

within the Brawley Elementary School District and Brawley Union High School District. An increase in population would also create additional demand for library and recreational facilities. To offset impacts, the No C-RE would include payments of mandatory development impact fees to keep impacts at less-than-significant levels.

Traffic and Circulation

The No C-RE Alternative would result in fewer traffic impacts than the proposed Project. Commercial development generates a significantly greater amount of vehicle trips than residential development (see Appendix H). By replacing the C-RE land use designation with the R-PA land use designation, the number of vehicle trips would be reduced. Because quantitative analysis of the No C-RE Alternative was not included in the traffic study, implementation of this alternative would require such analysis accurately identify impacts and mitigation measures necessary to maintain acceptable operation of the circulation system. This analysis would also be necessary to ensure that the revisions to the on-site roadway network under the No C-RE Alternative and traffic patterns that would result would not present unforeseen impacts on or off site.

Utilities

By replacing commercial use with low density residential use, the No C-RE Alternative would result in impacts to utility services similar to those assessed for the proposed Project. Replacing commercial use with new homes would slightly increase the demand on water supply, wastewater, energy and telephone service, but impacts would remain less-than-significant. Therefore, impacts of this alternative would be similar from those less-than-significant impacts identified for the proposed Project.

5.3 Alternatives Considered and Rejected

Analysis of an alternative site is not considered suitable for this EIR. The Rancho-Porter project includes development of contiguous parcels that is anticipated in the long range land use plans of the affected jurisdictions; moving the planned development to one or more alternative locations would require acquisition of those parcels by the project applicant; location of a large area of land capable of supporting a master plan development with residential, commercial, and mixed-use components near existing urban infrastructure; as well as requiring a substantial revision of the City and County land use plans and other planning documents. Furthermore, such relocation would not avoid significant environmental impacts and would likely increase impacts if developed further from the City urban areas and away from existing infrastructure such as SR-111 and SR-78. Therefore, an alternative site is not considered a feasible Project alternative. No other alternatives were considered prior to this environmental review.

5.4 Summary Comparison of Alternatives

The No Project Alternative avoids more significant impacts than does the Reduced Density Alternative and the No C-RE Alternative; therefore, the No Project Alternative is environmentally superior to the

other two alternatives. Pursuant to CEQA Section 15126.6(e)(2), the Reduced Density Alternative must be considered the “environmentally superior alternative,” as the No Project Alternative may not be labeled as such.

By reducing the number of residences, the Reduced Density Alternative would lessen impacts on air quality, noise, public services and recreation, transportation, and utilities. Impacts related to agriculture, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, and land use would be similar. Table 5-1 below compares the significance of the potential impacts for the proposed Project and for the alternatives considered.

Table 5-1. Comparison of Project Alternative Impacts to Proposed Impacts

Impact Category	No Project Alternative	Reduced Density Alternative	No Commercial Regional (C-RE) Alternative
Agricultural Resources	Less	Similar	Similar
Air Quality	Less	Less	Less
Biological Resources	Less	Similar	Similar
Cultural Resources	Less	Similar	Similar
Geology and Soils	Less	Similar	Similar
Hazards and Hazardous Materials	Less	Similar	Similar
Hydrology and Water Quality	Less	Similar	Similar
Land Use	Greater	Similar	Similar
Noise	Less	Less	Less
Public Services and Recreation	Less	Less	Greater
Transportation	Less	Less	Less
Utilities	Less	Less	Similar

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6.0

GROWTH INDUCEMENT

Section 15126.2(d) of the CEQA Guidelines requires that an EIR discuss the ways in which a proposed project could foster growth-inducing effects. Growth inducement refers to economic or population growth, the construction of additional housing, or removal of obstacles to population growth. Direct growth inducement may result from the provision of public services and infrastructure (e.g., utility lines and roads) to a previously undeveloped area. Such a provision can foster additional growth by reducing development constraints for nearby areas, thereby inducing other landowners in the area to convert their property to other uses. Direct impacts can also result from a development's population placing strain on existing public services, or a particular development increasing the pace of density of existing surrounding developments. Indirect growth-inducing impacts include the additional demand for housing, commodities, and services that new development attracts by increasing population and/or services in an area.

The Project proposes the construction of a maximum of approximately 1,296 new residences, a portion of which would be constructed as part of a mixed residential and commercial use area of approximately 23 acres. In addition, the Project proposes the construction of a maximum of approximately 32 acres of commercial property. In an alternative scenario, with the commercial overlay incorporated, residential units are reduced to a maximum number of 1,134 to accommodate an increased amount of commercial space at approximately 53 acres. The project would extend City of Brawley infrastructure, including roadways and utility pipelines, to service the site.

The proposed Project is consistent with the City of Brawley General Plan, which accommodates planned growth for a population increase projected by SCAG to double in 25 years from 22,433 in 2005 to 49,036 in 2030. Through its General Plan process and coordination with SCAG, the City of Brawley has planned for projected population and physical growth within its existing boundaries and surrounding areas planned for future annexation. The Specific Plan site and much of the surrounding land has been planned for residential and regional commercial development. The City's plan for infrastructure and service extension to accommodate this planned growth is presented in the Special Study Area designation and P-D zone. The project's park element would serve existing and future residential development in the City, but would not affect growth in any appreciable way. Growth associated with the project would accommodate projected population growth within the City and the Imperial County region as a whole.

The proposed Project would directly impact public services by increasing demand. This would place additional strain on schools, firefighters, police officers, libraries, solid waste, and other public services. Development Impact Fees to be paid by the developer would provide funding for these resources to the City and schools to compensate public service providers and facilities for this growth induced increase in demand.

The proposed project would indirectly place pressures to convert prime farmland outside of the designated urban area to non-agricultural uses south and east of the project site. While the Project would not have direct impacts to these properties, the cumulative impact of the development of the proposed project may place additional pressure to remove agricultural land in the vicinity from production.

The proposed project site is located east of and adjacent to the City's boundary. According to the California Department of Conservation Farmland Mapping and Monitoring Program (2004), the project site includes and is surrounded by Farmland of Statewide Importance, includes and is east of Prime Farmland and is southeast of Farmland of Local Importance. Land adjacent to the project site's northwest boundary is developed and land adjacent to the project site's southeast boundary is under the Agricultural Land Use designation.

The relaxation of trade barriers following approval of the North American Free Trade Agreement (NAFTA) has brought increasing numbers of new residents, business and leisure travelers to the region. It is also expected to greatly increase agricultural import and export opportunities. The region already accommodates large numbers of seasonal agricultural workers who would continue to travel to the Imperial Valley and often choose to remain as permanent residents. To accommodate population growth and take advantage of NAFTA-related economic opportunities and residential development, both the City and the County have determined that it will likely be necessary to convert existing "Important Farmland" to non-agricultural, urban uses. With the other Special Study Area projects, many of the cumulative projects would result in conversion of farmland to non-agricultural uses. This cumulative impact is anticipated by the City and County General Plans.

To offset the expected net loss of Prime Farmland or Farmland of Statewide Importance and provide necessary housing and support facilities, both the City and County General Plans designate areas where growth should be directed. All properties within the urban limit line are anticipated for development. Urban uses outside this boundary are not currently anticipated and/or planned for urban development and indeed policies and city-wide mitigation is in effect to restrict urban growth outside the existing urban boundaries indicated in the City's General Plan Land Use Element and associated Zoning Ordinance. However, this indirect pressure resulting from on-going regional growth patterns in Imperial County would result in a significant cumulative impact on conversion of Important Farmland.

7.0

CUMULATIVE IMPACTS

7.1 Cumulative Projects

Section 15130 of the CEQA Guidelines allows for the preparation of a list of past, present, and reasonably foreseeable future projects as a viable method of determining cumulative impacts. Section 15130 also states that a summary of projects contained in an adopted general plan or related planning document which is designed to evaluate regional or area-wide conditions may be used in a cumulative impact analysis. This discussion primarily uses the first method for analyzing cumulative impacts with the exception of traffic, air quality, and noise, which utilize both the list method and adopted Imperial County and City of Brawley General Plans. A list of all related present and reasonably foreseeable future projects known to the City was compiled; past project that have already been built were already included in the baseline. Additionally, an analysis is provided of the effects that the proposed Project may have on each environmental category of concern when considered in conjunction with past, present, and reasonably foreseeable future projects. These include impacts related to agricultural resources, air quality, biological resources, cultural resources, geology/soils, hazardous materials, hydrology/water quality, land use, noise, public services/recreation, traffic and utilities.

According to Section 15130 of the CEQA Guidelines, the discussion of cumulative effects need not provide as great a detail as it provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness. Reasonable mitigation measures must be discussed; however, CEQA acknowledges that with some projects the only feasible mitigation measures for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis.

Table 7-1 is a list of the projects in the vicinity of the proposed Rancho-Porter project that either have applications submitted or approved, are recently constructed or under construction. The projects that are included in the table below potentially pose cumulative construction and/or operational impacts to agricultural resources, air quality, biological resources, cultural resources, geology/soils, hazardous materials, hydrology/water quality, land use, noise, public services/recreation, traffic and utilities.

Table 7-1. Past, Present, and Probable Activities That May Result in Cumulative Impacts

Project Name	Use Type	Sq. Foot/Units/Rooms	Location
Luckey Ranch	Planned Development	803 single family units, 468 multi-family units	East of Best Ave, North of Hwy 78
La Paloma	Planned Development	1430 single family units, 570 multi-family units	South of Malan, West of Hwy 111, North of Best Canal.
Brawley Gateway	Planned Development	124 single family units, 240 multi-family units, 44 ac commercial, 50.5 acres	East side of Hwy 86, South portion of City of Brawley.
Rancho Los Lagos	Development Under Study	1071.15 acres	West of Dogwood Rd, North of Schartz Rd, East of Hwy 86, South of City of Brawly on Mead Rd
Griffen Smythe	Commercial Project	34.50 acres	West of Hwy 86, East of Willard Ave, South of Del Norte Chevrolet, North of animal clinic
Pioneer's Hospital	Commercial Project	20 acres	East of Evelyn Ave, South of Austin Dr, North of American Legion Rd.
Walgreens	Commercial Project	5.51 acres	Northwest corner of Legion Rd and Hwy 86.
E-Z Gardner Nursery	Commercial Project	1.20 acres	630 South Brawley Ave, on South side of Hwy 86.
Brawley Inn	Commercial Project	2.16 acres	Corner of West Main St and North Las Flores Dr.
Coffee Shop / Car Wash	Commercial Project	0.52 acres	120 Main St, South of W Main St, East of South Western Ave, West of South First Ave, North of West G St.
Quick Lube / Car Wash	Commercial Project	0.44 acres	Northeast corner of Main St. and 9th St.
Motel / Restaurant / Retail Stores	Commercial Project	4.59 acres	1562 Main St, South of Hwy 78, East of South Western Ave, North of I Rd.
C&C Gas / Jack In The Box Restaurant	Commercial Project		Southwest corner of Main St (Hwy 78) and Best Ave (Hwy 111).
Webster Ranch	Commercial Project	48.41 acres	Between 7st and SR 111, North of River Dr.
Brawley Beef	Commercial Project	154 acres	South side of Shank Rd, Luckey Ranch Planned Development.
Best Western	Commercial Project	1.0 acre/ 50 hotel rooms	1400 East Main St, Southwest corner of East Main and Eastern Ave.
Walmart	Commercial	18.78 acres	Located in Brawley Gateway Planned Dev, South

Project Name	Use Type	Sq. Foot/Units/Rooms	Location
	Project		of fut. Panno Rd, East of Hwy 86, North of Legion Rd, West of future extension of Western Ave.
Parkside Estates	Residential	98.1 acres / 428 single family lots	East of North Western Ave, West of North Imperial Ave, North of River Dr.
Park Imperial Condos	Residential	3.12 acres / 50 apartment-condo conversion units	650 N. Imperial Ave, South of River Dr, East of North Imperial St, West of North Fifth St, North of A St.
River Drive	Residential	24.5 acres / 122 single family lots	North of River Dr, West of Palm Ave, South of Duarte Ave.
Silver Oaks	Residential	14.71 acres / 256 condo units	Located in Luckey Ranch Subdivision, East of Best Ave, West of future Seabolt Blvd, South of future River Dr, North of future A St.
Valle del Sol Apartments	Residential	3.94 acres / 72 density bonus units	1605 and 1623 C St, between North Eastern Ave and Best Ave.
Adams Park	Residential	20.21 acres / 50 single family lots	South side of C St, West of Best Ave, East of North Eastern Ave.
Sonterra Apartments	Residential	3.15 acres / 54 senior apartment units	Eastern side of South Eastern Ave, North of Del Rio School.
Toscana	Residential	2.62 acres / 61 apartment units	1545 I St, North of I Rd, East of South Eastern Ave, West of State Hwy 111, South of Hwy 78.
Garcia Subdivision	Residential	4.63 acres / 10 single family, 1 multifamily lots	North of I Rd, East of South Eastern Ave, West of State Hwy 111, South of Hwy 78.
I Street Apartments	Residential	4.64 acres / 77 apartment units	1586 I St, South of I Rd, East of South Eastern Ave, West of State Hwy 111, North of K St.
River Drive Townhomes	Residential	1.39 acres / 22 condo units	North of River Dr, West of Palm Ave, South of Duarte Ave.
Casa by the Desert	Residential	1.91 acres / 29 multifamily lots	1669 Main St, North side of Malan St, West of Best Ave, East of South Eastern Ave.
Planters Hotel	Residential	64 affordable senior units	313 Main St, South of Main St, East of South 3rd St, North of West G St, West of South Plaza St.
Ciudad Plaza	Residential	61 affordable senior apartment units	Northwest corner of Main St and Eighth St.
E Street Apartments	Residential	0.77 acres / 14 apartment units	Southeast corner of East E St and North Ninth St.
Remington Club Condos	Residential	Conversion 40 apartment units to condo units	585 West H St, North of West H St between Terrace Cir and Willard Ave.
Cattle Call	Residential	0.80 acres / 12	275 Cattle Call Dr, East of South El Cerrito Dr,

Project Name	Use Type	Sq. Foot/Units/Rooms	Location
Apartments		apartment units	West of South Western Ave, South of Allen St.
Cattle Call Townhomes	Residential	16 townhome units	396 Cattle Call Dr, North of Hwy 86, South side of Cattle Call Dr between South Rio Vista Ave and De Anza Pl.
La Valencia	Residential	20 acres / 72 single family lots	South of Legion Rd, East of Tangerine Gardens Mobile Home Park, West of Ventana Ave.
South Pointe	Residential	6.88 acres / 4 single family estate lots	End of Legion Rd adjacent to southwestern edge of city limits.
Tangerine Gardens	Residential	140 condo units	335 West Legion Rd adjacent to existing Tangerine Mobile Home Park, West of Avenida Del Valle.
Griffin Smythe	Residential	34.50 acres / 23.10 acres medium commercial and residential medium density & 11.4 acres medium commercial	West of Hwy 86, East of Willard Ave, South of Del Norte Chevrolet, North of animal clinic.
Carissa Ranch	Residential	16 acres / 59 single family lots	North of Panno Rd, South of Rodeo Dr, West of Willard Ave.
Springhouse	Residential	17.67 acres / 246 condo units	Located in Griffin Smythe Subdivision, West of Hwy 86, East of Willard Ave, South of Del Norte Chevrolet, North of animal clinic.
Palazzo Apartments	Residential	3.465 acres / 80 family apartment units Located in Gateway, East of Hwy 86, South of future Panno, North of future American Legion St.	Located in Gateway, East of Hwy 86, South of future Panno, North of future American Legion St.
Los Suenos	Residential	30 residential units	
Malan Park	Residential	63.34 acres / 223 single family	South of Malan St, West of Victoria Park Subdivision, East of Brawley Gateway Subdivision, North of future Panno Rd.
Latigo Ranch	Residential	83.42 acres / 267 single family lots	West of Dogwood Rd, East of future Western Ave, South of future Panno Rd.
Victoria Park	Residential	76.60 acres / 295 single family lots	South of Malan St, West of Dogwood Rd, North of proposed Panno Rd.
Valle Grande	Residential	7.15 acres / 34 single family lots	South side of C St between North Eastern Ave and Best Ave.
Manzanilla Terrace	Residential	69 residential units	

Project Name	Use Type	Sq. Foot/Units/Rooms	Location
Brawley Family Apartments	Residential	14.6 acres / 160 apartment units	Southwest corner of East C St and Best Ave.
Ridge Park Estates	Residential	8.29 acres / 24 single family lots	Located on Ridge Park Dr and Crest View Dr.
C Street Apartments	Residential	2.72 acres / 41 units	1661 C St, South of A St, North of C St, West of Best Ave, East of North Eastern Ave
La Paloma Townhomes	Residential	42.02 acres / 452 townhome units	South of Malan St, East of Ninth St, West of future Cesar Chavez St.
Wildhorse	Residential	250 single family lots	Located in Luckey Ranch Subdivision, East of Best Ave, West of future Seabolt Blvd, South of future River Dr, North of future A St.
101 Ranch (Long-term)	Residential/Commercial	1900 acres	Located south of the proposed Project within the County of Imperial
Rancho Los Lagos (Long-term)	Residential/Commercial	1,076 acres	Located Southwest of the proposed Project within the County of Imperial

Source: City of Brawley Planning Dept. 2008, County of Imperial 2009

7.2 Cumulative Impact Analysis

7.2.1 Agricultural Resources

The Imperial Valley possesses vast expanses of active and successfully productive agricultural land. Within its boundaries are a few modest urban areas, incorporated as cities, which are the regional centers of residential and commercial activity. These cities are expected to grow in the coming decades, and accordingly are planned to expand their boundaries. Usually, this boundary expansion includes conversion of agricultural land to the proposed urban uses. The County and the various incorporated cities, including Brawley, have coordinated and continue to coordinate on ongoing planning efforts—codified in their respective general plans—to ensure that this expansion occurs in a logical progression and minimizes the effects of encroaching development on existing agricultural land. Examples of this include the land use pattern established by the City of Brawley in their General Plan land use map, which generally follows the “Urban Area” overlay zoned by the County as planned future expansion of the City’s developed limits. Land outside this Urban Area overlay is maintained in the County’s jurisdiction and maintained in agricultural production. Various planning policies are in place to prevent “leap-frog” development patterns that will have a project-level and cumulative level impact on ongoing agricultural activity. The County’s Right-to-Farm Ordinance is also honored by the City and other incorporated areas within the County, minimizing the conflicts between urban development and agricultural activity that can combine to push agricultural landowners to develop premature of planning guidance. Therefore, proper planning among the County, City, and other regional cities, ensures and will continue to ensure that cumulative development does not trigger cumulatively considerable indirect impacts to agricultural land, and will maintain the Imperial Valley’s successful agricultural productivity while allowing for the necessary incremental growth and the maintenance of a diverse economy.

Many of the projects on the fringes of Brawley's existing developed area propose to convert land that has long been used for agricultural production to non-agricultural uses. Two projects in particular, Luckey Ranch and La Paloma, are located adjacent to the proposed project in the City's eastern frontier and represent large planned developments that propose to urbanize agricultural land. Like the proposed project, these developments and other cumulative projects are proposed on land possessing fertile agricultural soil and designated by the State as Important Farmland. This designation does not imply State regulation of agricultural land use, but is used as a research tool and conservation mechanism for the maintenance of economically important agricultural production throughout the state, including in the Imperial Valley. While development is combining to reduce overall Important Farmland throughout the region, the reduction is minimal compared to the great amounts that remain, and the cumulative impact from past, present, and reasonably foreseeable future projects is less than significant as they are nearly all located in the City Sphere of Influence. The proposed project's incremental contribution to this cumulative impact would not be substantial and is considered less than significant.

Impact Determination

The Project's incremental contribution to impacts from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required at the cumulative level.

Residual Impacts

The Project's incremental contribution to impacts from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

7.2.2 Air Quality

Cumulative impacts to air quality could occur as a result of air pollutant emissions from mobile, area, and stationary sources attributed to buildout of the proposed project in combination with other cumulative projects. However, cumulative thresholds for air quality are the same as those used when considering a project-specific air quality impact because the thresholds are related to a project's contribution to the regional air quality baseline (as determined Imperial Valley Association of Government's modeling that considers general plan land use designations for the jurisdictions within its borders). If a project would result in exceedance of both regional (ROG, NO_x) or localized (CO, PM₁₀, PM_{2.5}) daily emission limits, then it can be considered to contribute to cumulatively considerable air quality impacts. If a project-related air quality impact is individually less than significant, cumulative impacts may nevertheless be significant based upon an analysis of reasonably anticipated future and past projects with similar air quality impacts, transport considerations, and geographic location. The cumulative analysis also includes a discussion concerning the projects cumulative contribution to global climate change.

Consistency with AQAP

The project is a mixed-use residential and commercial project that would exceed relevant standards, as determined by an evaluation of criteria published in the ICAPCD *CEQA Air Quality Handbook*. That document contains screening criteria for residential and commercial facilities such as are proposed in the project. According to the *Handbook*, the criteria are "intended to allow for accurate and rapid evaluation

of a project's potential to exceed the Air District's CEQA emission thresholds of significance." (ICAPCD, 2007) The threshold for single-family dwelling unit such as proposed as part of the project is 290 units. The 1359-units proposed for this project exceeds this threshold.

As shown in Table 4.2-11 and 4.2-12 in Section 4.2, Air Quality, emissions calculated for project operations are greater than the applicable ICAPCD daily significance thresholds, which are designed to assist the region in attaining the applicable State and national ambient air quality standards. These standards apply to both primary (criteria and precursor) and secondary pollutants (ozone). The project site is located in a region that is in non-attainment for ozone, PM10, and PM2.5, and emissions associated with the project would be cumulatively considerable if they would exceed ICAPCD daily significance thresholds. With respect to the proposed project, ROG, NO_x and CO produced during long-term project operation would exceed the significance thresholds for non-attainment pollutants. However, implementation of mitigation measures MM AQ-1 and MM AQ-2 would reduce the project long term operational impact to less than significant. Therefore, the project would be consistent with the AQAP, which is intended to bring the Basin into attainment for all criteria pollutants.

Traffic Related CO Concentrations (CO Hot Spot Analysis)

The intersections with the three worst traffic delays were selected because they were calculated to operate at LOS F under the Cumulative Project conditions. (Linscott, Law, & Greenspan 2009.) For the purposes of providing a worst-case analysis, CO concentrations have been modeled at sidewalk locations adjacent to these study intersections. The three selected intersections are listed below:

- Cesar Chavez Street / Malan Street
- Eastern Avenue / Malan Street
- State Route 111 / Wildcat Road

The analysis was conducted using the CALINE4 line source dispersion model. Input parameters required for the CALINE4 model include traffic volumes, CO emission factors, receptor locations, meteorological conditions, and background concentrations. The evening peak-hour traffic volumes that include the proposed and cumulative project-generated traffic were modeled. The EMFAC2007 emission rate program was used to estimate CO emission factors in buildout year 2020. EMFAC2007 model outputs are presented in Appendix D to this EIR.

Meteorological inputs to the CALINE4 model were determined using methodology recommended in the CO Protocol (Garza et al. 1997). The meteorological conditions used in the modeling represent a calm winter period. The worst-case wind angles option was used to determine a worst-case concentration for each receptor.

A background concentration of 14.3 ppm was added to the modeled 1-hour values to account for sources of CO not included in the modeling. Eight-hour modeled values were calculated from the 1-hour values using a persistence factor of 0.7. A background concentration of 2.59 ppm was added to the modeled 8-hour values. All background concentration data were taken from the monitoring data provided by CARB (CARB 2008) and USEPA (USEPA 2008).

Table 7-2 presents maximum 1-hour and 8-hour CO concentrations predicted at locations 3 meters from the edge of the intersection in all directions. The CALINE4 model outputs are presented in Appendix D to this EIR.

Table 7-2. CO Modeling Concentrations (ppm)

Intersection	2020 Buildout Conditions	
	1-hour	8-hour
Cesar Chavez/Malan St	15.0	3.08
Eastern Ave/Malan St	15.1	3.15
SR-111/Wildcat Rd	16.5	4.13
CAAQS Standard	20.0	9.0
Significant?	No	No

Note: Background concentrations of 14.3 ppm and 2.59 ppm were added to the 1-hour and 8-hour modeling results, respectively.
EMFAC 2007 and CALINE4 Model Outputs are presented in Appendix D to this EIR

The results show that under the cumulative conditions, the State 1-hour and 8-hour standards of 20 ppm and 9 ppm, respectively, would not be exceeded at any of the three intersections. Therefore, the proposed project is not anticipated to significantly contribute to cumulative CO ambient concentration impacts.

Greenhouse Gas Emissions and Climate Change

Greenhouse gas (GHG) emissions and their contribution to climate change are widely recognized as a global problem, and the State of California has recently acknowledged this phenomenon as a State concern. GHG emissions are a cumulative impact—resulting from past, current, and future projects—and the cumulative projects listed in Table 7-1 would all likely contribute to this widespread cumulative impact. Given the overwhelming scope of global climate change, it is not anticipated that a single development project would have an individually discernable effect on global climate change (i.e., that any increase in global temperature or sea level could be attributed to the emissions resulting from a single project). Rather, it is more appropriate to conclude the substantial proposed project GHG emissions will combine with emissions across California, the U.S., and the globe to cumulatively contribute to global climate change. This amounts to a significant cumulative air quality impact. Increased GHG emissions could also potentially conflict with the requirement of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020.

The project will result in net operational increase of 45,437 metric tons of CO₂e over business-as-usual (BAU) conditions. The project will also result in 7,869 metric tons of CO₂e over the 10-year construction period. Various mitigation measures exist that would help to reduce the projects contribution to global climate change. Adoption of the measures cited above when fully incorporated into future development projects within the Rancho Porter Specific Plan area will lessen GHG emissions from within the project area and potentially even achieve a reduction target of 29% below business as usual conditions (BAU) as stated in AB32. Without a quantitative analysis of GHG emissions from specific construction and

operations mitigation proposed, it is not possible to know if the above listed measures would indeed achieve that target. Nevertheless, for the Project to achieve a broad reduction goal of 29% below BAU, in line with the state's goals, action is also required of many third parties—including but not limited to CARB, EPA, and local air districts—to adopt and fully implement GHG reduction requirements applicable to numerous sectors as described above. The lead agency lacks the authority to compel these third party agencies to engage in these activities. The lead agency concludes that these requirements are within the responsibility and jurisdiction of these other public agencies, and can and should be adopted by these other agencies. Thus, based on an abundance of caution and despite the lack of formal criteria for determining the level of significance of a project's contribution to climate change at this time, the lead agency concludes that GHG emissions from the Project are cumulatively considerable and unavoidable. Note this is the same impact as Impact AQ-2.

Impact Determination

The Project's incremental contribution to air quality impacts from past, present, and reasonably foreseeable projects would be cumulatively considerable.

Mitigation Measures

MM AQ-1, MM AQ-2, and MM AQ-3 described in Chapter 4.2 would reduce the project's air quality and climate change impacts.

Residual Impacts

After mitigation, the Project's incremental air quality impacts would be considered less than cumulatively considerable and deemed consistent with the AQAP. In addition, the project would not create elevated CO concentrations at affected intersections. However, the Project's incremental air quality impacts would be considered cumulatively considerable with regards to climate change (**Impact AQ-C-1**).

7.2.3 Biological Resources

The project vicinity is generally covered with agricultural lands. Because of the active agricultural character of the area, there are a limited variety of sensitive biological habitat areas. None of the cumulative projects identified are considered to have potentially significant impacts to biological resources. However, one species, the Burrowing Owl, has adapted to the agricultural coverage, and mitigation for relocating any pairs or burrows of this species is typically incorporated into projects as a precautionary measure. Because the burrowing owl has adapted to the agricultural land coverage, relocation of pairs or burrows of this species to undeveloped areas is sufficient to avoid impacts to the species and there is abundant suitable habitat for this species in Imperial County.

Moreover, as farmland near urban areas continues to be converted to urban development and water conservation measures continue to improve, cumulative projects will continue to use less water on average than existing farming operations. As projects consume less water, less water will drain into the Salton Sea. Over time the reduction in water levels in the Salton Sea could exacerbate the adverse habitat conditions, potentially concentrating levels of salt and other elements. Thus, impacts from past, present, and reasonably foreseeable future projects would potentially be cumulatively considerable.

Based on the project WSA, the project site has the potential to use up to 1,104.8 acre feet (AF) per year as agricultural land and between 587.0 and 616.08 AF when developed with urban uses. As noted in the revised project drainage study, under current conditions, approximately 320.4 AF per year drains into the

Salton Sea. At build-out the amount draining into the Salton Sea would be reduced to approximately 59.45 AF per year. The Salton Sea has a total volume of 7,500,000 AF (Salton Sea Authority 2010).¹ Thus, overall, this amount of runoff water, at the cumulative level, is exceedingly small. Therefore, the project's incremental contribution to this potentially cumulative impact would be less than cumulatively considerable.

Impact Determination

The Project's incremental contribution to biological impacts from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required at the cumulative level.

Residual Impacts

The Project's incremental contribution to biological impacts from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

7.2.4 Cultural Resources

Prior to the archaeological pedestrian survey, a records search was conducted at the Southeast Information Center located at the Imperial Valley College Desert Museum in Ocotillo on March 25, 2008. The results of the records search revealed that one cultural resource, P-13-008011, is located within the project site. This cultural resource is a historic-period ranch complex that consists of a total of six buildings. These buildings were recorded by Paula Boghosian (1994) of Caltrans. An intensive pedestrian archaeological survey of the project site resulted in the identification of a total of three new cultural resources (RP-01, RP-02, and RP-03) and the relocation of the previously recorded cultural resource (P-13-008011). The evaluations of these cultural resources indicate that they do not meet the eligibility criteria for the California Register of Historic Places and are not significant cultural resources under Section 15064.05 of the CEQA Guidelines. Boghosian has also evaluated buildings at P-13-008011 for NRHP eligibility. The results of this evaluation indicated that these buildings were not eligible for listing in the NRHP. Since there are no CEQA or NRHP eligible cultural resources, the proposed project will not constitute a cumulative impact to archaeological or historical resources.

Impact Determination

The Project's incremental contribution to cultural resource impacts from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required at the cumulative level.

Residual Impacts

The Project's incremental contribution to cultural resource impacts from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

¹ <http://www.salttonsea.ca.gov/thesea.htm>; accessed July 29, 2010.

7.2.5 Geology and Soils

The major geologic hazards associated with the Project site and future development sites within the surrounding area are related to the high seismic activity and liquefaction hazards. The proposed Project, as well as all other projects within the vicinity, would follow standard construction practices and engineering codes (i.e., California Building Code and Uniform Building Code Standards) to ensure that geology and soils impacts would not result from project development.

Potential impacts to future development would similarly be reduced to below a level of significance through conformance to building construction standards for seismic safety with the Uniform Building Code (UBC). The UBC would assure that new structures would be able to withstand anticipated seismic events within the Project vicinity. Therefore, implementation of the proposed Project and associated future development in the subregion would not contribute to cumulative impacts.

Impact Determination

The Project's incremental contribution to geologic impacts from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

Mitigation Measures

No mitigation is necessary at the cumulative level.

Residual Impacts

The Project's incremental contribution to geologic impacts from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

7.2.6 Hazards and Hazardous Materials

Based on the Phase I ESA prepared for the proposed Project site, there are no known contamination sources either on- or off-site. Three (3) ranch houses that exist on site would be demolished, creating the potential for exposure to asbestos and/or lead-based paint during construction activities. Applicable federal, state, and local regulations would be adhered to during demolition, which would avoid any potential cumulatively significant impacts.

Impact Determination

The Project's incremental contribution to impacts from hazards and hazardous materials associated with past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required at the cumulative level.

Residual Impacts

The Project's incremental contribution to impacts from hazards and hazardous materials associated with past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

7.2.7 Hydrology and Water Quality

The Salton Sea has been listed under CWA Section 303(d) as impaired by the following 303(d) listed constituents:

- Nutrients
- Salt
- Selenium

Both the New River and Central Main Canal, an Imperial Valley Agricultural Drain, discharge to the Salton Sea and are each listed under CWA Section 303(d) as impaired by the following constituents:

- Pesticides
- Sedimentation/Siltation
- Selenium

Contributions of these constituents originate from agricultural or naturally occurring sources. As implied by inclusion on the 303(d) list, the beneficial uses of waters of the New River, Imperial Valley Agricultural Drains, and Salton Sea are impaired such that they have no remaining assimilative capacity or ability to accommodate additional quantities of these contaminants, irrespective of concentration.

The existing agricultural activities at the project site presently contribute to the impaired status of these waters. After construction, the project would cease contributions of agricultural-related constituents, such as sediment, from the site through conversion of the land to residential use. However, some level of pollutants, such as nutrients from fertilizers, may be discharged from residential uses as a result of landscaping and urban runoff. Contributions of residential-related contaminants from the project is anticipated to be relatively low compared to existing conditions, and is considered less than significant at the project-level. Additionally, the project would incorporate detention basins and other water quality treatment BMPs, as required by the City's adopted Storm Water Management Plan and the Regional Water Quality Control Board to ensure that runoff from the project would not further impair the New River, Imperial Valley Agricultural Drains, or the Salton Sea as identified by CWA Section 303(d). Overall, the project would reduce agricultural sources of impairment to the New River, Imperial Valley Agricultural Drains, and the Salton Sea. Thus, the project would have a less than significant impact on CWA Section 303(d) listed water bodies.

Impact Determination

The Project's incremental contribution to impacts on water quality and regional hydrology from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required at the cumulative level.

Residual Impacts

The Project's incremental contribution to impacts on water quality and regional hydrology from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

7.2.8 Land Use

The proposed Project would be consistent with the County of Imperial General Plan or Zoning Ordinance, the City of Brawley General Plan, and Service Area Plan, and the Southern California Association of Government's Regional Comprehensive Plan and Guide. Projects that are consistent with applicable land use plans generally are not considered to be cumulatively significant; as such, no cumulative impacts related to land use or policy issues have been identified.

Impact Determination

The Project's incremental contribution to impacts on land use from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required at the cumulative level.

Residual Impacts

The Project's incremental contribution to impacts on land use from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

7.2.9 Noise

Significant cumulative noise impacts are considered to occur in locations where developed land uses would be exposed to noise that exceeds the applicable City land uses compatibility guidelines. Where the proposed project is predicted to contribute to a cumulative noise impact by more than 1 dB, the project's contribution to the significant cumulative impact would be considered cumulatively considerable.

As indicated in Table 4.9-6 traffic noise is predicted to exceed 60 dBA CNEL along Main Street, Malan Street, Best Avenue, and SR 111. Residential uses located along these streets are therefore exposed to significant cumulative traffic noise impacts. Implementation of the proposed project is predicted to increase traffic noise levels by more than 1 dB along Main Street, Malan Street, and Best Avenue. As discussed in Impact NOI-2, there are no developed noise sensitive land uses along Main Street or Best Avenue that would remain with the development of the project. The project's contribution to the significant cumulative noise impact at residences located along Malan Street between SR 86 and Best Avenue is considered to be cumulatively considerable. Although implementation of Mitigation Measure MM NOI-4 would reduce this impact, it is not considered feasible at the cumulative level to reduce this impact to a less-than-significant level. The project's contribution to the significant cumulative noise impact in the project area is therefore considered to be significant and unavoidable along Malan Street between SR 86 and Best Avenue. (**Impact NOI-C-1**)

Impact Determination

The Project's incremental contribution to noise impacts from past, present, and reasonable foreseeable projects would be cumulatively considerable.

Mitigation Measures

Implement MM NOI-4.

Residual Impacts

After mitigation, the Project's incremental contribution to noise impacts from past, present, and reasonable foreseeable projects would remain cumulatively considerable.

7.2.10 Public Services/Recreation

The City of Brawley's population in 2005 was approximately 22,433. This figure is projected to grow to approximately 44,427 by the year 2025. As such, implementation of the proposed Project would result in incremental increases in demand for public services including fire protection/emergency services, law enforcement services, schools, libraries, solid waste disposal, and recreation/parks. Increases in these services, along with other cumulative developments, may result in the need or demand for new or modified public services facilities. However, in the event that fees are needed, mandatory payment of development impact fees would be required prior to the issuance of building permits to ensure that future development contributes a fair share toward needed public services and recreation. As such, no cumulative impacts would occur upon Project implementation.

Impact Determination

The Project's incremental contribution to impacts on public services and recreation from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required beyond payment of development impact fees.

Residual Impacts

The Project's incremental contribution to impacts on public services and recreation from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

7.2.11 Traffic

There are other planned projects in the areas surrounding the project site that will add traffic to the roadways near the project site. The following is a table showing a trip generation summary of these cumulative projects. Table 7-3 summarizes the individual cumulative project trip generation. As seen in Table 7-3, the cumulative projects are calculated to generate a total of 277,788 ADT with 22,108 trips during the a.m. peak hour (10,307 inbound / 11,799 outbound) and 27,934 trips during the p.m. peak hour (15,825 inbound / 12,108 outbound). LOS along all project area roadways remained at acceptable levels after mitigation (See Table 10-1, Figure 10-1, and Figure 10-2 of the Traffic Impact Analysis).

Figure 4.11-9 shows the existing + entire project + cumulative projects "without overlay" traffic volumes. Figure 4.11-15 shows the existing + entire project + cumulative projects "with overlay" traffic volumes. Appendix D of the LLG Traffic Impact Analysis contains more detailed information on the cumulative projects. The impacted intersections and segments listed below are the same for both the "with overlay" and "without overlay" scenario.

Significant Cumulative Impacts

Intersections

Impact TR-6: Traffic conditions at the intersection of SR-78 / S. Best Avenue would be reduced from an LOS B in the existing condition to an LOS D and F in the AM and PM peak hour cumulative condition, respectively, in the “Without Overlay” scenario only, resulting in a significant cumulative impact.

Impact TR-7: Traffic conditions at the intersection of SR-86 / Malan Street would be reduced from an LOS C in the existing condition to an LOS E in the AM and PM peak hours in the proposed plus cumulative projects condition for the “Without Overlay” scenario.

Likewise, traffic conditions at the intersection of SR-86 / Malan Street would be reduced from an LOS C in the existing condition to an LOS E and F in the AM and PM peak hour cumulative condition, respectively, in the “With Overlay” scenario, resulting in a significant cumulative impact.

Impact TR-8: Traffic conditions at the intersection of S. Imperial Avenue / Malan Street would be reduced from an LOS B and A in the existing AM and PM peak hour, respectively, to an LOS D and F, in the proposed Project plus cumulative projects condition under both the “With Overlay” and “Without Overlay” scenarios, resulting in a significant cumulative impact.

Impact TR-9: Traffic conditions at the intersection of Cesar Chavez Street / Malan Street would be reduced from an LOS A in the existing condition to an LOS E and F in the AM and PM peak hours, respectively, in the proposed Project plus cumulative projects condition under both the “With Overlay” and “Without Overlay” scenarios, resulting in a significant cumulative impact.

Impact TR-10: Traffic conditions at the intersection of Eastern Avenue / Malan Street would be reduced from an LOS A in the existing condition to an LOS D and F in the AM and PM peak hours, respectively, in the proposed Project plus cumulative projects condition under both the “With Overlay” and “Without Overlay” scenarios, resulting in a significant cumulative impact.

Impact TR-11: Traffic conditions at the intersection of S. Best Avenue / Malan Street would be reduced from an LOS A in the existing condition to an LOS D in the PM peak hours, in the proposed Project plus cumulative projects condition under the “Without Overlay” scenario, resulting in a significant cumulative impact.

Likewise, traffic conditions at the intersection of S. Best Avenue / Malan Street would be reduced from an LOS A in the existing condition to an LOS D and F in the AM and PM peak hour cumulative condition, respectively, in the “With Overlay” scenario, resulting in a significant cumulative impact.

Impact TR-12: Traffic conditions at the intersection of S. Best Avenue / Wildcat Drive would be reduced from an LOS A in the existing condition to an LOS F in the PM peak hour in the proposed Project plus cumulative projects condition in the “With Overlay” and “Without Overlay” scenarios, resulting in a significant cumulative impact.

Impact TR-13: Traffic conditions at the intersection of SR-111 / Wildcat Drive would be reduced from an LOS B and C in the existing AM and PM peak hours, respectively, to an LOS F in the proposed

Project plus cumulative projects condition in the “With Overlay” and “Without Overlay” scenarios, resulting in a significant cumulative impact.

Impact TR-14: Traffic conditions at the intersection of SR-111 / Scharz Road would be reduced from an LOS B and C in the existing AM and PM peak hour condition, respectively, to an LOS F in the proposed Project plus cumulative projects condition in the “With Overlay” and “Without Overlay” scenarios, resulting in a significant cumulative impact.

Impact TR-15: Traffic conditions at the intersection of SR-111 / Harris Road would be reduced from an LOS B in the existing condition to an LOS F in the proposed Project plus cumulative projects condition in the “With Overlay” and “Without Overlay” scenarios, resulting in a significant cumulative impact.

Segments

Impact TR-16: Traffic conditions along the segment of SR-78 from SR-86 to SR-111 (west) would be reduced from an LOS B in the existing condition to an LOS F in the proposed Project plus cumulative projects condition in the “With Overlay” and “Without Overlay” scenarios, resulting in a significant cumulative impact.

Impact TR-17: Traffic conditions along the segment of SR-78 from SR-111 (west) to S. Best Avenue would be reduced from an LOS A in the existing condition to an LOS F in the proposed Project plus cumulative projects condition in the “With Overlay” and “Without Overlay” scenarios, resulting in a significant cumulative impact.

Impact TR-18: Traffic conditions along the segment of SR-78 from S. Best Avenue to SR-111 (east) would be reduced from an LOS A in the existing condition to an LOS E and F in the proposed Project plus cumulative projects condition in the “With Overlay” and “Without Overlay” scenarios, respectively, resulting in a significant cumulative impact.

Impact TR-19: Traffic conditions along the segment of Malan Street from Eastern Avenue to S. Best Avenue would be reduced from an LOS A in the existing condition to an LOS D in the proposed Project plus cumulative projects condition in the “With Overlay” and “Without Overlay” scenarios, resulting in a significant cumulative impact.

Table 7-3. Trip Generation Summary of Cumulative Projects

Land use	Size	Daily Trip Ends			AM Peak Hour Trips			PM Peak Hour Trips							
		Rate	ADT	Rate	In:Out Split	Volume	Rate	In:Out Split	Volume						
Project Name															
Group I															
Cattle Call Townhomes	16	DU	8	/DU	128	8%	20% : 80%	2	8	10	10%	70% : 30%	9	4	13
Carissa Ranch	59	DU	10	/DU	590	8%	30% : 70%	14	33	47	10%	70% : 30%	41	18	59
La Valencia	72	DU	10	/DU	720	8%	30% : 70%	17	41	58	10%	70% : 30%	50	22	72
Tangerine Gardens	140	DU	8	/DU	1,120	8%	20% : 80%	18	72	90	10%	70% : 30%	78	34	112
Brawley Gateway															
SFDU	124	DU	10	/DU	1,240	8%	30% : 70%	30	69	99	10%	70% : 30%	87	37	124
MFDU	240	DU	8	/DU	1,920	8%	20% : 80%	31	123	154	10%	70% : 30%	134	58	192
Commercial	44	Acres	500	/acre	22,000	4%	70% : 30%	616	264	880	9%	50%	990	990	1,980
Office/Business Park	50.5	Acres	200	/acre	10,100	13%	90% : 10%	1,182	131	1,313	13%	20%	263	1,050	1,313
Subtotal Group I					37,818			1,910	741	2,651			1,652	2,213	3,865
Group II															
Valle del Sol Apartments	72	DU	8	/DU	576	8%	20% : 80%	9	37	46	10%	70% : 30%	41	17	58
River Drive	122	DU	10	/DU	1,220	8%	30% : 70%	29	69	98	10%	70% : 30%	85	37	122
River Drive Townhomes	22	DU	8	/DU	176	8%	20% : 80%	3	11	14	10%	70% : 30%	13	5	18
C-Street Apartments	41	DU	8	/DU	328	8%	20% : 80%	5	21	26	10%	70% : 30%	23	10	33
Valle Grande	34	DU	10	/DU	340	8%	30% : 70%	8	19	27	10%	70% : 30%	24	10	34
Adams Park	50	DU	12	/DU	600	8%	30% : 70%	14	34	48	10%	70% : 30%	42	18	60

Land use	Size	Daily Trip Ends			AM Peak Hour Trips			PM Peak Hour Trips						
		Rate	ADT	Rate	In:Out Split	Volume	Rate	In:Out Split	Volume					
										In	Out	Total	In	Out
Subtotal Group II			3,240			68	191	259		228	97	325		
Group III														
Malan Park	223	DU	10	/DU	2,230	8%	30%	70%	178	10%	70%	156	67	223
Victoria Park	295	DU	10	/DU	2,950	8%	30%	70%	236	10%	70%	207	88	295
Latigo Ranch	267	DU	10	/DU	2,670	8%	30%	70%	214	10%	70%	187	80	267
Subtotal Group III			7,850			188	440	628		550	235	785		
Group IV														
Los Suenos	30	DU	8	/DU	240	8%	20%	80%	19	10%	70%	17	7	24
Manzanilla Terrace	69	DU	8	/DU	552	8%	20%	80%	44	10%	70%	39	16	55
Subtotal Group IV			40,874			1,559	1,114	2,673		2,069	2,181	4,249		
Luckey Ranch														
Luckey Ranch	803	DU	10	/DU	8,030	8%	30%	70%	642	10%	70%	562	241	803
Luckey Ranch	468	DU	8	/DU	3,744	8%	20%	80%	300	10%	70%	262	112	374
Luckey Ranch	35	Acres	600	/acre	21,000	4%	60%	40%	840	10%	50%	1,050	1,050	2,100
Luckey Ranch Industrial	90	Acres	90	/acre	8,100	11%	90%	10%	891	12%	20%	194	778	972
Subtotal Luckey Ranch			40,874			1,559	1,114	2,673		2,069	2,181	4,249		
Best Western														
Best Western	1	Acres	200	/acre	200	4%	60%	40%	8	10%	50%	10	10	20
Retail	4	TSF	40	/TSF	160	3%	60%	40%	5	9%	50%	7	7	14
Restaurant	6.3	TSF	160	/TSF	1,008	8%	50%	50%	80	8%	60%	48	32	80

Land use	Size	Daily Trip Ends			AM Peak Hour Trips			PM Peak Hour Trips		
		Rate	ADT	Rate	Rate	In:Out Split	Volume	Rate	In:Out Split	Volume
		Rooms	/room	500	6%	40% : 60%	In	8%	40% : 60%	In
Hotel	50	10					18			24
							12			16
							30			40
Subtotal Best Western				1,868			66			89
							57			65
							123			154
La Paloma										
La Paloma	1,430	DU	10	/DU	14,300	8%	30% : 70%	10%	70% : 30%	1,001
							801			429
La Paloma	570	DU	8	/DU	4,560	8%	20% : 80%	10%	70% : 30%	319
							292			137
La Paloma	16	Acres	90	/acre	1,440	11%	90% : 10%	12%	20% : 80%	35
							16			138
La Paloma	17	Acres	600	/acre	10,200	4%	60% : 40%	10%	50% : 50%	510
							163			510
							408			1,020
Subtotal La Paloma				30,500			803			1,865
							1,272			1,214
							2,075			3,079
Casa by the Desert	29	DU	8	/DU	232	8%	20% : 80%	10%	70% : 30%	16
							15			7
Davis O'Connell Property ^d				11,873			232			751
							644			439
							876			1,190
Rancho Los Lagos (Long-term)				56,378			2,592			2,925
							2,418			2,728
							5,010			5,653
101 Ranch Specific Plan (Long-term)				86,363			2,874			5,625
							4,858			2,906
							7,731			8,531
Total Cumulative Projects				277,788			10,307			15,825
							11,799			12,108
							22,108			27,934

Source: LLG 2008

Footnotes:

TSF=Thousand Square Feet

Trip generation from the traffic study prepared by LLG.

The Rancho Los Lagos and 101 Ranch Specific Plan projects are only assumed to be built under the long-term analysis.

Mitigation Measures

Intersections

MM C-TR-1: SR-86 / Malan Street: Contribute fair share towards providing a dedicated eastbound right-turn lane with overlap.

MM C-TR-2: S. Imperial Avenue / Malan Street: The project should contribute a fair share towards installing a traffic signal, providing bike lanes on Malan Street and implementing the following intersection geometry improvements:

- Southbound: One left-turn lane and one shared through / right lane
- Westbound: One left-turn lane and one shared through / right lane
- Northbound: One left-turn lane and one shared through / right lane
- Eastbound: One left-turn lane, one through lane and one shared through / right lane

MM C-TR-3: Cesar Chavez Street / Malan Street: The project should contribute a fair share towards installing a traffic signal, providing bike lanes on Malan Street and implementing the following intersection geometry improvements:

- Southbound: One left-turn lane and one shared through / right lane
- Westbound: One left-turn lane and one shared through / right lane
- Northbound: One left-turn lane and one shared through / right lane
- Eastbound: One left-turn lane and one shared through / right lane

MM C-TR-4: Eastern Avenue / Malan Street: The project should contribute a fair share towards installing a traffic signal, providing bike lanes on Malan Street and implementing the following intersection geometry improvements:

- Southbound: One left-turn lane and one shared through / right lane
- Westbound: One left-turn lane and one shared through / right lane
- Northbound: One left-turn lane and one shared through / right lane
- Eastbound: One left-turn lane and one shared through / right lane

MM C-TR-5: S. Best Avenue / Malan Street: Contribute fair share towards modifying the southbound shared through / right lane into a through lane and an exclusive right-turn lanes.

MM C-TR-6: S. Best Avenue / Wildcat Drive: Contribute fair share towards providing dual southbound left-turn lanes and a dual westbound right-turn lane with overlap phasing.

MM C-TR-7: SR-111 / Wildcat Drive: Contribute fair share towards providing dual eastbound right-turn lanes with overlap phasing and dual northbound left-turn lanes.

MM C-TR-8: SR-111 / Schartz Road: The project should contribute a fair share towards installing a traffic signal and providing one left-turn, and one shared through/right-turn lane and one right-turn lane in the eastbound and westbound directions.

MM C-TR-9: SR-111 / Harris Road: The project should contribute a fair share towards installing a traffic signal and providing one left-turn, and one shared through/right-turn lane and one right-turn lane in the eastbound and westbound directions.

Segments

MM C-TR-10: SR-78 from SR-111 (west) to S. Best Avenue: One of the key intersections along the impacted SR-78 is the intersection of SR-78 / S. Best Avenue. Therefore, Mitigation Measures MM TR-1 and MM C-TR-4 would mitigate this segment impact by providing additional capacity at a key intersection along the segment.

MM C-TR-11: SR-78 from S. Best Avenue to SR-111 (east): With Mitigation Measure MM TR-1 and the construction of State Route 78 / 111 Bypass Project improvements the cumulative impact at this segment should be mitigated.

MM C-TR-12: Malan Street from Eastern Avenue to S. Best Avenue: One of the key intersections along the impacted Malan Street is the intersection of Eastern Avenue and Malan. Therefore, Mitigation Measure MM C-TR-3 would mitigate this segment impact by providing additional capacity at a key intersection along the segment. The proposed project should contribute a fair share towards improving this key intersection.

Residual Impacts

Implementation of these mitigation measures to contribute fair share funding towards the improvements listed above would reduce the Project's incremental contribution to cumulative traffic impacts to a less-than-significant level.

7.2.12 Utilities

The proposed Project, when considered with projects in the surrounding areas, would incrementally increase the demand for water and wastewater services. This demand has been evaluated by the City of Brawley's SAP, which identifies current and future facilities needs within the City boundaries and the City's SOI boundary, and the Rancho-Porter Water Services Assessment (WSA) which includes projections of demand for water and wastewater services for the IID's entire service area. Planned land uses within the City's SOI, including the land uses included with the proposed Project, were considered and evaluated in both the City of Brawley SAP and the Rancho-Porter WSA and water provisions were determined to be adequate. Note the project's WSA is subject to approval by IID. Review and approval or denial will occur prior to the finalization of the EIR. Any changes required by IID will be reflected in the Final EIR.

The existing wastewater treatment plant capacity is 5.9 MGD and the projected demand for the City for 2005 was 3.5 MGD. Moreover, the City is planning on expanding its infrastructure in the future as needed. The ongoing Water and Sewer Replacement Program Phase 1 project would upgrade approximately 6,800 linear feet of water distribution pipelines and approximately 3,200 linear feet of sewer collection pipelines and a modernization and rehabilitation project will begin in the Spring of 2010. New developments are responsible for adding or upgrading infrastructure as needed. Connection fees would be required. Additionally, the City is researching a program to institute a "capacity fee" in addition

to DIFs for water and wastewater. Therefore, because the proposed project would contribute its fair share to the expansion of wastewater facilities, the project's incremental contribution to cumulative impacts on water and wastewater services would be less than significant.

The project's demand for electricity, natural gas, and telephone services can be accommodated without contributing to a future shortage since the supply of these services is not projected to be in shortage and the project would comply with all energy conservation measures by the IID to help promote energy conservation. Therefore, cumulative impacts related to these utility services would be less than significant.

Impact Determination

The Project's incremental contribution to impacts on utilities from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

Mitigation Measures

No mitigation is required at the cumulative level.

Residual Impacts

The Project's incremental contribution to impacts on utilities from past, present, and reasonable foreseeable projects would be less than cumulatively considerable.

8.0

SIGNIFICANT IRREVERSIBLE CHANGES

8.1 Introduction

Pursuant to Section 15126.2(c) of the CEQA Guidelines, an EIR must consider any significant irreversible environmental changes that would be caused by the proposed Project should it be implemented. Section 15126.2(c) states:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as a highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

8.2 Analysis of Irreversible Changes

The proposed Project would require the use of nonrenewable resources, such as the permanent removal of agricultural land, the burning of fossil fuels, and the use of nonrenewable construction materials. Operation of proposed Project would result in an irreversible commitment of nonrenewable resources, including fossil fuels and natural gas. Use of these resources, however, would not substantially deplete existing supplies.

Fossil fuels and energy would be consumed during construction and operation activities. Fossil fuels in the form of diesel oil and gasoline would be used for construction equipment and vehicles. During operations, gasoline would be used by vehicles. Electrical energy and natural gas would also be consumed during construction and operation. These energy resources would be irretrievable and their loss irreversible.

Nonrecoverable materials and energy would be used during construction and operational activities, but the amounts needed would be accommodated by existing supplies. Although the increase in the amount of materials and energy used would be limited, they would nevertheless be unavailable for other uses.

Construction activities that result in physical changes to the environment have the most potential to result in irreversible changes. However, none of the proposed project components would result in irreversible environmental damage. For example, the proposed Project would not have a significant impact on sensitive biological species or communities, demolish significant cultural resources, or result in water quality impacts that could not be mitigated to less-than-significant levels.

Impacts associated with operation of the proposed Project would occur as described in Chapter 4, "Environmental Analysis." The development of existing agricultural land on the project site would mean a permanent change in how the land would be used. New homes and commercial buildings, once constructed, would be permanent. A return to the original use of the land would likely not occur. While it is possible the land could undergo further development in later years, it would likely never be actively farmed again. However, the reduction in farmland, as discussed in Chapter 4.1, "Agricultural Resources," would not be substantial.

Thus, the proposed Project would result in irreversible changes due to the use of energy resources and fossil fuels during construction and operation, however, this change would not be considered significant. Therefore, construction and operation of the proposed Project would not result in significant irreversible impacts on environmental resources, as described above.

9.0

LIST OF PREPARERS, AGENCIES CONSULTED, AND REFERENCES

9.1 Preparers

9.1.1 ICF International Staff:

Bob Stark, AICP – Project Director/Principal

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Stacey Jordan-Connor, Ph.D, RPA – Practice Leader for Archaeology

Michael Slavick – Senior Air Quality Specialist

Dana Lodico, P.E. – Senior Acoustical Engineer

Alex Hardy – Senior Environmental Planner

Erin Pace – Environmental Planner

Mayra Medel – Environmental Planner

Aaron Brownwood – Environmental Planner

Matt Owens – Environmental Planner

Matt McFalls – Air Quality Specialist

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Keira Perkins – Publications Specialist

Jenelle Mountain-Castro – Publications Specialist

9.1.2 Subconsultants

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- John A. Boarman, P.E. – Principal
- Raul Armenta – Transportation Engineer III

9.1.3 City of Brawley Staff

Gordon Gaste – Planning Director

Karin Morgan – Director of Parks and Recreation

Yazmin Arellano – Director of Public Works

Frank Contreras – Fire Chief

Mark Gillmore – Acting Chief of Police

Francisco Soto – Building Official

Teri Nava – Community Development

Allison Ricker – Enterprise Zone

Ruben Mireles – Water Department

9.1.4 Imperial County LAFCO Staff

Jurg Heuberger – Executive Officer

9.2 Agencies Consulted

Adelphia

Brawley Elementary School District

Brawley Union High School District

California Air Resources Board

California Department of Conservation

California Department of Fish and Game

- Environmental Services Division

- Habitat Conservation Program

California Department of Housing and Community Development

- Housing Policy Division

California Department of Parks and Recreation

- Resource Management Division

California Department of Toxic Substances Control

California Department of Transportation, District 11

- Division of Aeronautics

- Planning

California Department of Water Resources

California Highway Patrol

California Integrated Waste Management Board

California Native American Heritage Commission

California Public Utilities Commission

California Resources Agency

California State Lands Commission

City of El Centro

Imperial County Agricultural Commissioner

Imperial County Air Pollution Control District

Imperial County Airport Advisory Committee

Imperial County Office of Education

Imperial Irrigation District

Imperial Valley Telecommunications Authority

Naval Air Facility, El Centro

Pacific Bell, Engineering and Design

Southern California Gas Company

Regional Water Quality Control Board, Colorado River Basin Region 7

Union Pacific Railroad

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