

SUMMARY

A. Project Description

The proposed project consists of the adoption of a General Plan Update (Plan Update) for development of the County of Imperial. The proposed Plan Update will replace the existing General Plan, originally prepared in 1973, to more effectively and comprehensively plan for the long-term physical development of the County. The Plan Update includes the following mandatory Elements: Land Use, Circulation and Scenic Highways, Conservation and Open Space, Seismic and Public Safety, and Noise. In addition, the County has prepared three additional Elements: Agricultural, Geothermal and Transmission, and Water.

The proposed Plan Update is the product of a cooperative effort on the part of County staff, Planning Commission, Board of Supervisors, and citizens aimed at creating a comprehensive guide for development within Imperial County. A series of goals and objectives for each Element of the Plan Update was developed along with policies intended to realize the goals and objectives.

The purpose of the Imperial County General Plan Update can be summarized in the following objectives:

- To more effectively and comprehensively plan for the long-term physical development of the County.
- To maintain agricultural production as a major economic activity.
- To provide short-term and long-term employment opportunities in Imperial County.
- To generate tax revenue and foster economic growth in Imperial County.
- To provide adequate housing, public services, and public safety for increasing numbers of people residing in Imperial County.
- To preserve the unique visual and recreational amenities available in Imperial County.
- To protect the County's biological and cultural resources.

B. Environmental Issues

1. Land Use

a. Environmental Impacts

Under the proposed Plan Update, two instances occur in which there would be a conflict between a city's sphere of influence and a proposed Urban Area designation. These occurred in the placement of the Urban Area designations of the cities of Calexico and Calipatria. In the case of Calexico, the discrepancy between the Urban Area designation and the sphere represents an adverse land use impact. In the case of Calipatria, the change in which portion of the city's environs is designated for future growth is logical in that the underlying zoning and the existing pattern of parcelization in the newly designated area is more compatible with urbanization.

Because of possible conflicts between proposed Specific Plan Area (SPA) land uses and uses adjacent to the SPAs, a potential for significant adverse land use impacts exists. The SPAs with a potential for significant land use impacts are Mesquite Lake, Interstate 8/State Route 111, Felicity, Glamis, the Holtville Air Strip, Tamarack Canyon Ranch, East Border Crossing, and Bravo Ranch.

The Special Purpose Facility designation would be applied to lands that are necessary for basic governmental services and that have physical or operational characteristics incompatible with most other land use categories. The designation includes Class I, II, and III solid and liquid waste facilities, correctional facilities, general aviation airports, or sites approved for those purposes. Implementation Strategies included in the Land Use Element of the Plan Update are sufficiently stringent to preclude the occurrence of any adverse land use impacts through the designation of new Special Purpose Facilities. Several existing waste disposal facilities are located, however, within Urban Area designations. In these instances the urban uses could eventually be developed in close proximity to the Special Purpose Facility. This incompatibility of potential future uses represents a significant adverse land use impact.

b. Mitigation Measures

Impacts associated with spheres of influence shall be mitigated through the processing through LAFCO of an amendment to the sphere of influence that would extend the sphere to cover the additional area affected.

Impacts associated with Specific Plan Areas shall be mitigated through the preparation of a Specific Plan that specifies the distribution, location, and extent of the uses of land. In each Specific Plan, a land use compatibility 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. In addition to the above measures that apply to all SPAs, each SPA has specific implementation policies. These policies are designed to preclude the occurrence of adverse land use and other effects.

Where an existing Special Purpose Facility is circumscribed by an Urban Area designation, eventual development could conflict with Special Purpose Facility operations. This impact shall be mitigated through the preparation of an environmental Initial Study for any proposed project within one-half mile of the facility. If any potential for a land use conflict between the proposed urban land use and the uses associated with the facility exists, an EIR shall be prepared. The EIR shall focus on the environmental effects of the land use conflict. In the case of a solid waste disposal facility, for instance, the EIR would examine the odor, noise, traffic, public health, visual, and water quality effects of the facility upon the proposed development. Implementation of this environmental review requirement would mitigate the potential impact below a level of significance.

Impacts associated with new facilities for the permanent placement of solid waste shall be mitigated as follows:

- The minimum required buffer for any area proposed for the permanent placement of solid waste (i.e., the actual landfill footprint portion of the facility) shall be 1,320 feet (one-quarter mile) from any lands not owned or controlled by the landfill owner or operator. Where public lands dedicated to open space uses or landfill related industrial development or mining operations are located within the said 1,320 feet, the buffer may not be required as determined by the lead agency. The potential long term environmental impacts to the neighboring land uses or development may be considered in making this determination.

2. Agriculture

a. Environmental Impacts

No impacts would occur to agricultural production and the preservation of Important Farmland through implementation of the Agricultural Element. Implementation of the Land Use Element, however, and development of the Mesquite Lake, Interstate 8/State Route 111, Tamarack Canyon Ranch, Bravo Ranch, and East Border Crossing SPAs would convert Important Farmland to non-agricultural uses and result in significant impacts to agricultural production.

b. Mitigation Measures

Mitigation measures would be required to reduce two types of agricultural production impacts: the direct loss of Important Farmland, and the indirect impact on adjacent agricultural operations associated with the conversion of agricultural land to non-agricultural uses. The direct and indirect impacts of any SPA or other proposed development could be mitigated by avoiding the impacts through the selection of alternative sites that do not contain Important Farmland. Alternatively, direct impacts shall be mitigated by one or more of the following 1) reducing the amount of agricultural land converted to nonagricultural uses and retaining on-site agricultural uses; 2) establishing agricultural packaging and processing facilities on these properties; 3) locating, securing, and improving replacement Important Farmland on a 1:1 acreage basis; 4) protecting offsite productive Important Farmland subject to conversion through the purchase or

transfer of its development rights; and 5) establishing, for any development impacting less than 160 acres of Important Farmland, an in lieu fee to improve Important Farmland on a 1:1 basis.

Indirect impacts shall be mitigated by 1) creating and maintaining on-site buffer zones; 2) restricting the intensity of non-agricultural uses adjacent to agricultural lands; 3) demonstrating that indirect impacts will not significantly affect future agricultural operations on an adjacent property by obtaining signed statements to this effect from the adjacent property owner; and/or 4) requiring that at least one entire property line of the new uses adjoin an area of existing urban uses.

Project-specific mitigation measures for direct and indirect impacts are to be provided on a project by project basis during the subdivision, zoning, and environmental review process. SPAs and other developments that do not meet these criteria should not be approved. In all instances the provisions of the Right To Farm Ordinance (No. 1031) must be strictly enforced.

3. Traffic Circulation

a. Environmental Impacts

The proposed Land Use Element of the General Plan Update would impact traffic circulation in the County. These impacts, however, would be mitigated by the adoption of the Circulation and Scenic Highways Element. The Plan Update would not impact Scenic Highways.

The Circulation and Scenic Highways Element would accommodate future growth in the area until the year 2015. Factors taken into consideration in forecasting traffic volumes on future roadways include trend line analysis, population projections, Caltrans projections and manual assignment of approved projects and land use decisions. With the new proposed classifications, all County street segments are expected to operate at Level of Service C or better. If future volumes conform to projections; and roads are built to the Circulation and Scenic Highways Element specifications, there would be no adverse circulation impacts with implementation of the General Plan. Level of service on State Highways, in some cases, deteriorates to level of service "D". The County of Imperial, however, has no jurisdiction over State Highways and planning for these facilities is undertaken by the State of California.

b. Mitigation Measures

The proposed Circulation Element for Imperial County mitigates traffic impacts that would result from the implementation of the land uses proposed by the new General Plan. Additionally, the County should require that project-level traffic studies be conducted during the environmental review phase of proposed development projects and proposed new roadway and roadway improvement projects. The County shall coordinate and cooperate with Caltrans in the future planning of State Highways.

4. Noise

a. Environmental Impacts

The Circulation and Scenic Highways Element would expand railroad service, implement rail service between the international border crossings in Calexico and the Coachella Valley, and encourage the use of railroad freight service to minimize long haul truck traffic. These goals and policies would increase the potential railway noise impact, and could reduce potential roadway noise impact.

For any proposed development within the 60 dB CNEL contours of an airport there are potential adverse noise impacts. For airports such as Brawley, where an expansion of the area within the 60 dB CNEL contour is predicted, there are potential impacts to existing sensitive receptors within the expansion zone.

Two proposed projects could add rail lines to the existing railway network: the proposed new international border crossing and industrial area east of Calexico, and the proposed Mesquite Landfill near Glamis. There is a potential for adverse noise impacts adjacent to these rail lines and along the rights-of-way of existing tracks.

A new State Highway, SR-7, will provide a north-south connection from SR-98 to a planned border crossing and industrial area east of Calexico. SR-7 may continue north to connect with I-8. Improvements are planned to SR-86 which is expected to follow a more westerly alignment from south of Salton City to reconnect with existing SR-86 southwest of Brawley. The increases in noise levels to existing sensitive receptors along these and non-State roadways will be adverse noise impacts. Where traffic volumes more than double, the increases will be greater than 3 dB CNEL, and potential for significant impact exists.

The Geothermal and Transmission Element encourages the continuing development of geothermal resources. The exploration, construction and operation activities associated with geothermal plants have the potential for adverse noise impacts. To avoid these impacts, the Geothermal and Transmission Element contains development and operation standards which include provisions to ensure that the impacts are less than significant.

The Agricultural Element would maintain the existing and potential noise impacts associated with agriculture. This Element would also enforce the Right To Farm Ordinance, which will tend to minimize the number of new sensitive receptors to agricultural noise.

New industrial and commercial development, in SPAs and urban areas may include noise-generating operations with the potential for significant noise impact upon adjacent or nearby sensitive receptors. Construction of residential, commercial and industrial facilities and of roads and utilities will generate noise with a potential for significant impact to existing sensitive receptors.

b. Mitigation Measures

The following specific mitigation measures should be taken to ensure that potentially significant noise impacts are reduced to a level less than significant.

- Acoustical analysis shall be required of all discretionary projects within the existing or projected 60 dB CNEL contour of any airport, as shown in the Imperial County Airport Land Use Compatibility Plan or an approved airport master plan which supersedes the ALUCP.
- Acoustical analysis shall be required of all discretionary projects within 750 feet of the centerline of any railroad or within 1,000 feet of the boundary of any railroad switching yard.
- Acoustical analysis shall be required of all discretionary projects which provide new railroad lines, or which increase the frequency of service or the size of trains on existing lines.
- Acoustical analysis shall be required of all discretionary projects within the distances from the centerlines of existing or proposed roadways. The roadway classifications are provided in the Circulation and Scenic Highways Element of the General Plan.
- Acoustical analysis shall be required of all discretionary projects which have the potential to result in a significant increase to noise levels to sensitive receptors in the community.
- The County shall identify and evaluate projects which have the potential to generate noise in excess of the Property Line Noise Limits specified in the Noise Element. An acoustical analysis must be submitted which demonstrates the project's compliance with the Property Line Noise Limits, and/or required mitigation measures to reduce noise to acceptable levels.
- The County shall enforce the property line noise limits as specified in the Noise Element.
- Acoustical analysis shall be required of all discretionary projects which are proposed within one-quarter mile (1,320 feet) of existing farmland which is in an agricultural zone. Purchasers or owners of property near agricultural lands or operations or included within an area zoned for agricultural purposes shall be provided with the disclosure statement from the Right to Farm Ordinance (No. 1031).
- The County shall enforce construction noise standards as specified in the Noise Element. These standards limit the hours of construction and the level of noise emitted by the construction operations.

- Each Specific Plan shall be accompanied by an EIR that includes an analysis of project impacts; the issues analyzed are determined by the County and other Responsible Agencies. The County shall assure that noise impacts are analyzed where appropriate.
- Where mitigation measures require acoustical analyses of discretionary projects, the County shall use the standards and criteria set forth in the Noise Element. Where acoustical analysis indicates the potential for conflict with the County noise standards or for significant noise impact, mitigation measures, as described in the Noise Element of the General Plan, should be considered and incorporated into the project.

5. Biological Resources

a. Environmental Impacts

The Plan Update would largely impact agricultural areas, since most of the native vegetation within Imperial Valley has previously been removed. Loss or disturbance of native vegetation in certain undeveloped areas is still expected, nevertheless, due to grading associated with future urbanization and required clearing and thinning for fire control. Sensitive species and habitats may also be impacted as a result of future development. The following lists some of the current and anticipated impacts to biological resources within the County:

- Past and/or present use of pesticides.
- Chemical changes in the County's surface drainage water, including salinity; selenium and other toxic compounds; organochlorine pesticides and herbicides; municipal waste discharges; erosion and siltation; and bacteria levels.
- Direct impacts from construction of urban and recreational developments.
- Indirect noise impacts from construction equipment and vehicle noise along urban roadways.
- Fuel management activities.
- Indirect impacts from human activities associated with developed areas, including unauthorized intrusions into adjacent native habitats; lighting and noise effects; disturbance from hikers and equestrians; increased predation from feral pets and birds; and increased "road-kills" along urban roads.
- Construction and maintenance of roads and power transmission lines.
- Off-highway vehicle use.
- Geothermal, oil and gas development, including associated noise impacts from cooling towers, drilling and power plant operations; human disturbances; toxic emissions of

arsenic, boron, ammonium salts and hydrogen sulfide from cooling towers and spray ponds; and accidental and controlled brine spills from geothermal fields.

- Sand and gravel extraction and gold mining.
- Habitat fragmentation and impacts to wildlife corridors and dispersal.

b. Mitigation Measures

Site-specific measures may be required of future development proposals as mitigation for potential impacts to significant biological resources. The design of such measures shall be based on a field reconnaissance conducted by a qualified biologist, and documented in a report to be submitted to the County Planning Department and relevant resource agencies for review and approval. Such reports shall include, at a minimum, a map of the specific biological resources occurring on the subject property, a description of sensitive species and habitats, an evaluation of potential impacts to these resources based on the proposed development plan, and recommended mitigation measures, if necessary. The range of on-site mitigation should include proposed open space easements to preserve sensitive resources, revegetation plans to fully compensate for the direct loss of sensitive biological habitat, or other feasible options such as conversion fees or mitigation banking, to be determined by future biological studies.

All recommended mitigation measures from these future biological field surveys shall become conditions of approval on subsequent development projects, subject to approval by the County Planning Department. In addition, the applicant shall submit the necessary permits, where applicable, to the relevant resource agencies for review and approval. All conditions specified by these approved permits shall also become conditions of approval.

6. Cultural Resources

a. Environmental Impacts

Significant impacts to prehistoric cultural resources may result if development occurs on existing undeveloped land in Imperial County. Impacts would be particularly likely to occur in sensitive areas such as along the New River, the Alamo River, and the Lake Cahuilla shorelines, the southwestern portion of the County around Ocotillo, and the easternmost portion of the County. Under the proposed Plan Update, most future development activities would occur in existing farmland and residential areas; no significant impacts to prehistoric cultural resources are expected to occur at these locations. Similarly, if development is restricted to existing farmland or residential areas, and away from documented historical sites, no significant impacts to historic resources are expected to occur. At the County-wide level, a potential exists for impacts to occur to undocumented historic sites, such as subsurface house foundations, privies, and trash deposits. No impacts to the Quechan or Torres-Martinez Reservations are expected to occur.

In comparison with the 1973 General Plan, the Plan Update offers a more comprehensive description of the status of cultural resources in Imperial County, including the general locations

of highly and moderately sensitive prehistoric resources. As such, the Plan Update represents an improvement over the 1973 Plan for the protection and management of cultural resources.

b. Mitigation Measures

No mitigation measures for prehistoric cultural resources are required for projects that may be proposed in areas that have been entirely developed. Significant impacts to prehistoric cultural resources would be expected to occur in areas that have been identified as very sensitive, moderately sensitive, or lightly sensitive. Any project proposed in these areas shall require a cultural resource study for prehistoric resources by a qualified archaeologist. Significant impacts to historic resources could occur in both previously developed and undeveloped areas. Project applicants should seek to identify any potentially significant historical resources that may exist in undeveloped areas proposed for development.

Developers of all SPAs shall be required, as part of the environmental review process, to have a cultural resource study conducted by a qualified archaeologist. If prehistoric or historic resources are encountered during any development project, a qualified archaeologist shall be consulted to evaluate the resources.

7. Public Services

a. Environmental Impacts

Implementation of the proposed Plan Update would result in an increased need for Sheriff services, fire protection by the County Fire Department, natural gas from the Southern California Gas Company, electrical energy, telephone service, sewer services, school capacity, and health care services.

b. Mitigation Measures

All impacts to public services will be mitigated below levels of significance. Potential impacts upon most public services will be mitigated by requiring that future developments pay fees to the County that cover the costs of providing such services.

8. Air Quality

a. Environmental Impacts

Imperial County is a nonattainment area for ozone and PM₁₀. Therefore, any adverse impact to the generation of these two pollutants is considered significant.

A proposed policy in the Land Use Element to amend the County Zoning Ordinance and County Zoning Maps to prohibit residential use as a primary use in commercial and industrial zones. This policy has the potential for adverse air quality impact, as it is contrary to the mixed land use strategy for attainment of air quality standards.

Another policy is to review zoning adjacent to industrial areas, with a preference for agriculture and a prohibition on residential. This policy may have a potential for adverse air quality impact, as it may conflict with the air quality strategy for balancing jobs and housing. The SPAs in the proposed Plan Update also have the potential for significant air quality impacts.

The Circulation and Scenic Highways Element contains data projecting considerable growth in vehicle traffic volumes to the year 2015. The additional vehicle miles travelled will have a significant adverse impact on air quality. However, this Element contains programs and policies designed to maintain levels of service which would minimize motor vehicle emissions. Additional policies encourage the use of non-motorized transportation and provide guidelines for a Transportation Demand Management program. This Element will not result in significant air quality impact.

Agricultural practices that emit pollutants, notably the burning of agricultural debris which contributes both ROG to the formation of ozone and PM₁₀, can be expected to continue, thus resulting in an adverse air quality impact. Growth in the agriculture industry also carries the potential of increased odor impacts, and impacts from aerial spraying of pesticides.

The Geothermal and Transmission Element recognizes the potential for adverse air quality impacts from the construction and operation of geothermal plants. The Element also recognizes potential air quality benefits where geothermal generation replaces, or is built instead of, fossil fuel generation. The development of new plants is subject to environmental review and air quality permitting rules. No significant air quality impact would occur from implementation of this Element.

b. Mitigation Measures

The following mitigation measures are recommended to minimize the potential for significant air quality impacts.

- Establish formal procedures in land use planning which provide air quality-sensitive inputs to the planning process as well as the review process.
- Consider the addition of an Air Quality Element to the General Plan. Alternatively, or in the interim, add the concepts of Mixed Use Zoning, Balanced Jobs and Housing, and Planning Compact Communities to the Goals and Objectives of the Land Use Element. These are strategies L-2, L-3 and L-1 of the *1991 Air Quality Attainment Plan* (APCD 1991).
- Purchasers or owners of property near agricultural lands or operations or included within an area zoned for agricultural purposes shall be provided with the disclosure statement from the Right to Farm Ordinance (No. 1031).
- Support the Air Pollution Control Officer with resources as required to implement the strategies of the *1991 Air Quality Attainment Plan* (APCD 1991), when approved.

Similarly, support study efforts to develop technically and economically feasible alternatives to the burning of agricultural waste.

9. Visual Resources

a. Environmental Impacts

Implementation of the Plan Update is not anticipated to impact the highly sensitive visual resources of the deserts, mountains, sand dunes and the Salton Sea. The Plan Update would, however, result in some impacts to agricultural areas and the incremental expansion of existing urban areas. The impacts would be due to the adoption of SPAs and Urban Area designations in existing agricultural areas. This is not considered a significant impact to visual resources.

b. Mitigation Measures

With the inclusion of objectives and policies to preserve the visual resources of the Felicity and Glamis SPAs, significant impacts are not expected in these areas and therefore no mitigation measures are proposed.

10. Water Quality

a. Environmental Impacts

The Plan Update would result in development of new residential, commercial, and industrial uses. This is not anticipated to cause significant impacts to water quality. The development of urban uses such as homes and businesses will have minimal water quality impacts. The development of urban uses would result in less fertilizer or pesticide residue being discharged to the drainage systems as is currently the case with the agricultural uses, although the discharge of total petroleum hydrocarbons (stormwater discharge) will increase. The development of urban uses would also result in lower salt concentrations being deposited into drainage systems than is currently the case with the agricultural runoff.

The development of new industrial uses will require a review of the proposed use by the City, State Regional Water Quality Control Board, County Environmental Health Department and the Environmental Protection Agency (EPA) to determine if additional mitigation measures will be needed. These mitigation measures cannot be identified at this time because the exact type of use is unknown. However, permits will need to be obtained from concerned agencies such as EPA and the State Regional Water Quality Control Board.

b. Mitigation Measures

The following mitigation measures shall be implemented in order to improve the water quality of Imperial County's bodies of surface water.

- Require new development to utilize measures designed to conserve water in their construction.
- Encourage farmers to use irrigation methods that conserve water.
- Participate with cities and districts to establish programs for the agricultural re-use of treated wastewater in manners that would be economically beneficial to agriculture.
- Participate with other agencies in developing strategies to reduce the use of pesticides and other chemicals without negatively impacting agricultural production; and thereby reduce the drainage of toxic elements into downstream drains and into the Salton Sea.
- Promote the use of water efficient sprinkling and gardening systems to include ordinances and technology to encourage drought tolerant plants.
- Allow development within unsewered areas only after testing proves that septic systems would not create potential pollution.
- Phase out the use of water softeners which utilize salt in the water-softening process to prevent continued degradation of the water.
- Require that appropriate and necessary permits be obtained from all responsible agencies before any new industrial use is established.

11. Geology/Soils

a. Environmental Impacts

Future development in the western and southwestern portions of the County could be affected by landslides. Development in the County could also result in impacts from grading, and impacts related to erosion and subsidence.

Imperial County is seismically active, with several major faults including the San Andreas Fault Zone traversing the region. The principal hazards related to seismic episodes are ground shaking, including differential ground settlement, soil liquefaction, rock and mudslides, ground lurching, and avalanches; ground displacement along the fault; floods from levee and dam failures; fires; and disruption of essential public facilities and systems, including water, sewer, gas, electricity, transportation, communication, and irrigation/drainage. As the proposed Plan Update would allow for increased urbanization and other development, there is greater potential than currently exists for loss of life and property damage due to seismically-induced liquefaction and catastrophic flooding downstream of a failed dam.

b. Mitigation Measures

Prior to the approval of a tentative map, implementing permit, or grading plan for any phase or unit of development, a geotechnical investigation shall be conducted by a registered geotechnical engineer identifying appropriate mitigation. Common mitigation measures associated with minimizing potential impacts to geology and soils include adherence to basic construction procedures pursuant to the Uniform Building Code, which involves the incorporation of seismic safety-related construction standards; removal and recompaction of soils susceptible to settlement; and reduction or control of erosion by retaining as much vegetation in place as possible throughout the development process. All geotechnical studies shall be submitted to the Imperial County Planning and Engineering Departments for review and approval. Mitigation measures that reduce identified impacts to below a level of significance shall be included as conditions of project approval.

12. Flood Control/Hydrology**a. Environmental Impacts**

The proposed Plan Update would allow for increased agriculture, urbanization and other development within the County. Resultant impacts could include:

- Alteration of existing surface drainage patterns;
- Increase in impervious surfaces, runoff volumes, and water levels of rivers, reservoirs and the Salton Sea;
- Increase in downstream erosion, sedimentation and siltation due to inadequate erosion control measures;
- Depletion of groundwater resources due to well water extraction and subsidence;
- Increased flooding potential, which could damage more property and inflict more casualties than would be experienced currently.

Future residential development could also result in discontinued use of adjacent agricultural properties if existing infrastructure (e.g., utilities, underground pipelines, access roads) is disrupted, without providing or maintaining temporary service connections during construction.

b. Mitigation Measures

Prior to the approval of a tentative map, implementing permit, or grading plan, a drainage study shall be conducted by a registered civil engineer experienced in performing drainage studies, and submitted to the County Planning Department for review and approval. This study shall include specific recommendations on the locations, design and construction easements for all temporary and permanent drainage and erosion control facilities required to handle surface drainage flows

based on peak build-out runoff volumes. The locations of all permanent maintenance structures and access roads required to service these facilities shall also be delineated. Supplemental environmental review may be required to determine potential impacts and mitigation measures related to the construction and maintenance of required drainage and erosion control facilities.

All future development projects shall be required to comply with the goals, objectives and policies of the Water Element, as relates to water conservation. In addition, reclaimed water facilities shall be considered as part of future development plans to aid in groundwater recharge. Improvement plans for reclaimed water facilities shall be prepared and submitted for review by the County Engineering Department prior to the approval of a tentative map, implementing permit, or grading plan. Such plans shall show the locations/sizing of reclaimed water facilities, in accordance with County and other responsible agency requirements. This measure would avoid the future need for disruptive pipeline construction activities in 'built-out' areas.

All future development proposed within potential flood hazard areas of the County shall be required to install appropriate flood control facilities and structures, in compliance with County and other responsible agency standards. Prior to the approval of a tentative map, implementing permit, or grading plan, an infrastructure improvement plan shall be submitted to the County Planning and Engineering Departments for review and approval. This plan shall show the temporary water utility connections that will be required to maintain continued agricultural use of adjacent properties that could be impacted by future grading operations.

C. Alternatives To The Proposed Project

Five alternatives to the proposed General Plan Update for the County of Imperial are discussed. 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".

1. Increased Agriculture Alternative

The Increased Agriculture Alternative increases the area of Important Farmland that would be protected for at least five years. This change is associated with a corresponding decrease in the proposed sizes of Urban Areas for Brawley, Calexico, Imperial, and Seeley; the removal of the Tamarack Canyon Ranch and Bravo Ranch SPAs; and the reduction of the I-8/SR-111 Corridor and East Border Crossing SPAs. 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.

The Increased Agriculture Alternative reduces several land use, agricultural, and other impacts. The 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. Only a little over 3% of the 560,000 acres currently under production would be lost under this alternative.

Indirect land use impacts to agricultural operations would also be reduced; 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. Conflicts between cities' spheres of influence and proposed Urban Area designations would also be reduced.

This alternative would generally decrease traffic circulation, public service, and visual impacts of the area, compared with the proposed Plan Update. Impacts that would be similar to those of the proposed Plan Update are noise, cultural resources, air quality, water quality, geology/soils, and flood control/hydrology. Biology impacts may increase somewhat due to the reduction of Recreation/Open Space area in East Mesa.

This alternative accommodates all projected growth for the County, and all goals, objectives, programs, and policies of the proposed Plan Update would be met through implementation of this alternative. All projected population growth, economic growth, and urban development would easily be accommodated in the Urban Areas and SPAs. The overall decreased significant land use impacts associated with this alternative make it environmentally superior to the proposed Plan Update and the Increased Development Alternative.

2. Increased Development Alternative

The Increased Development Alternative would allow for intensified development in the County. This would be accomplished primarily through the expansion of Urban Areas, the addition of four SPAs, and a significant reduction of Important Farmland. The Urban Areas proposed to be larger are Brawley, Calexico, El Centro, Holtville, Imperial, and Westmorland. In addition to the SPAs described for the proposed Plan Update, the Gordon's Well, Imperial County Land Company, West Ross Road Corridor, and SR-111 Corridor SPAs would be included in this alternative. The amount of area designated Recreation/Open Space is significantly higher under this alternative in comparison with that of the proposed Plan Update. The major reason for this is that Community Area is substantially reduced in the Ocotillo/Nomirage region.

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; businesses north of Calexico would experience significant economic losses as new commercialization concentrated near the border attracts customers from both sides of the border. Third, traffic circulation impacts would intensify in the border area. These impacts would be significant and unmitigable.

Regarding agricultural production, this alternative would result in the loss of 49,000 acres of Important Farmland. 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. This significant economic loss

would be accompanied with significant declines in agricultural-related employment and the economic viability of local support services.

Indirect land use impacts to existing agricultural operations would also intensify under this alternative. Normal agricultural operations such as aerial spraying, irrigation, and the transportation of farm equipment would be disrupted, and production costs due to rising land costs, theft and vandalism of farm equipment, crop pilferage, road congestion, and personal injury liability associated with farm trespass would increase as more people are brought into close contact with agricultural operations.

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.

In general, the 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. Properly mitigated, these impacts would not be significant, with the exception of those in and adjacent to Calexico.

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 public services such as police and fire protection, natural gas, treated water, sewer, and transportation of school children would be more demanding and expensive. 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.

The noise, biological, cultural, air quality, water quality, geology/soils, and hydrology/flood control impacts would be virtually to the impacts described for the proposed Plan Update.

Overall, this alternative is considerably less environmentally acceptable than the proposed Plan Update or the Increased Agriculture Alternative.

3. Modified Staff Alternative

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. This 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 convert agricultural land to non-agricultural uses for two years unless specific findings of benefit to the County can be identified.

Environmental impacts associated with the Modified Staff Alternative would be similar to those of the proposed Plan Update. The major differences would be a reduced availability of Important Farmland and an increase in Urban/Agriculture land use conflicts. In particular, an additional 2,500 acres designated as Urban Area for the expansion of Brawley, Imperial, and Holtville, and an 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.

In particular, approximately 6% of the 560,000 acres currently under production in the County would be lost under this alternative. This impact is only slightly greater than that of the proposed Plan and is considered mitigable. This alternative would also be associated with a slight 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 somewhat disrupted. These impacts, although considered significant, can be fully mitigated with the implementation of proposed policies and programs from the General Plan.

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

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

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

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

Impacts related to noise, biological resources, cultural resources, air quality, water quality, geology/soils, and flood control/hydrology for this alternative would be essentially the same as

those for the proposed Plan. All mitigation measures recommended for these impacts under the proposed Plan would apply to this alternative.

This alternative accommodates all projected growth for the County, and all goals, objectives, programs, and policies of the proposed Plan Update would be met through implementation of this alternative. All projected population growth, economic growth, and urban development would easily be accommodated in the Urban Areas and SPAs. The overall increased land use, agriculture, and other impacts associated with this alternative make it less environmentally preferred than the proposed Plan Update.

4. Environmental/Open Space Alternative

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. 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 Environmental/Open Space Alternative limits the total area of land designated as Urban Area to approximately 72,180 acres by reducing the Urban Areas of Brawley, Calexico, Imperial and Seeley, and allows Specific Plan Areas only at the East Border Crossing, Mesquite Lake, Felicity, Holtville Air Strip, and Glamis. These changes would be associated with an increase in land designated as Agriculture to 597,837 acres. Other 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 agricultural and intensive recreation uses such as recreational vehicle parks, athletic fields, golf courses, swim and tennis clubs, and off-road vehicle use areas from this land use category. This alternative includes a five-year limit on the conversion of agricultural land by General Plan Amendments.

Land Use conflicts would be significantly 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. Other land use impacts identified for the proposed Plan Update would remain the same under this alternative. The mitigation measures recommended for the Land Use section of this EIR shall apply to this alternative.

Associated with the reduced Urban Area boundaries and removal of three SPAs 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.

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. However, the reduced direct and indirect agricultural impacts associated with the

Environmental/Open Space Alternative also contribute to the conclusion that this alternative is environmentally superior to the proposed Plan Update.

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

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. 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.

The cultural resource impacts of the Environmental/Open Space Alternative would be somewhat reduced due to the increased restrictions on development uses and activities in Recreation/Open Space area. The mitigation measures recommended for the Cultural Resources section of this EIR shall apply to this alternative.

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

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

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

Impacts related to noise, water quality, geology/soils, and flood control/hydrology for this alternative would be essentially the same as those for the proposed Plan. All mitigation measures recommended for these impacts under the proposed Plan would apply to this alternative.

5. No Project Alternative

The No Project Alternative would involve not adopting the proposed General Plan Update. The existing General Plan, prepared in 1973, would remain in effect.

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. The overall large area allocated to urban and other residential uses does not reflect community and State concerns regarding retention of agricultural land, preservation of the character of existing rural desert communities, and the restriction of urban land uses to the periphery of existing urbanized areas. The land use impacts of the No Project Alternative would be regarded as significant. The direct loss of Important Farmland that may occur under the No Project Alternative would also be significant.

The Circulation Element of the 1973 General Plan consists of a highly simplified street classification system which does not include pavement widths, traffic projections, or level of service projections. The No Project Alternative would significantly impact traffic circulation in the County.

The No Project Alternative would also offer less opportunity to protect sensitive biological and cultural resources, and may lead to significant disruptions in the provisioning of adequate public services and to increased air quality impacts. The No Project Alternative would not be expected to result in any significant impacts to noise, visual resources, water quality, geology/soils, or flood control/hydrology.