR shall apply to this alternative.

C. Modified Staff Alternative

1. Description

The Modified Staff Alternative is based on numerous meetings with local cities and deliberation by the Board of Supervisors. This alternative is similar to the proposed project described in the Environmental Impact Report's Project Description.

The overall intent of the Modified Staff Alternative is to focus on the needs of the cities in Imperial County. Key elements of the Modified Staff Alternative include the elimination of the I-8/SR-111 Interchange SPA; the addition of a 1,660-acre Heber SPA which focuses on mixed use development between the city of Calexico on the south, the railroad to the west, Corral Road to the north, and 1,300 feet east of Highway 111; the expansion of the City of Imperial Urban Area east to Dogwood Road; the expansion of the City of Brawley Urban Area to include the Poe Subdivision to the west; and expansion of the City of Holtville Urban Area to the south (Figure 27). The Modified Staff Alternative also includes a two-year General Plan Amendment limit on agricultural designated lands. This limit allows for development consistent with the Agriculture designation as defined in the Land Use Element but does not allow General Plan Amendments to more intensive development for two years unless specific findings of benefit to the County can be identified.

Environmental impacts from this alternative are almost identical to those of the proposed project. These impacts, although considered significant, can be fully mitigated with the implementation of proposed policies and programs from the General Plan.

a. Agriculture

The area designated as Agriculture decreases slightly under the Modified Staff Alternative to 584,817 acres. This decrease allows for the expansion of the City of Imperial and City of Brawley Urban Areas in conformance with their Spheres of Influence, and for the creation of a mixed use SPA adjacent to Heber. This category includes a two-year limit on General Plan Amendments.

b. Community Areas

The areas encompassed by this land use classification for this alternative are the same as those for the proposed General Plan Update.

c. Government/Special Public

The areas encompassed by this land use classification for this alternative are the same as those for the proposed General Plan Update.

d. Industry

The areas encompassed by this land use classification for this alternative are the same as those for the proposed General Plan Update.

e. Recreation/Open Space

The areas encompassed by this land use classification for this alternative are the same as those for the proposed General Plan Update.

f. Rural Residential

The areas encompassed by this land use classification for this alternative are the same as those for the proposed General Plan Update.

g. Specific Plan Area

This alternative deletes the 360-acre commercial SPA located at the junction of I-8 and Highway 111 and adds a 1,660-acre mixed use commercial/employment/residential SPA adjacent to Heber. This new SPA focuses on development opportunities associated with the International Border and the existing public utilities district at Heber which supplies both sewer and water. All other SPAs as identified in the proposed project are part of this alternative.

h. Special Purpose Facility

The areas encompassed by this land use classification for this alternative are the same as those for the proposed General Plan Update.

i. Urban Areas

A key issue with this alternative includes the increase of Urban Areas for the cities of Imperial, Brawley, and Holtville. All other Urban Areas remain the same as the proposed project. The expanded areas are as follows:

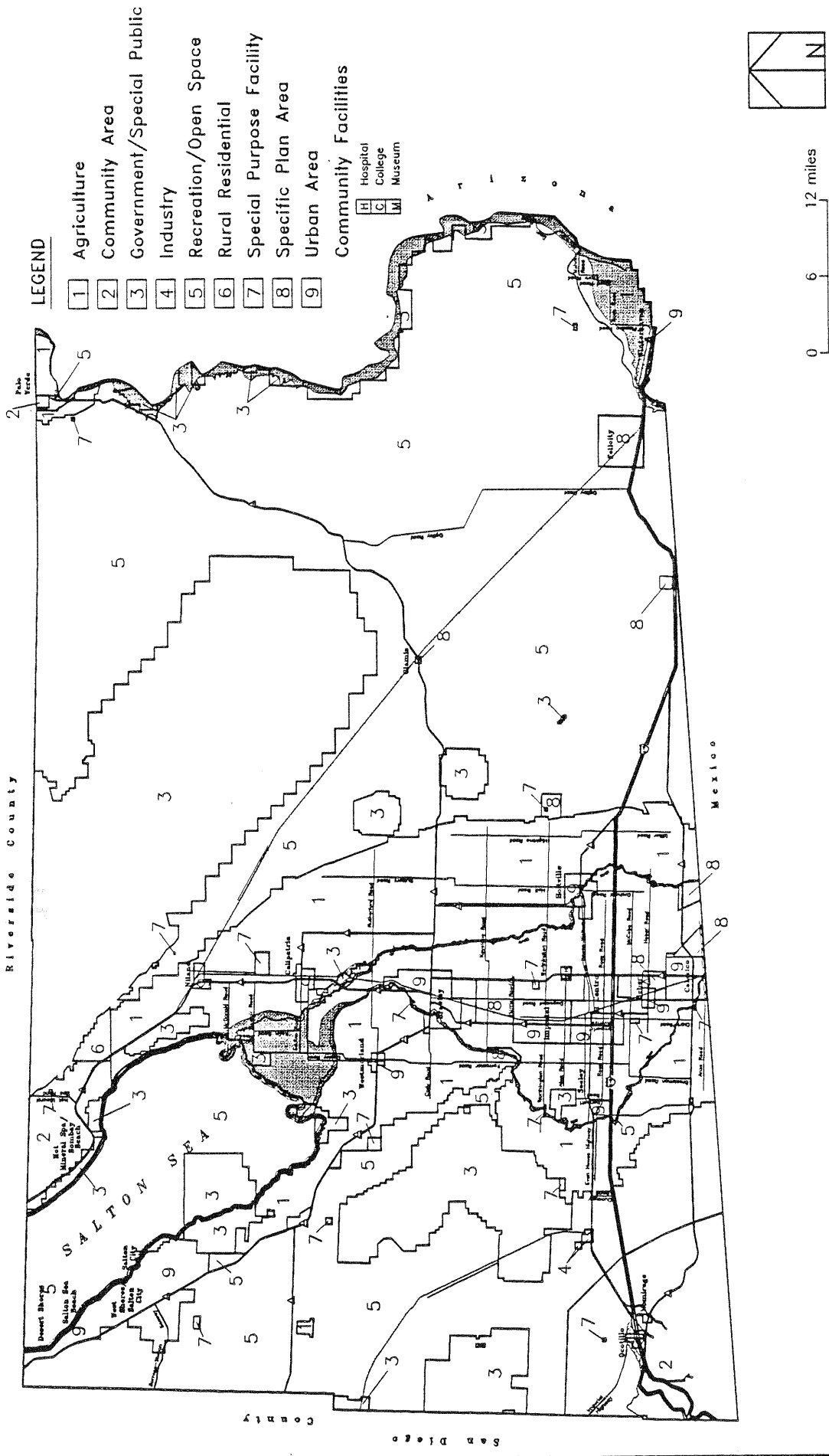
Brawley Urban Area. This area was expanded to include 9,140 acres. The expansion over the proposed project includes area to the west of the city which allows for urban services to the Poe Subdivision and east to capture development opportunities along Highway 111. In all cases the expansion of Urban Area designations are consistent with the adopted Sphere of Influences.

Imperial Urban Area. This area expands to 8,480 acres and focuses on allowing urban level development eastward to Dogwood Road. This expansion is also consistent with the recently adopted City General Plan and Sphere of Influence.

Holtville Urban Area. This includes an area up to 4,080 acres and focuses on land south of Evan Hewes Highway. This is also consistent with the City's Sphere of Influence.

2. Environmental Analysis

Environmental impacts associated with the Modified Staff Alternative would be similar to those of the proposed Plan Update. The major difference would be a reduced availability of Important Farmland and an increase in Urban/Agriculture land use conflicts. The specific impacts and recommended mitigation measures associated with each environmental issue are addressed below.



Imperial County
General Plan

Modified Staff Alternative

Land Use Element

Figure 27

a. Land Use**Environmental Impacts**

Land use impacts would intensify slightly under the Modified Staff Alternative due to the increased areas of land designated for the Urban Area and Specific Plan Area categories. In particular, the additional 2,500 acres designated as Urban Area for the expansion of Brawley, Imperial, and Holtville, and the additional 1,300 acres designated as SPA resulting from the addition of the Heber SPA and elimination of the I-8/SR-111 SPA, would contribute to the significant direct and indirect impacts associated with the loss of Important Farmland. Land use conflicts would also increase between Agriculture areas and Urban Areas, and between Agriculture areas and SPAs, since more people would be brought into close contact with agricultural operations. Other land use impacts identified for the proposed Plan Update would remain essentially the same under this alternative.

In terms of land use impacts, the significant impacts associated with this alternative make it slightly less environmentally preferable than the proposed Plan. These impacts would be mitigable, however.

Mitigation Measures

The mitigation measures recommended for the Land Use section of this EIR shall apply to this alternative.

b. Agriculture**Environmental Impacts**

Implementation of this alternative would remove an additional 3,600 acres from Agriculture beyond that described for the proposed Plan. This reduction together with the 28,000 acres of Important Farmland that would be lost under the proposed Plan represents almost 6% of the 560,000 acres currently under production in the County. Considering that the gross annual value of agricultural production in the County has hovered around one billion dollars for the last several years, this loss would represent an annual economic loss of nearly 60 million dollars. This impact is only slightly greater than that of the proposed Plan and is considered mitigable.

Associated with the expansion of Urban Area boundaries for Imperial, Brawley, and Holtville and the relatively slight overall increase of SPA area would be an increase in indirect land use impacts to existing agricultural operations. Normal agricultural operations such as aerial spraying, irrigation, and the transportation of farm equipment would be disrupted. In addition, production costs would increase due to rising property values, theft and vandalism of farm equipment, crop pilferage, road congestion, and personal injury liability associated with farm trespass.

Mitigation Measures

All mitigation measures stated in the Agriculture section of this EIR shall pertain to this alternative. It should be noted that the Land Use Element under this alternative would state that for a period of two years after adoption of this General Plan Update by the County Board of supervisors, no land shall be removed from the Agriculture category except where needed for use by a public agency, for geothermal purposes, where a mapping error may have occurred, or where a clear long term economic benefit to the County can be demonstrated through the planning and environmental review process. After this two year period is completed, the Planning Department will assess the need of converting additional agricultural designated lands to development uses. If no need is identified, an additional two year conversion program will be imposed.

c. Traffic Circulation

Environmental Impacts

Implementation of the Modified Staff Alternative would slightly increase traffic circulation impacts along roadways located between existing urban uses and the proposed additional SPAs, and between existing urban uses and the expanded Urban Area boundaries. These impacts would not be significant.

Mitigation Measures

The mitigation measures stated in the Traffic Circulation section of the EIR shall pertain to this alternative.

d. Noise

Environmental Impacts

The noise impacts of the Modified Staff Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Noise section of this EIR shall apply to this alternative.

e. Biological Resources

Environmental Impacts

The biological impacts of the Modified Staff Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Biological Resources section of this EIR shall apply to this alternative.

f. Cultural Resources**Environmental Impacts**

The cultural resource impacts of the Modified Staff Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Cultural Resources section of this EIR shall apply to this alternative.

g. Public Services**Environmental Impacts**

The public services impacts of the Modified Staff Alternative would be similar to those described for the proposed Plan Update. However, since the development associated with the proposed SPAs and expanded Urban Area boundaries would be more distantly located from existing urban uses, the provision of many services such as police and fire protection, natural gas, treated water, sewer, and transportation of school children would be more demanding and expensive.

Mitigation Measures

The mitigation measures recommended for the Public Services section of this EIR shall apply to this alternative.

h. Air Quality**Environmental Impacts**

The air quality impacts of the Modified Staff Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Air Quality section of this EIR shall apply to this alternative.

i. Visual Resources

Environmental Impacts

The visual impacts of the Modified Staff Alternative would be similar to those described for the proposed Plan Update. However, the expansion of urban uses and into agricultural areas would incrementally impact the existing scenic characteristics associated with farmland and agricultural production. These impacts would not be considered significant.

Mitigation Measures

The mitigation measures recommended for the Visual section of this EIR shall apply to this alternative.

j. Water Quality

Environmental Impacts

The water quality impacts of the Modified Staff Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Water Quality section of this EIR shall apply to this alternative.

k. Geology/Soils

Environmental Impacts

The geology/soils impacts of the Modified Staff Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Geology/Soils section of this EIR shall apply to this alternative.

l. Hydrology/Flood Control

Environmental Impacts

The Hydrology/Flood Control impacts of the Modified Staff Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Hydrology/Flood Control section of this EIR shall apply to this alternative.

D. Environmental/Open Space Alternative

1. Description

The Environmental/Open Space Alternative limits the size of Urban Areas to approximately 72,180 acres and only allows Specific Plan Areas at the East Border Crossing, Mesquite Lake, Felicity, Holtville Air Strip, and Glamis (Figure 28). Under this alternative, land designated as Agriculture would increase to 597,837 acres.

Key components of this alternative include the limitation of one dwelling unit per 40 acres on all Recreation/Open Space designated lands and the elimination of intensive recreation and agricultural uses from this land use category. This alternative includes the five-year limit on the conversion of agricultural land by General Plan Amendments.

The Environmental/Open Space Alternative reduces overall impacts to both agricultural resources and natural/cultural resources located within the County and is considered the environmentally superior alternative.

This alternative would significantly limit growth within the County of Imperial to unincorporated cities.

a. Agriculture

This alternative increases agricultural designated property to approximately 597,837 acres. This increase of 9,420 acres is the result of reducing the urban and specific plan areas. This alternative also includes the five year limit on general plan amendments for converting Agriculture land to non-agricultural uses.

b. Community Area

The areas encompassed by this land use classification for this alternative are the same as those for the proposed General Plan Update.

c. Government Special Public Category

The areas encompassed by this land use classification for this alternative are the same as those for the proposed General Plan Update.

d. Industry

The areas encompassed by this land use classification for this alternative are the same as those for the proposed General Plan Update.

e. Recreation/Open Space

Although the areas of designation are the same as the proposed project, this alternative would include three critical differences in the development standards. Specifically, this alternative would limit residential development to one single family unit per 40 acres; all agricultural uses would be prohibited within this category; and intensive recreation uses such as recreational vehicle parks, athletic fields, golf courses, swim and tennis clubs, and off-road vehicle use areas would be eliminated.

f. Rural Residential

The areas encompassed by this land use classification for this alternative are the same as those for the proposed General Plan Update.

g. Specific Plan Area

This land use designation would be similar to that proposed under the Increased Agricultural Alternative by eliminating the Tamarack Canyon Ranch SPA, the Bravo Ranch SPA, and the I-8/SR-111 SPA. This land use category would be reduced to 19,160 acres under this alternative.

h. Special Purpose Facility

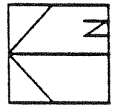
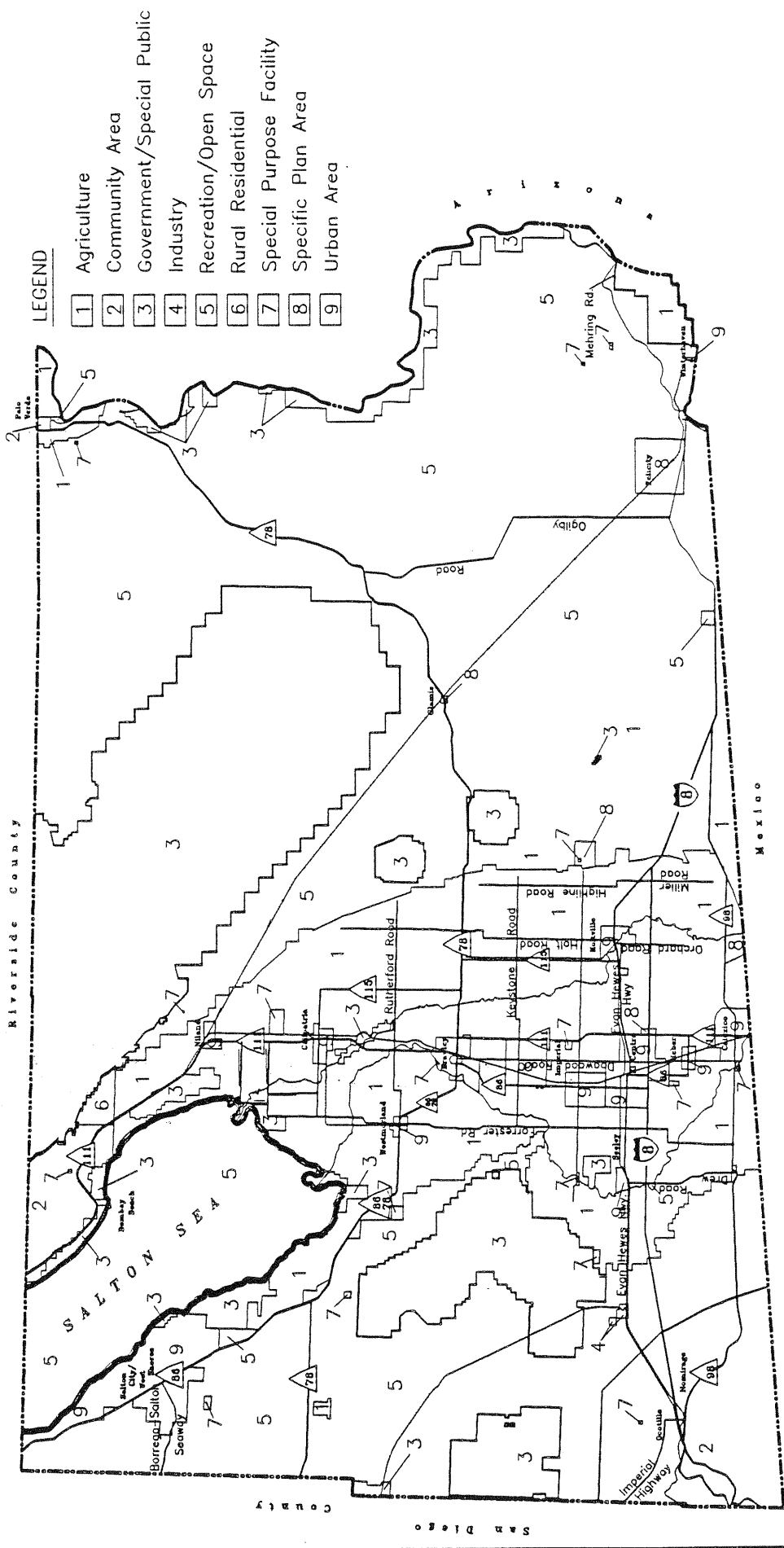
The areas encompassed by this land use classification for this alternative are the same as those for the proposed General Plan Update.

i. Urban Area

This category will be the same as the Intensive Agricultural alternative. Specifically, this would reduce urban areas for Brawley, Calexico, Imperial and Seeley by approximately 6,060 acres. Other urban areas would remain the same.

2. Environmental Analysis

The most important environmental advantages of the Environmental/Open Space Alternative is that it reduces the loss of Important Farmland and associated Urban/Agriculture land use conflicts, limits the density of Recreation/Open Space land to one dwelling unit per 40 acres, eliminates intensive recreation and agricultural uses from Recreation/Open Space land, and includes a five-year limit on the conversion of agricultural land by General Plan Amendments. Future population growth, economic growth, economic diversification, and other factors in the



Imperial County
General Plan

Environmental/Open Space Alternative

Land Use Element

Figure
28

County are not expected to be substantially influenced any differently under this alternative than they would be under the proposed Plan Update. The specific impacts and recommended mitigation measures associated with each environmental issue are addressed below.

a. Land Use

Environmental Impacts

Land Use conflicts would be reduced under the Environmental/Open Space Alternative. In particular, fewer people and considerably less area of urban use would be exposed to and annoyed by agricultural operations, since future urban uses would be relatively closer to existing urban uses. All projected population growth, economic growth, and urban development would easily be accommodated in the Urban Areas and SPAs identified for this alternative.

Conflicts between cities' spheres of influence and proposed Urban Area designations would also be reduced under this alternative. All Urban Area boundaries for cities lie along or within their adopted spheres of influence.

Other land use impacts identified for the proposed Plan Update would remain the same under this alternative. Overall, the reduction in significant land use impacts associated with this alternative make it environmentally superior to the proposed Plan Update, the Increased Development Alternative, and the Modified Staff Alternative.

Mitigation Measures

The mitigation measures recommended for the Land Use section of this EIR shall apply to this alternative.

b. Agriculture

Environmental Impacts

Implementation of this alternative would designate an additional 9,420 acres of productive agricultural land in Imperial Valley as Agriculture. The contribution of the Important Farmland, which would result from decreased Urban Area boundaries and the elimination of three SPAs, would significantly reduce the impacts associated with the loss of Important Farmland under the proposed Plan Update. Whereas approximately 28,000 acres, or about 5% of the 560,000 acres currently under production in the County would be lost by the proposed Plan Update, only a little over 3% would be lost under this alternative. The area of currently producing agricultural land that would be lost, approximately 18,580 acres, would be significant but mitigable.

Aside from the reduced direct loss of agricultural land and products that would occur from implementation of this alternative, the annual economic loss to the County would decline by about 20 million dollars based on the average one billion dollar gross annual value achieved for

the last several years. This reduced economic loss would be accompanied by reduced declines in agriculturally-related employment and the economic viability of local support services.

Associated with the reduced Urban Area boundaries, removal of the Bravo Ranch SPA, the I-8/SR-76 Interchange SPA, and the Tamarack Canyon Ranch SPA would be a significant decrease in indirect land use impacts to agricultural operations under this alternative. Less disruption would occur to normal agricultural operations such as aerial spraying, irrigation, and the transportation of farm equipment. Production costs due to rising property values, theft and vandalism of farm equipment, crop pilferage, road congestion, and personal injury liability associated with farm trespass would also be reduced.

The reduced direct and indirect agricultural impacts associated with the Environmental/Open Space Alternative contribute to the conclusion that this alternative is environmentally superior to the proposed Plan Update, the Increased Development Alternative, and the Modified Staff Alternative, from an agricultural preservation perspective.

Mitigation Measures

The mitigation measures stated in the Agriculture section of this EIR shall pertain to this alternative and would fully mitigate the direct and indirect impacts to agricultural production.

c. Traffic Circulation

Environmental Impacts

Reduced traffic circulation impacts would occur along roadways located between existing urban uses and the proposed Tamarack Canyon Ranch, Bravo Ranch, and I-8/SR-111 SPAs, and between existing urban uses and the Urban Area boundaries identified under the proposed Plan Update. These reductions may be offset by minor increases within Urban Area boundaries.

Mitigation Measures

The mitigation measures stated in the Traffic Circulation section for the proposed Plan Update shall pertain to this alternative.

d. Noise

Environmental Impacts

The noise impacts of the Environmental/Open Space Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Noise section of this EIR shall apply to this alternative.

e. Biological Resources

Environmental Impacts

The biological impacts of the Environmental/Open Space Alternative would be less than those under the proposed Plan Update due to restrictions placed upon land designated as Recreation/Open Space. Although the amount of area designated as Recreation/Open Space would remain the same, impacts to biological resources would not be as adverse due to the reduced residential density of not more than one single family dwelling per 40 acres rather than one dwelling unit per 20 acres allowed under the proposed project. In addition, agriculture and intensive recreation activities would not be allowed in Recreation/Open Space area. Most of the land in this area is public land administered by the Bureau of Land Management, which is the principal entity charged with protecting resources in this region.

Mitigation Measures

Fewer impacts to biological resources located in area designated as Recreation/Open Space would occur under the Environmental/Open Space Alternative. The mitigation measures recommended for the Biological Resources section of this EIR shall apply to this alternative.

f. Cultural Resources

Environmental Impacts

The cultural resource impacts of the Environmental/Open Space Alternative would be virtually identical to the impacts described for the proposed Plan Update, though perhaps somewhat reduced due to the increased restrictions on development uses and activities in Recreation/Open Space area.

Mitigation Measures

The mitigation measures recommended for the Cultural Resources section of this EIR shall apply to this alternative.

g. Public Services

Environmental Impacts

The public services impacts of the Environmental/Open Space Alternative would be similar to those described for the proposed Plan Update. However, since the development associated with

the Tamarack Canyon Ranch, Bravo Ranch, and I-8/SR-111 Interchange SPAs would be eliminated, and the development of the Urban Areas for Brawley, Calexico, Imperial, and Seeley would be reduced from that of the proposed Plan Update, the provision of many services such as police and fire protection, natural gas, treated water, sewer, and transportation of school children would be better facilitated and less expensive.

Mitigation Measures

The mitigation measures recommended for the Public Services section of this EIR shall apply to this alternative.

h. Air Quality

Environmental Impacts

The air quality impacts of the Environmental/Open Space Alternative would be slightly less than the impacts described for the proposed Plan Update due to a reduction in vehicle trips between existing urban uses and the SPAs/Urban Areas described under the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Air Quality section of this EIR shall apply to this alternative.

i. Visual Resources

Environmental Impacts

The visual impacts of the Environmental/Open Space Alternative would be similar to those described for the proposed Plan Update. However, the reduction of urban uses into agricultural areas would maintain the existing scenic characteristics associated with farmland and agricultural production in these areas.

Mitigation Measures

The mitigation measures recommended for the Visual section of this EIR shall apply to this alternative.

j. Water Quality

Environmental Impacts

The water quality impacts of the Environmental/Open Space Alternative would be virtually identical to the impacts described for the proposed Plan Update, although relatively more fertilizer and pesticide residue would be discharged to the drainage system under this alternative.

This impact would be less serious than currently exists, however, and would not be a significant increase over that of the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Water Quality section of this EIR shall apply to this alternative.

k. Geology/Soils

Environmental Impacts

The geology/soils impacts of the Environmental/Open Space Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Geology/Soils section of this EIR shall apply to this alternative.

l. Hydrology/Flood Control

Environmental Impacts

The hydrology/flood control impacts of the Environmental/Open Space Alternative would be virtually identical to the impacts described for the proposed Plan Update.

Mitigation Measures

The mitigation measures recommended for the Hydrology/Flood Control section of this EIR shall apply to this alternative.

E. No Project Alternative

The "No Project Alternative" would involve not adopting the proposed General Plan Update. Under this alternative, the existing General Plan, prepared in 1973, would remain in effect. The existing General Plan is summarized on pages III-4 to III-9 of this EIR.

Under the No Project Alternative, the following environmental conditions would remain until the existing General Plan is updated.

Land Use

The No Project Alternative would maintain 43,786 more acres of land covered by the "Urban" designation than the proposed Plan Update. The development of some communities could therefore be substantially more intense if this alternative is implemented. For example, the communities of Ocotillo/Nomirage and Hot Mineral Spa are designated in the existing General Plan for urban level development in their central areas. Unlike the proposed Plan Update, extensive rural and desert residential development would also be anticipated at the periphery of Ocotillo/Nomirage. Furthermore, the 1973 General Plan designates a ring of rural residential development surrounding the Winterhaven and Niland communities. The urban designations applied to Niland and Winterhaven cover larger areas than the proposed Plan Update, along with outlying rural residential designations.

This alternative allocates more land for urban levels of intensity than the proposed Plan Update. It also allocates additional areas of less intense residential development on the periphery of urban areas. The existing General Plan does not reflect local and State agency concerns regarding retention of agricultural land, preservation of the character of existing rural desert communities, and restriction of urban land uses to the periphery of existing urbanized areas. These concerns would not be addressed should this alternative be implemented. Therefore, the land use impacts of the No Project Alternative would be regarded as significant, and not fully mitigated.

Agriculture

The No Project Alternative would retain 289,919 more acres of land designated as Agriculture than the proposed Plan Update. Most of this area, however, consists of land on East Mesa and the Borrego Valley floor, rather than existing agriculturally-productive land. Unlike the proposed Plan Update, the 1973 General Plan does not contain policies for controlling the conversion of agricultural land to non-agricultural uses. Therefore, the direct loss of "Important Farmlands" that would occur under implementation of the 1973 General Plan would be significant, and not fully mitigated.

Traffic Circulation

The Circulation and Scenic Highways Element of the 1973 General Plan consists of a simplified street classification system which does not include pavement widths, traffic projections, or level of service (LOS) projections. It also proposes narrower roads than the proposed Plan Update. The 1973 General Plan does not address projected deficiencies in the LOS of existing roads and intersections from implementation of the General Plan, nor does it identify the need for phased improvements to existing circulation systems (or construction of new facilities) to accommodate build-out traffic volumes. The No Project Alternative would significantly impact traffic circulation throughout the County, without providing a means to fully mitigate these impacts.

Noise

The No Project Alternative would not provide an adequate level of protection for "noise-sensitive" land uses as the proposed Plan Update. The primary reasons for this are two-fold: 1) The vehicle noise level limit for residential areas is higher in the Noise Plan for the 1973 General Plan than in the Noise Element of the proposed Plan Update (65 vs. 60 dB CNEL); and 2) The proposed Plan Update contains provisions required for the adoption of a County Noise Ordinance, which does not exist in the 1973 General Plan. Thus, noise impacts associated with implementation of the existing General Plan would be considered significant, and not fully mitigated.

Biological Resources

On the surface, it may appear that the proposed Plan Update is less effective in its ability to protect sensitive biological resources than the 1973 General Plan because it would allow potentially impactful uses such as agriculture in areas that were previously designated for Preservation. Since a substantially larger amount of open space is designated by the proposed Plan Update, however, there is greater potential to preserve more acreage of biological sensitivity than was available with the existing General Plan. Through the creation of wildlife corridors, better connectivity between biological preserves can also be achieved with the proposed Plan Update because many of the areas previously designated for Preservation are already highly fragmented. Furthermore, the proposed Plan Update will allow the County and appropriate resource agencies to exert greater land use controls over future projects in the Recreation/Open Space land use category for the purpose of protecting biological resources. For example, the design of open space easements could occur in a configuration which is sensitive to the natural vegetation and terrain, and therefore more conducive to wildlife movements. With the No Project Alternative offering less opportunity to protect sensitive biological resources than the proposed Plan Update, its implementation would result in significant, non-mitigable impacts.

Cultural Resources

The Conservation and Open Space Element of the proposed Plan Update provides a more comprehensive review of prehistoric, historic and ethnographic resources in the County, and provides several goal, policy and other statements that encourage the protection and conservation of these resources. The 1973 General Plan does not provide a comprehensive description of the status of cultural resources in Imperial County, including the general locations of highly and moderately sensitive prehistoric resources. It also does not provide strong enough language calling for the protection of cultural resources, and for the scientific study and storage of these resources. Implementation of the No Project Alternative would therefore represent a significant impact to cultural resources that could not be fully mitigated.

Public Services

The 1973 General Plan designates a substantially larger amount of acreage for residential and commercial development than the proposed Plan Update, yet does not adequately address the

provision of necessary public services. Implementation of the No Project Alternative could therefore lead to significant increases in the need and funding for adequate public services. These impacts could be mitigated, however, via conditions on future development projects.

Air Quality

The existing General Plan addresses air quality concerns in its Geothermal and Conservation and Open Space Elements. Unless the 1991 draft *Amended Circulation and Scenic Highways Plan* or the proposed Plan Update (in conjunction with the Air Quality mitigation measures specified in this EIR) are adopted, air quality impacts may not be reduced and, in fact, may increase significantly. No mitigation is available with this alternative that would reduce these impacts to below a level of significance.

Visual Resources

The 1973 General Plan does not identify significant visual resources within Imperial County, nor does it specify policies for the preservation of these resources. The 1973 General Plan has the potential to impact sensitive visual resources such as desert areas, sand hills, mountains, the Salton Sea, and agricultural areas. These impacts would be considered significant.

Water Quality

The 1973 General Plan would result in greater impacts to water quality than the proposed Plan Update because the existing General Plan designates a substantially larger amount of area as Agriculture. The development of more land in agricultural production would increase the potential for significant water quality impacts due to the high levels of chemical contaminants (e.g., pesticides, herbicides, fungicides) found in agricultural runoff. The 1973 General Plan does not specify policies for the protection of the County's surface and groundwaters. Thus, without adequate mitigation, as is proposed in the Water Element of the General Plan Update and this EIR, implementation of the No Project Alternative would result in significant, unmitigable water quality impacts.

Geology/Soils

The proposed Plan Update is consistent with the 1973 General Plan with respect to the goals and policies relating to soils and seismicity. In terms of soils, both the existing and proposed General Plans defer to the *Soil Survey of Imperial County* (SCS, 1981) for future planning in the use and management of soils for crops and pastures; buildings; highways and other transportation systems; sanitary facilities; parks and other recreational facilities; and wildlife habitats. Using this information, the development potential of each soil type can be determined, based on the designated land use; soil limitations to these land uses can be identified; and costly failures in houses and other structures due to unfavorable soil conditions can be avoided. No significant impacts to geology/soils are therefore anticipated with the No Project Alternative.

Hydrology/Flood Control

The goals and policies in the 1973 General Plan relating to hydrology, drainage, groundwater and flood control are rather broad-based and do not provide detailed plans to improve the use and distribution of water throughout the County. Implementation of the No Project Alternative could, nevertheless, result in the same level of hydrological impacts as the proposed Plan Update. Such impacts could include the alteration of existing drainage patterns and increased flooding potential. Mitigation for these impacts would be similar to those listed in the Flood Control/Hydrology Section of this EIR.

X. REFERENCES, PERSONS AND AGENCIES CONSULTED

Anderholt, Joseph J.

1987 *The Development of Imperial Valley*. The Imperial Valley Pioneers Historical Society.

Air Pollution Control District, Imperial County (APCD)

1992 1991 Air Quality Attainment Plan. April 14.

Baca, Thomas, Regional Planner, U.S. Fish and Wildlife Service (Region II)

1992 Telecommunication with Michael J. Gonzales, Brian F. Mooney Associates. December.

Barker, James P.

1976 Ethnographic Sketch of the Yuha Desert Region. In *Background to Prehistory of the Yuha Desert Region*, edited by P.J. Wilke, pp. 21-41. Ballena Press Anthropological Papers No 5, Ramona.

Brattstrom, B.H. and M.C. Bondello

1983 Effects of off-road vehicle noise on desert vertebrates. Pages 167-204 in: R.H. Webb and H.B. Wilshire (Eds.), *Environmental Effects of Off-Highway Vehicles: Impacts and Management in Arid Regions*. Springer-Verlag, New York.

Buzo, Joe, Imperial County Fire Department

1992 Telecommunication with Amy Fandel, Brian F. Mooney Associates. October.

California Native Plant Society

1988 Inventory of Rare and Endangered Vascular Plants of California.

Cameron, Steve, District Conservationist, USDA Soil Conservation Service

1992 Telecommunication with Michael J. Gonzales, Brian F. Mooney Associates. October.

City of Brawley

1974 Comprehensive General Plan. Adopted 1974. Brawley, California.

City of Calexico

1992 General Plan and Zoning Ordinance. February 1992. Calexico, California.

City of Calipatria

1992 General Plan. Revised 1991. Calipatria, California.

City of El Centro

1989 General Plan. Adopted March 15, 1989. El Centro, California.

City of Holtville

1991 General Plan. Adopted June 24, 1991. Holtville, California.

City of Imperial

1992 Draft General Plan. Revised 1992. Imperial, California.

City of Westmorland

1973 General Plan. June 1973. Westmorland, California.

County of Imperial, Planning Department

1985 Imperial County General Plan: County Overview. Adopted September 18.

Crabtree, Don E.

1981 Archaeology, in *A Cultural Resources Overview of the Colorado Desert Planning Units* by Elizabeth von Till Warren, et. al., pp. 25-54. U.S. Department of the Interior, Bureau of Land Management, California Desert District, Riverside.

Davis, Emma Lou; Kathryn H. Brown, and Jacqueline Nichols.

1980 *Evaluation of Early Human Activities and Remains in the California Desert*, Great Basin Foundation, San Diego.

Dice, James, Plant Ecologist, California Department of Fish and Game

1992 Telecommunication with Michael J. Gonzales, Brian F. Mooney Associates. December.

Ezell, Paul H.

1984 A New Look at the San Dieguito Culture. *Casual Papers in Cultural Resource Management* 3(2):103-109.

Forbes, Jack D.

1965 *Warriors of the Colorado: The Yumas of the Quechan Nation and Their Neighbors*. Norman, Oklahoma: University of Oklahoma Press.

Forde, C. Daryll

1931 *Ethnography of the Yuman Indians, Publications in American Archaeology and Ethnography* 28:83-278. University of California, Berkeley.

Gallegos, Dennis

1980 Class II Cultural Resource Inventory of the East Mesa and West Mesa Regions Imperial Valley, California. Report prepared by WESTEC Services, Inc. for the U.S. Department of Interior, Bureau of Land Management.

1984a West Mesa Cultural Resource Survey and Site Evaluation, Imperial Valley, California. Report prepared by WESTEC Services, Inc. for the U.S. Department of Interior, Bureau of Land Management.

1984b Cultural Resource Data Recovery Program for SDG&E's Imperial Valley to La Rosita 230KV Transmission Line. Report prepared by WESTEC Services, Inc. for San Diego Gas and Electric Company.

Garrett, Kimball and Jon Dunn

1981 Birds of Southern California: Status and Distribution. Los Angeles Audubon Society, The Artisan Press, Los Angeles, California.

Gifford, E. W.

1931 The Kamia of Imperial Valley. *Smithsonian Institution Bureau of American Ethnology*, Bulletin 97. Washington, D.C.

Graham, William R.

1981 A Cultural Resource Survey of the Laguna Mountain Recreation Area. Report prepared by Archaeological Systems management, Inc. for the U.S. Forest Service.

Hayden, Julian

1976 Pre-althothermal Archaeology in the Sierra Pinacate, Sonora, Mexico. *American Antiquity* 41:274-289.

Horvitz, Steve, Superintendent, California Park Service (Salton Sea Sector - Colorado Desert District)

1992 Telecommunication with Michael J. Gonzales, Brian F. Mooney Associates. December.

Imperial County Airport Land Use Commission (ALUCP)

1991 Airport Land Use Compatibility Plan, Imperial County Airports. Prepared by Hodges & Shutt. June 5

Jorgensen, Mark, Park Naturalist, California Park Service (Anza-Borrego Sector - Colorado Desert District)

1992 Telecommunication with Michael J. Gonzales, Brian F. Mooney Associates. December.

Lacy, R.C.

1988 A report on population genetics in conservation. *Conservation Biology* (2):245-247.

Law/Crandall, Inc.

- 1991 Report of Preliminary Geotechnical Investigation of the Calexico East Border Station (GSA Project No. ICA 18040), Calexico, California. October 17.

Lawton, Harry W.

- 1974 An Ethnohistory of the Yuha Desert (1769-1865). In, Background to Prehistory of the Yuha Desert. *Ballena Press Anthropological Papers No. 5*, Ramona.

Little, Ida

- 1982 *Imperial Valley Historical Markers*. Holtville, Calif.: Holtville Tribune.

McGuire, Randall H.

- 1982 Environmental Background, in *Hohokam and Patayan, Prehistory of Southwestern Arizona* edited by Randall H. McGuire and Michael B. Schiffer, pp. 13-56. Academic Press, New York.

McLaughlin, S.P., J.E. Bowers and K.R.F. Hall

- 1987 *Vascular Plants of Eastern Imperial County, California*. *Madroño* 34:359-378.

Naval Facilities Engineering Command

- 1990 Air Installation Compatible Use Zones. Naval Air Facility, El Centro, California.

Nicol, Kimberly, Wildlife Biologist, California Department of Fish and Game

- 1992 Telecommunication with Michael J. Gonzales, Brian F. Mooney Associates. November.

Norris, Frank and Terri Jacques

- 1980 Historical Sequence. In, Class II Cultural Resource Inventory of the East Mesa and West Mesa Regions Imperial Valley, California. Report prepared by WESTEC Services, Inc. for the U.S. Department of Interior, Bureau of Land Management.

Pacific Flyway Study Committee, Subcommittee on Colorado River Valley Population of Greater Sandhill Crane

- 1983 Pacific Flyway Management Plan for the Greater Sandhill Crane Population Wintering Along the Lower Colorado River Valley. March.

Pendleton, Lorann

- 1984 Archaeological Investigations in the Picacho Basin. Report prepared by Wirth Environmental Services for San Diego Gas and Electric.

Peterson, R.T.

- 1990 A Field Guide to Western Birds. Houghton-Mifflin Company, Boston, Massachusetts.

Radke, Marcia, Wildlife Biologist, U.S. Fish and Wildlife Service (Salton Sea National Wildlife Refuge - Region I)

1992 Telecommunication with Michael J. Gonzales, Brian F. Mooney Associates. December.

Robinette, G.O.

1973 Energy and Environment. Kendall-Hunt Publishing Company, Dubuque, Iowa. 302 pp.

Rogers, Malcolm J.

1939 Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Areas. *San Diego Museum of Man Papers No. 3.*

1945 An Outline of Yuman Prehistory. *Southwestern Journal of Anthropology* 1(2):167-198.

1966 *Ancient Hunters of the Far West.* Union-Tribune, San Diego.

Schaefer, Jerry

1981 Phase II Archaeological Survey of the La Rosita 230kV Interconnection Project. Report prepared by Cultural Systems Research, Inc. for San Diego Gas and Electric.

1986 Hunter-Gatherer Adaptions to a Marginal Desert Environment: Subsistence Practices and Lithic Production in the Chocolate Mountains, Imperial County, California. Report prepared by Mooney-Levine and Associates, Inc. for Gold Fields Mining Corporation, Lakewood, Colorado.

Schoenherr, A.A.

1986 A review of the life history and status of the desert pupfish, *Cyprinodon macularius*. Pages 66-105 in: R.G. Zahary (Ed.), *Desert Ecology 1986: A Research Symposium.* May.

Shackley, M. Steven

1984 *Archaeological Investigations in the Western Colorado Desert: A Socioecological Approach.* Wirth Environmental Services, A Division of Dames & Moore, San Diego.

Smith, H.M. and E.D. Brodie, Jr.

1982 Reptiles of North America. Golden Press, Western Publishing Company, Inc., New York, New York.

Spier, Leslie

1923 Southern Diegueño Customs. *University of California Publications in American Archaeology and Ethnology* 20:292-358, Berkeley.

State of California Department of Fish and Game (CDFG)

1990 Natural Diversity Data Base.

1990 California's Wildlife, Volume III (Mammals). April.

1989 The Status of the Flat-Tailed Horned Lizard (*Phrynosoma mcallii*) in California.

1988 Imperial Wildlife Area (Wister Unit) Management Plan. December 9.

State of California Regional Water Quality Control Board, Colorado River Basin Region.

1991 Water Quality Control Plan Colorado River Basin Region. August 22.

State of California Resources Agency

1988 A Guide to Wildlife Habitats of California. October.

Stebbins, R.C.

1966 A Field Guide to Western Reptiles and Amphibians. Houghton-Mifflin Company, Boston, Massachusetts.

Tate, James, Jr.

1986 The Blue List for 1986. American Birds, 40(2): 227-236.

Taylor, R.E. and Louis A. Payen

1979 The Role of Archaeometry in American Archaeology in *Advances in Archaeological Method and Theory 2*, edited by Michael B. Schiffer, pp. 239-285. Academic Press, New York.

Thompson, Ron, Wildlife Habitat Supervisor I, California Department of Fish and Game (Wister Wildlife Management Area)

1992 Telecommunication with Michael J. Gonzales, Brian F. Mooney Associates. December.

United States Department of Agriculture, Soil Conservation Service

1981 Soil Survey of Imperial County, California, Imperial Valley Area. October.

United States Department of the Interior, Bureau of Land Management

1980 California Desert Conservation Area Plan.

1990 The Management Strategy for the Flat-Tailed Horned Lizard (*Phrynosoma mcallii*) on Bureau of Land Management Administered Lands within the California Desert Conservation Area. January 12.

United States Department of the Interior, Fish and Wildlife Service

Lower Colorado River National Wildlife Refuges Master Plan.

von Werlhof, Jay

1984 Archaeological Investigations of the Gold Fields Mesquite District. Report prepared by the Imperial Valley College Museum for Gold Fields Mining Company, Inc.

1992 Personal Communication with Michael Baksh, Brian F. Mooney Associates. November.

von Werlhof, Jay, Sherilee von Werlhof, Morlin Childers, Howard Pritchett, Lorraine Pritchett, Ray Avels, and George Collins

1977 Archaeological Survey on the Yuha Basin Imperial County. Unpublished Ms. on file, Imperial Valley College, Barker Museum, El Centro.

Wallace, W.J. E.S. Taylor, and G. Kritzman

1962 Additional Excavations at the Indian Hill Rockshelter, Anza-Borrego Desert State Park, California. In *Archaeological Explorations in the Southern Section of Anza-Borrego Desert State Park*, edited by W. J. Wallace, Part IV. California Department of Parks and Recreation Archaeological Reports 5., Sacramento.

Warren, Claude N.

1967 The San Dieguito Complex, A Review and Hypotheses. *American Antiquity* 32(2):168-185.

1984 The Desert Region, in *California Archaeology*, pp. 339-430, edited by Michael J. Moratto. Academic Press, Orlando.

Warren, Claude N. and D.L. True

1961 The San Dieguito Complex and Its Place in California Prehistory. *Archaeological Survey Annual Report 1960-61*, pp. 246-238. Department of Anthropology and Sociology, University of California, Los Angeles.

Watkins, Jim, Wildlife Biologist, USDI Bureau of Land Management (El Centro Resource Area-California Desert District)

1992 Telecommunication with Michael J. Gonzales, Brian F. Mooney Associates. December.

Weide, David C.

1976 Regional Environmental History of the Yuha Desert. In *Background to Prehistory of the Yuha Desert Region*. Edited by P. J. Wilke, pp. 9-20. Ballena Press Anthropological papers 5.

Whitman, Ted, Imperial County Sheriff's Department

1992 Telecommunication with Amy Fandel, Brian F. Mooney Associates. November.

Wilcove, D.S., C.H. McLellan and A.P. Dobson

- 1986 Habitat fragmentation in the temperate zone. Pages 237-256 in: M.E. Soule', Conservation Biology: The Science of Scarcity and Diversity. Sinauer Associates, Inc. Sunderland, Massachusetts.

Wilke, Philip J.

- 1976 Background to Prehistory of the Yuha Desert. *Ballena Press Anthropological Papers No. 5*, Ramona..
- 1978 Late Prehistoric Human Ecology at Lake Cahuilla, Coachella Valley, California. *Contributions of the University of California Archaeological Research Facility* Number 38. University of California, Berkeley.

Wilke, Philip J., Meg McDonald, and L.A. Payen (eds.)

- 1986 *Excavations at Indian Hill Rockshelter Anza-Borrego Desert State Park, California 1984-1985*. Archaeological Research Unit, University of California, Riverside.

Wilshire, H.G.

- 1983 The impact of vehicles on desert soil stabilizers. Pages 31-47 in: E.H. Webb and H.B. Wilshire (Eds.), *Environmental Effects of Off-Road Vehicles: Impacts and Management in Arid Regions*. Springer-Verlag, New York.