

V. CUMULATIVE IMPACTS

When analyzed separately, the individual effects of a proposed project may not be considered significant, or may be mitigated to below a level of significance via implementation of proposed mitigation measures. When considered together with other projects in the vicinity, either currently under construction, recently approved, or planned in the near future, however, the cumulative effects may prove to be significant. As required by CEQA (Section 15355), the objective of this section is to evaluate the potentially significant environmental impacts associated with implementation of the proposed General Plan, in conjunction with past, present and reasonably foreseeable future projects in the surrounding region. In order to comply with this objective, the following analysis must assume full build-out of the various land use classifications within the County, as well as within its sphere of influence. The County's sphere of influence, similar to that of its incorporated cities, encompasses portions of the surrounding municipalities. For purposes of this analysis, this sphere shall extend for several miles from the Imperial County line into the counties of San Diego and Riverside in California, the State of Arizona, and Mexico. Assuming full build-out of these areas, it would not be necessary to list projects individually.

Potentially significant cumulative impacts are identified in nearly all of the environmental issues listed below. Mitigation for these impacts can be accomplished via the successful implementation and monitoring of the goals, objectives and policies in the Imperial County General Plan Update. In accordance with CEQA requirements, the timing of implementation for each of these General Plan policies is delineated in the Mitigation Monitoring Program (Appendix F). Verification of compliance for each measure on this Checklist is required in order to ensure that all cumulative environmental impacts are mitigated to below a level of significance.

Consistent with a "program-level" analysis as defined by CEQA, the above shall be considered adequate mitigation for potentially significant cumulative impacts associated with implementation of the Imperial County General Plan. Any subsequent General Plan Amendment (GPA), however, shall require corresponding environmental review and additional mitigation (where applicable) if the proposed GPA would result in:

- A substantial change in any of the stated goals, objectives and policies of the General Plan.
- A substantial change in the Mitigation Monitoring Program adopted herein.
- The generation of new cumulative environmental impacts.

Also analyzed in the Cumulative Impacts section are reasonably foreseeable future projects. This analysis focuses on future General Plan Amendment projects and includes both a list of such projects and a generalized discussion of potential impacts. In view of the fact that these projects have only limited technical information available since they are just beginning the

approval process, or in some cases have not yet been applied for, the conclusions are general. Future listed projects do not include subdivisions, conditional use permits, or rezones because under the worst case analysis they are already covered under the cumulative effects of implementing the General Plan. The following future projects are included in this analysis.

1. Mesquite Regional Landfill

A regional landfill covering approximately 5,200 acres in the Glamis area. This project will focus on receiving waste from the greater Los Angeles area by rail. The project will require a General Plan Amendment to designate the project area as Special Purpose Facility, a rezone and a conditional use permit among many other local, state, and federal actions. A complete application is on file with the County of Imperial.

2. Chocolate Mountain Regional Landfill

The project would also include a regional landfill in excess of 3,000 acres in the Chocolate Mountain area southeast of Niland, California. This project would also serve the greater Los Angeles area waste stream by rail. The project would also require a General Plan Amendment to designate it as Special Purpose Facility, a rezone and a conditional use permit, and various other local, state, and federal actions. A complete application for this project has not been submitted to the County of Imperial.

3. Mt. Signal Industrial Park

This project would include a new border crossing and industrial park on approximately 3,700 acres of land east of Mt. Signal and west of Calexico. At a minimum, this project would require a General Plan Amendment to Specific Plan Area, and implementing development permits. A completed application has not been submitted to the County of Imperial.

4. Niceland Specific Plan Area

This project would include a mixed-use master planned development at Dunaway Road and Interstate 8 on approximately 1,100 acres. The proposal would require a General Plan Amendment to Specific Plan Area and implementing permits. Currently, no application is on file with the County of Imperial, only verbal intent to pursue a development project.

A. Land Use

1. General Plan Implementation

Full implementation of the Imperial County General Plan Land Use Element would involve two primary issues of potential environmental concern: growth inducement and compatibility. The issue of growth inducement is analyzed in Section IV of this EIR, but only in terms of projected growth within the County. When compared against neighboring growth patterns along its north-

central border with Riverside County and southern border with Mexico, Imperial County is expected to contribute significantly to regional growth. The physical form of this projected growth can be characterized as an increase in development oriented along north-south (State Route 111) and east-west (Interstate 8) "urban corridors". The intensity of development along these corridors is the primary factor in determining whether implementation of the proposed General Plan would result in a significant growth-inducing impact on a regional scale. Insofar as such growth occurs in a haphazard and ill-planned fashion, the potential exists for significant adverse impacts. The land use policies contained in the General Plan Update, however, are intended to reduce the potential for regional growth-inducing impacts to below a level of significance.

Potentially significant adverse impacts could occur due to incompatibility between land uses developed along the periphery of the Imperial County line and those located on immediately adjacent property outside the County, particularly in Mexico. The potential for such impacts are minimal along the eastern and western County boundaries due to the presence of natural barriers to development (e.g., Colorado River, Anza-Borrego Desert State Park, and Jacumba, Fish Creek and Santa Rosa Mountains). Land use incompatibility is also possible in areas near the Salton Sea and the Riverside County line, but can be mitigated through the inclusion of a land use compatibility study as a requirement of future development proposals in these areas. For three reasons, the risk of incompatible land uses is greatest along the Mexican border. First, as a general matter this region is expected to undergo the most rapid growth. Second, land use controls within Mexico may be less stringent than within Imperial County. Finally, to the extent such controls exist, Imperial County has limited opportunity to coordinate its land use decision-making with the Mexican government. The policies incorporated into the proposed plan lessen the risk of cross-border incompatible land uses. Nevertheless, the risk of incompatible land uses along the Mexican border is significant and unavoidable.

2. Future General Plan Amendments

Each of the potential projects listed above would require a General Plan amendment. Amending the General Plan, rezoning, and (where applicable) obtaining conditional use permits or Specific Plans would, during both the planning process and environmental review, address potential inconsistencies with land use designations.

The potential landfill proposals present the risk that they will be incompatible with adjoining land uses. The proposed General Plan provides that any area proposed for the permanent placement of solid waste must be surrounded by a buffer of at least 1,320 feet from any lands not owned or controlled by the landfill owner or operator that are not public lands dedicated to open space uses, landfill related industrial development, or mining operations. This buffer will mitigate potential cumulative nuisance impacts associated with the potential landfills.

The Mt. Signal Industrial Park and Niceland Specific Plan Area proposals would result in increased urbanization of these areas. Policies in the General Plan would ensure that these uses would be compatible with surrounding uses.

B. Agriculture

1. General Plan Implementation

Implementation of the General Plan Agriculture Element would ensure that approximately 93.4% of existing Important Farmland within Imperial County will be reserved for agricultural uses for the next five years. These lands include the categories of "Prime Farmland", "Farmland of Statewide Importance", "Unique Farmland" and "Farmland of Local Importance" as defined by federal and State agencies. Furthermore, all existing agricultural land will be preserved for irrigation agriculture, livestock production, aquaculture and other agriculture-related uses, except for non-agricultural uses identified in the General Plan or in previously adopted city General Plans. Thus, the goals, objectives and policies of the Agriculture Element are intended to prevent the regional cumulative loss of agricultural land in the short-term. Implementation of this Element would also reduce the potential for cumulative impacts associated with conflicts between agricultural and adjacent non-agricultural land uses.

For long-term protection (beyond five years) of significant agricultural resource areas within Imperial County, a regional land use study shall be prepared every five years. The purpose of this study shall be to examine the degree to which future development approaches build-out within each of the designated urban areas of the County, including Specific Plan Areas. The intent of this measure is to limit the future conversion of any agricultural land to urban uses, unless it is shown that all urban designations within the County have been built-out. Ordered by the County Board of Supervisors, this five-year regional land use study shall be prepared by the Planning Department. To facilitate implementation of this measure, the following shall become a recommended policy of the General Plan Land Use and Agriculture Elements:

- No GPA shall be permitted which allows the conversion of agricultural land to urban uses, unless it is shown by means of a regional land use study that build-out has been achieved in an orderly and well-planned fashion within each of the urban land use designations shown on the Imperial County General Plan Land Use Map. To be conducted every five years, the Imperial County Planning Department and Board of Supervisors shall review and approve said land use study.

2. Future General Plan Amendments

The proposed landfill projects would have no impact on existing farmland and, due to their location in remote areas, will be served only by groundwater which would not effect potential new agricultural development. The proposed Specific Plan Areas would have a direct cumulative impact on 3,000 to 4,000 acres of existing Important Farmland. This impact could be mitigated by implementation of measures identified in the Agricultural section of the EIR. Specifically, the direct impacts of the proposed SPAs may be mitigated as follows:

- Impacts to Important Farmland shall be avoided by proposing alternative sites that do not contain Important Farmland, or sites with less productive soils, less intensive agricultural uses, or less potential for land use conflicts.

If selecting alternative sites proves to be infeasible, the General Plan sets forth numerous, additional policies designed to mitigate these impacts. These mitigation measures are described in detail in the analysis of impacts to agricultural in this Draft EIR.

C. Traffic/Circulation

1. General Plan Implementation

The General Plan Circulation and Scenic Highways Element was designed to accommodate future growth in the region until the year 2015; therefore, its implementation would not result in significant adverse cumulative impacts with respect to the levels of service (LOS) on existing and planned roadways and intersections. Two State highway segments within the County, however, are projected to operate at LOS D. These are Interstate 8 (I-8) between Fourth Street and State Route 111 (SR-111), and State Route 86 (SR-86) between Heber and Dogwood Roads. Portions of the County roads which intersect these State highway segments may also operate at deficient levels of service since delays at intersections tend to deteriorate operating conditions along street segments. As development proceeds within the County and its sphere of influence, the corresponding increase in traffic volumes would contribute significantly to the cumulative traffic impacts along these street segments. Since the County has no jurisdiction over State highways, the affected road segments may continue to experience severe traffic congestion and safety impacts until appropriate interchange improvements are conducted by the California Department of Transportation (Caltrans).

2. Future General Plan Amendments

The proposed landfills would not have a cumulative impact on local traffic circulation because they would be rail oriented and would generate only limited local (intra-County) trips. The proposed landfills would not have a cumulative impact on the region rail system because the existing system is under-utilized, and thus existing capacity on that system would accommodate both landfills.

Cumulative traffic impacts from the Specific Plan Area proposals would focus on Drew Road, Dunaway Road, and Interstate 8. These cumulative impacts are potentially significant. Policies incorporated into the General Plan, however, call for project-specific analysis to ensure that levels of service (described in the General Plan's Circulation and Scenic Highways Element and in the traffic/circulation analysis in this Draft EIR) are maintained, and to make improvements in the circulation system if that proves to be necessary. The proposed Specific Plan Areas would be subject to this requirement. Accordingly, the proposals will be individually evaluated to ensure that any potential impacts on the circulation system are fully mitigated by conforming to the performance standards prescribed therein.

Development associated with the Mt. Signal Industrial Park and Niceland Specific Plan Area proposals would result in increased vehicle trips and vehicle miles travelled, which in turn would result in increased ROG, NO_x and PM₁₀ emissions. These emissions could exacerbate the existing non-attainment status of Imperial County for ozone and PM₁₀. Policies in the General Plan (e.g., consideration of mixed use development, including the Air Pollution Control Office in the planning process, promoting a job/housing balance), however, would apply to the proposals, and would mitigate these impacts to a less than significant level. In addition, these proposals will be subject to separate environmental review, in the course of which the proposals would be required to mitigate to the extent feasible any contribution to regional air quality impacts. Because detailed analysis of air quality impacts is not available at the General Plan level of analysis, it is assumed that these projects may contribute to a cumulatively significant impact to air quality. At present, the County has not received development applications for these projects. Pursuant to CEQA Guidelines section 15145, further analysis is considered speculative until such time as development applications are submitted.

I. Visual Resources

1. General Plan Implementation

Full implementation of the Imperial County General Plan would eventually result in the build-out of existing land uses throughout the County. In some cases, this may be a conversion of an existing use such as Agriculture to Urban, for example. Vacant and undeveloped land would also be converted to either residential subdivisions, commercial, industrial and recreational uses, or agricultural fields. How a future development affects the County's visual resources depends upon its location relative to unique physical and geological features, the visibility of significant features from important public areas, and accessibility of vantage points to the public. The most significant visual resources within the County include the Salton Sea; the Yuha Desert area; the ancient dunes of the Algodones Sand Dunes; limited areas of restricted public access along the lower Colorado River, such as Picacho State Recreational Area, Yuma, and Palo Verde Valley; agricultural fields; a few man-made lakes (e.g., Ferguson, Finney, Ramer) and dams (e.g., Laguna and Imperial); and some of the more prominent mountains and mountain ranges, such as Picacho Peak, Superstition Mountain, Superstition Hills, and the Chocolate, Cargo Muchacho, Palo Verde, Jacumba, Coyote, Fish Creek, and Santa Rosa Mountains.

Determining thresholds of significant impact to these visual resources is a highly subjective undertaking. Regardless of its subjective nature, the identification of key viewsheds and vantage points is critical to any visual analysis. Measures to reduce, avoid, or mitigate potentially significant cumulative impacts to visual resources are provided in the Conservation and Open Space Element of the General Plan. Furthermore, the various Specific Plan Areas designated throughout the County will be required to adopt visual design guidelines. The extent to which visual impacts from future development plans are mitigated shall be determined by subsequent visual studies and conformance to adopted visual design guidelines.

2. Future General Plan Amendments

The potential future projects would all have localized visual impacts which would not cumulatively be significant to the County of Imperial due to the extensive distances between projects. Although not considered a cumulative impact, they would require visual analysis at a project-specific level to determine appropriate localized impact mitigation.

J. Water Quality

1. General Plan Implementation

Future urban development within Imperial County and its sphere of influence is expected to discharge less fertilizer or pesticide residues, and result in lower salt concentrations in existing drainage systems than is currently the case due to agricultural runoff. Urban runoff, particularly from industrial uses, contributes significantly to water quality degradation in the region, nevertheless. Oil and grease residuals and heavy metals are examples of pollutants found in urban runoff which can lead to potentially significant cumulative impacts with respect to surface and groundwater quality. The potential also exists for contamination of surface and groundwaters in the vicinity of geothermal power plants due to the presence of pollutants such as ammonia, boron, copper, lithium, strontium and manganese. Policies designed to mitigate these potential cumulative water quality impacts to below a level of significance are detailed in the Water Plan and Geothermal Element of the proposed General Plan Update.

2. Future General Plan Amendments

The potential landfills could have a potentially significant impact on water quality. These impacts, viewed together with the General Plan, could contribute to a cumulatively significant impact to water quality.

The potential landfills will be subject to extensive environmental review. In light of the risks posed by landfills, this review will place substantial focus on water quality issues, particularly the protection of groundwater. The landfills will incorporate extensive design controls and other measures designed to mitigate their potential impacts on water quality. Controls and measures will include landfill liner systems and monitoring programs, and will be subject to the review and approval of the Regional Water Quality Control Board. Of necessity, the review will be conducted on a project-specific level. With the incorporation of these controls and measures, potential impacts to water quality are mitigatable to a less than significant level.

K. Geology/Soils

1. General Plan Implementation

Implementation and monitoring of the mitigation measures listed in Section K of this EIR shall adequately mitigate to below a level of significance the potential cumulative impacts of soil

erosion, siltation, sedimentation, and subsidence that could result from future grading of undeveloped areas within Imperial County and its sphere of influence. As previously mentioned, the public safety hazards typically associated with a major seismic event and its related effects (e.g., surface rupture, groundshaking, liquefaction and inundation due to dam failure) are independent of this cumulative impact analysis.

2. Future General Plan Amendments

All possible projects may be significantly impacted by the unique geology/soils circumstances of Imperial County. However, adequate mitigation is available for ultimate project implementation based on specific engineering designs.

L. Flood Control/Hydrology

1. General Plan Implementation

As future development proceeds within the region, the incremental increase in impervious surfaces is expected to result in potentially significant cumulative impacts with respect to the alteration of surface drainage patterns; increased burden on existing drainage capacities; increase in urban runoff volumes and flows, leading to downstream flooding potential; degradation of surface and groundwater quantity and quality; and increase in erosion, sedimentation and siltation. As with the discussion on "Geology/Soils" above, implementation of the mitigation measures provided in this EIR shall mitigate this potential cumulative impacts to below a level of significance.

2. Future General Plan Amendments

Cumulative impacts from future development projects vary among the landfills and Specific Plan Areas. However, these impacts are readily mitigated with the implementation mitigation measures presented in the EIR.