

### 7.1 CUMULATIVE IMPACTS

#### **Background**

CEQA requires the analysis of impacts due to cumulative development that would occur independent of, but during the same timeframe as, the project under consideration, or in the foreseeable future. By requiring an evaluation of cumulative impacts, CEQA attempts to minimize the potential that large-scale environmental impacts would be ignored due to the project-by-project nature of project-level analyses contained in EIRs.

Cumulative analyses need not be undertaken in the same manner as those aimed at evaluating the project under consideration. According to Section 15130(b) of the CEQA Guidelines:

The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as provided of the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact. The following elements are necessary for an adequate discussion of cumulative impacts:

- (1) Either:
  - (A) A list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the agency, or
  - (B) A summary of projections contained in an adopted general plan or related planning document or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the Lead Agency...

#### **Cumulative Context**

Cumulative analyses included in this EIR are based on an understanding of anticipated growth within the region that would affect the severity of project impacts identified in Chapter 4, based on adopted plans (e.g., General Plans). Different analyses use different cumulative development scenarios, because the location of future growth that affects cumulative impacts differs by the type of resource. As an example, the appropriate cumulative development base would be growth throughout the San Joaquin Valley Air Basin, because growth throughout the air basin contributes to air pollution. For each impact, the cumulative development base must be determined after consideration of the way in which cumulative impacts are created.

#### **Summary of Cumulative Impacts**

The following is a summary of the cumulative context assumed for each issue area and the cumulative impacts that were identified in Chapter 4. These impacts are discussed in detail in the relevant technical sections of Chapter 4.

#### **Agricultural Resources**

The cumulative context for the loss of Important Farmland is Merced County and the greater Central Valley. As discussed in Impact 4.1-4, farmland is being converted to urban uses throughout the county, and this trend would continue. The proposed Community Plan would contribute to the cumulative loss of Important Farmland.

The Proposed Project would not affect any Williamson Act lands or agricultural preserves (Impact 4.1-2), so it would not contribute to cumulative impacts on these resources. The potential for conflicts between urban and agricultural uses (Impact 4.1-3) occurs where those uses abut each other and/or are in close proximity. No changes are proposed to agricultural lands adjacent to or near the Plan Area, so there would not be a cumulative impact associated with such potential conflicts.

### **Air Quality**

The cumulative context for the analysis of criteria air pollutants is the San Joaquin Valley Air Basin (SJVAB). As discussed in Section 4.2, Air Quality, future development in the SJVAB will increase air pollution in the Basin. This degradation in air quality would be a significant cumulative impact. This contribution is considered considerable, because project emissions would exceed SJVAPCD thresholds, and would contribute to a delay in achieving federal and State air quality standards (see Impact 4.2-5).

Because there are no planned or anticipated changes to land uses and activities immediately adjacent to the Plan Area that would involve heavy commercial or industrial activities, there would be no cumulative increases in toxic air contaminants, odors or carbon monoxide in proximity to the Plan Area.

### **Biological Resources**

The cumulative context for biological resource impacts is Merced County and the greater San Joaquin Valley. The Plan Area contains several habitat types that could support a number of special-status species (Impact 4.3-8). Buildout of the Plan Area could adversely affect these species, if they are present. These same impacts could occur elsewhere in the county. For most of the special-status species that have the potential to occur within the Plan Area, the habitat is marginal and/or occurs in small pockets. Mitigation Measures 4.3-1 through 4.3-5 would ensure that the special-status species and their nests would be protected, so development of this habitat would not be considered a considerable contribution to cumulative impacts on these species. Nonetheless, the Proposed Project could result in the permanent loss of habitat for special status species, including foraging habitat for Swainson's hawk and other raptors. While mitigation would ensure that similar habitats are preserved in perpetuity, there would still be a permanent reduction in foraging habitat, which would be a considerable contribution to the loss and/or degradation of special-status species habitat in Merced County and the San Joaquin Valley. The conversion of this habitat to urban uses would therefore result in a significant and unavoidable cumulative impact.

Merced County contains extensive sensitive habitats, particularly wetlands. Winton is not in an area that has been designated vernal pool grassland or critical habitat for vernal pools. However, the Plan Area could contain wetlands in grasslands and there is some riparian habitat near a portion of Miles Creek. Because wetlands within the Plan Area would be fragmented from larger wetland areas in the county, and mitigation would ensure that there would be no net loss of wetlands, the project would not contribute considerably to the cumulative loss of wetlands. The potential loss of riparian habitat would also not be considerable, because the small area that could be affected provides marginal habitat and mitigation would minimize the loss by requiring compensation. For these reasons, the project's contribution to cumulative losses of sensitive habitats would be less than significant (Impact 4.2-9).

As grasslands and other habitat have been fragmented by agriculture and urban development, migration corridors have become an important means for wildlife to move between areas that provide food and shelter. The proposed Community Plan would not construct barriers in existing corridors, so wildlife would be able to continue to migrate along them after the proposed

Community Plan is developed. Therefore, this cumulative impact would be less than significant.

### **Cultural Resources**

The cumulative setting for cultural resources includes Merced County for historic period resources, and the portions of San Joaquin Valley identified as the territory of the local Native American community for prehistoric archaeological resources. Historic resources tend to be more highly concentrated within cities and urban communities. The cumulative context for paleontological resources is Merced County and the San Joaquin Valley.

Merced County and the San Joaquin Valley have been inhabited by prehistoric peoples for thousands of years. Development throughout the county and the valley will continue to occur in areas that are likely to contain prehistoric and historic resources (Impact 4.4-4). The Plan Area is considered sensitive for archaeological resources, although none have been recorded there. Mitigation would ensure that steps are taken prior to construction to identify archaeological resources, if any are present, and ensure that if such resources are unexpectedly encountered during construction, they are identified before they can be damaged or disturbed by construction activities, and that they are treated appropriately after discovery. With these protections, the contribution of the Proposed Project to the cumulative loss of archaeological resources would be less than considerable.

The proposed Community Plan could result in the loss or alteration of historically significant properties. Historic resources are being lost to development throughout Merced County and the region. Such resources cannot be replaced, although they can be recorded. The proposed Community Plan would contribute to this regional cumulative impact (Impact 4.4-5). The extent to which this would occur cannot be determined at this time, because there is not yet a list of historic structures or specific development proposals. The proposed Community Plan contains a policy and implementing actions that, in combination with Mitigation Measure 4.4-5, would ensure that historic resources are identified and information about them is recorded, and that they be preserved where feasible. Nonetheless, given the anticipated extent of new development and the likelihood of some redevelopment within the downtown core, some historic resources could be lost and/or substantially altered under the proposed Community Plan. Because the extent of the loss would depend on the nature and number of resources that are affected, this is considered a potentially considerable contribution to the cumulative loss and alteration of historic resources.

Paleontological resources are known to occur within Merced County, and elsewhere in the San Joaquin Valley. Excavation and grading in areas with geologic formations that are able to contain paleontological resources could result in the damage or destruction of fossils and related resources, including fossils of large vertebrates (Impact 4.4-6). The Plan Area does contain geologic formations that have yielded paleontological resources elsewhere in the county. Construction of the Proposed Project could damage or destroy such resources, if they are present in the Plan Area, thereby contributing to the cumulative loss of paleontological resources. Mitigation Measure 4.4-3 would ensure that such resources are identified and protected if encountered during construction. With this measure, the project contribution to the cumulative impact on paleontological resources would not be considerable.

### **Greenhouse Gas Emissions and Climate Change**

An individual project in and of itself could not alter the climate globally, so climate change impacts are considered only from a cumulative perspective. The Proposed Project's total estimated greenhouse gas (GHG) emissions, including amortized construction emissions, would exceed applicable thresholds (Impacts 4.5-1 and 4.5-2). Mitigation would reduce GHG emissions; however, the type and extent of measures that could be implemented and the total

amount of reductions toward cannot be quantified at this time. Furthermore, it may not be feasible for all projects to achieve the reduction targets.

### **Land Use**

There are no cumulative impacts associated with land use compatibility and plan consistency. The analysis of land use compatibility addresses the effects of locating different uses adjacent to or near each other. That analysis considers existing and future uses, so there are no additional impacts to consider under the cumulative scenario. Plan consistency is a project-specific analysis that is unaffected by cumulative conditions.

### **Noise**

The only noise levels likely to be affected by cumulative development outside of the Plan Area would be related to traffic. The land surrounding the proposed Plan Area is expected to remain in agriculture. The only urban development, outside of the central Plan Area, is located within the City of Atwater to the south; agricultural land in the County separates the Plan Area from Atwater, with the exception of the existing high school. Therefore, there would be no urban-density residential, commercial, or industrial development outside of and in proximity to the Plan Area.

The cumulative noise analysis focuses on traffic noise. Traffic volumes would increase due to development within and outside of the Plan Area, which would increase noise levels. The proposed Community Plan would not alter traffic noise considerably, so its contribution to the cumulative impact would be less than significant (see Impact 4.7-7).

### **Transportation**

The context for the cumulative analysis of vehicle miles traveled (VMT) impacts stems from the increases in development within and outside of the Plan Area, and changes in circulation patterns. Consistent with OPR guidelines, the VMT analysis considers both the changes in daily VMT within the Plan Area and in the region as represented by the MCAG model, which includes Merced County and portions of Stanislaus County. Cumulative growth could also increase demand for transit facilities and potential conflicts with the rail line. The demand for pedestrian and bicycle facilities would be primarily limited to those residing and working in the Plan Area. Therefore, there would be no cumulative impact on bicycle and pedestrian facilities.

The proposed Community Plan would substantially increase traffic in the Winton community. As discussed in Impact 4.8-6, total VMT would increase compared to existing conditions, even without the proposed Community Plan. The proposed Community Plan would increase VMT both within the Plan Area and on a regional level. However, the VMT/service population would increase within the Plan Area under cumulative conditions, the VMT/service population would decrease by about two percent on a regional level with implementation of the proposed Community Plan. Nevertheless, the standard of significance is a 15% reduction in VMT, so the contribution to cumulative VMT is considered significant, even with mitigation.

The proposed Community Plan would also contribute to cumulative increases in transit demand, but this impact would be less than significant, because the proposed Community Plan includes Implementation Measures to ensure that transit facilities are available within the Plan Area (Impact 4.8-7).

Winton's existing railroad crossings will carry increased traffic in the future as the area develops, and conflicts between the operation of intersections and adjoining crossings could occur if no improvements are made. Improvements at rail crossings would minimize the potential for conflicts, but the funding and timing for some of these has not been determined. The proposed

Community Plan would contribute to the potential conflicts by increasing vehicle trips as well as bicycle and pedestrian activity (Impact 4.8-9). The contribution to the cumulative impact would be considerable, but would be minimized to a less-than-significant level through mitigation.

### **Utilities**

The cumulative context for water supply is the Merced groundwater subbasin. The Winton Water and Sanitary District (WWSD) would need to expand its boundaries in order to serve the entire Plan Area. The WWSD draws groundwater from an aquifer that also serves other agricultural and municipal users. The proposed Community Plan would contribute to this cumulatively significant impact on the aquifer (see Impact 4.9-3).

The cumulative context for wastewater impacts is the WWSD service area for conveyance infrastructure and the Atwater WWTP service area for wastewater treatment. The proposed Community Plan would require additional facilities to convey and treat wastewater. The WWSD serves only the community of Winton, so no development outside of the WWSD service area would contribute to the need for sewer lines. However, in order to treat flows from the WWTP service area, which includes the City of Atwater, a U.S. penitentiary and Castle Airport, the WWTP will likely need to be expanded (Impact 4.9-6). The WWTP is designed to allow for expansion up to 12 mgd, which would be adequate to treat cumulative increases in wastewater. The impacts of expanding an existing WWTP facility would include standard construction impacts, such as those listed here, which would be temporary and could be reduced through standard mitigation. Any increase in the amount of wastewater being treated at the plant could incrementally add to the operational impacts identified in the WWTP EIR. Some of these could be resolved by the time expansion occurs, such as the presence of lead in discharged water. In some cases there could be incremental increases in an impact, such as exposure to odors. In any case, the proposed Community Plan's contribution to these impacts would not be substantial, because it would account for such a small portion (less than 5%) of an expansion to 12 mgd. Therefore, the project's contribution would be considered less than significant.

The Winton drainage system is self-contained and serves only the Plan Area. The system drains to a basin located within the Plan Area. Stormwater from within the Plan Area will therefore stay within the Plan Area system. Because the drainage system serves only Winton, and Winton runoff remains contained within the Plan Area, there is no cumulative impact.

The cumulative context for solid waste is the Merced County Solid Waste Regional Agency (MCSWRA) service area. MCSWRA is responsible for ensuring that the cumulative solid waste disposal capacity needs of its member jurisdictions are met over time, and toward that end has approved expansion of the Highway 59 landfill, which accepts waste from the Winton area.

The Proposed Project would increase the amount of solid waste that requires land filling, but not beyond the levels anticipated during planning for expansion of the Highway 59 landfill. Therefore, the project contribution to cumulative solid waste impacts would not be considerable.

## **7.2 GROWTH INDUCING IMPACTS**

### **Introduction**

An EIR must discuss the ways in which a proposed Community Plan could foster economic or population growth or the construction of additional housing in the vicinity of the project and how that growth would in turn, affect the surrounding environment (see CEQA Guidelines Section 15126 [d]). Growth can be induced in a number of ways, including through the elimination of obstacles to growth, or through the stimulation of economic activity within the region. The discussion of the removal of obstacles to growth relates directly to the removal of infrastructure

limitations or regulatory constraints that could result in growth unforeseen at the time of project approval.

Several factors must be considered when assessing the growth-inducing effects of a project. These include the following:

**Elimination of Obstacles to Growth:** The extent to which infrastructure capacity provided to the Plan Area or a change in regulatory structure would allow additional development in the Winton community; and

**Promotion of Economic Expansion:** The extent to which development of the proposed Community Plan could cause increased activity in the local or regional economy. Economic effects can include such effects as:

- **Increased Indirect Demand:** The extent to which the proposed Community Plan could generate secondary or indirect effects on other employment industries in the region.
- **Increased Pressure on Land Use Intensification:** The extent to which the proposed Community Plan could increase pressure on the Merced County and/or cities or other counties in the Central Valley to redesignate the land to higher land use intensities.

### **Elimination of Obstacles to Growth**

The elimination of either physical or regulatory obstacles to growth is considered to be a growth-inducing effect. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines, into areas that are not currently provided with these services would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

New infrastructure would be required to serve the proposed Community Plan, including new groundwater wells, new lift stations and new pipelines, which would be extended to areas that do not have access to public water and sewer lines at present. The WWSD serves the community of Winton. Portions of the Plan Area would require annexation to the WWSD in order to obtain service. All of the new infrastructure would be within the existing WWSD boundaries (after annexation of the portion of the Plan Area currently outside of the WWSD area). Given the 2030 General Plan policies that direct growth to Urban Communities, it is unlikely that substantial amounts of new development would occur outside of the Plan Area, and close enough to connect to the extended water or sewer lines. The Atwater WWTP has an existing capacity of 6 mgd, with the ability to expand to 12 mgd. Any expansion of the WWTP would be designed to accommodate projected demand from its service area, primarily associated with the City's adopted General Plan. Even if the expansion could accommodate development beyond the levels identified within adopted plans (e.g., the City's General Plan, the proposed Community Plan), it would not necessarily result in unanticipated growth. Wastewater treatment capacity is only one of many services and utilities that would be needed to serve growth. Additionally, any new development must be consistent with the applicable General Plan and related adopted plans. For these reasons, the Proposed Project would not remove an obstacle to growth outside of the development that would occur of under the proposed Community Plan.

### **Economic Effects**

The proposed Community Plan would increase economic activity both directly and indirectly. Retail stores would sell goods in the community. Retail, office and industrial land uses would buy goods

and services in the community and hire employees from Winton and the surrounding region. Non-residential development would include retail stores, employ residents from Winton and the greater region and buy goods and services both locally, as well as regionally and from outside the region.

Using standard employment generation rates, the proposed Community Plan could result in approximately 2,811 new jobs associated with non-residential land uses (see Table 7-1, Estimated Employment Generation) and a total of approximately 4,119 jobs in the Plan Area at build out. The proposed Community Plan would result in the buildout of 4,652 residential units, so there would be approximately 0.89 jobs per household. This does not include service jobs, such as school teachers and support staff, which would also be needed to serve new development. The number of jobs associated with the proposed Community Plan would still be only a small portion of countywide employment, estimated at 95,200 jobs in 2010, growing to 137,200 jobs in 2030.<sup>1</sup> Therefore, while the non-residential land uses in Winton would provide services and an important source of jobs and economic activity within the Plan Area, it would not be substantial enough to induce growth or unplanned for growth within Winton or elsewhere in the county.

<b>Land Use</b>	<b>Square Feet (new)</b>	<b>Square Feet/ Employee</b>	<b>Employees</b>
NC	67,543	500	135.086
GC	249,547	500	499.094
BP	734,268	400	1835.67
MU (office)	71,637	400	179.0925
MU (retail)	23,879	500	47.758
CT	28,500	500	57
Industrial	67,953	850	79.94470588
	-11,175	500	-22.35
<b>Total</b>	<b>1,232,152</b>		<b>2,811</b>
Source: Merced County General Plan Background Report, Table 2-38, 2013.			

New residential development typically generates a secondary or indirect demand for other services, such as grocery stores, dry cleaners, banking, and communications. This demand can lead to unforeseen future development if located in areas that are currently lacking a full spectrum of economic activity.

Increased economic activity can increase demand for new construction, and create pressure to either expand into undeveloped areas or increase the density of development within urban areas. However, the proposed Community Plan provides enough areas planned for residential and non-residential development to meet demand for at least 20 years based on historic growth rates. Therefore, there would not be pressure to expand beyond the Plan Area, or to intensify

<sup>1</sup> Merced County, 2030 Merced County General Plan d Draft Program Environmental Impact Report, November 2012, page 16-5.

development within the Plan Area beyond the levels anticipated in the proposed Community Plan.

In summary, the proposed Community Plan would contribute to economic activity in Merced County and surrounding region, but would not induce growth. Direct effects on growth, that is the increased population due to residents living in the proposed Community Plan, are the subject of this Draft EIR. The indirect growth due to increased demand for employees as the non-residential land uses in the Plan Area develop would not result in pressure to expand the Plan Area and/or develop additional housing elsewhere in the county.

### **7.3 SIGNIFICANT AND UNAVOIDABLE IMPACTS**

According to CEQA Guidelines [Section 15126, subd. (b); Section 21000, subd. (b).], a Draft EIR must include a description of those impacts identified as significant and unavoidable should the proposed action be implemented. These impacts are unavoidable because it has been determined that either no mitigation, or only partial mitigation, is feasible. The final determination of significance of impacts and of the feasibility of mitigation measures would be made by the Board of Supervisors as part of certification action.

The potential environmental impacts that would result from proposed Community Plan are summarized in Table 2-1. In most cases, impacts that have been identified would be less than significant after incorporation of the mitigation measures described in Table 2-1. Those impacts that cannot be feasibly mitigated to a less-than-significant level would remain as significant unavoidable adverse impacts. The following impacts would be significant and unavoidable.

- Conversion of Important Farmland to non-agricultural uses (Impact 4.1-1);
- Cumulative conversion of Important Farmland (Impact 4.1-4)
- Conflict with applicable air quality plans (Impact 4.2-1);
- Increase in criteria air pollutants for which the SJVAB is in non-attainment (Impact 4.2-2)
- Cumulative contribution to increased criteria air pollutants (Impact 4.2-5)
- Cumulative loss of special-status species habitat (Impact 4.3-8);
- Loss of historically significant buildings, sites and/or facilities (Impact 4.4-2);
- Cumulative loss of historic resources in Merced County and the Central Valley (Impact 4.4-5);
- Contribute to cumulative increases in the emission of greenhouse gasses and global climate change (Impact 4.5-1);
- Increased vehicle miles traveled (Impact 4.8-1);
- Contribute to cumulative increases in vehicle miles traveled (4.8-6); and
- Contribute to cumulative increases in groundwater withdrawals from the Merced groundwater basin (Impact 4.9-3).

### **7.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS**

Under CEQA, an EIR must analyze the extent to which a project's primary and secondary effects would commit resources to uses that future generations will probably be unable to reverse [CEQA Guidelines Section 15126.2(c); 15127].

Implementation of the proposed Community Plan would result in the long-term commitment of resources to residential, commercial, industrial and other development. Specific long-term effects of the proposed Community Plan could include:

- Increased ambient noise;
- Irreversible commitment of municipal resources to the provision of service and infrastructure for future urban and suburban development;
- Irreversible consumption of goods and services associated with urban development;
- Increased traffic volumes on existing roadways;
- Irreversible consumption of natural resources; and
- Contribution to global climate change through the generation of greenhouse gases.

Those impacts that could be significant are addressed throughout this Draft EIR. See, for example, Section 4.7, Noise, 4.8, Transportation and Circulation, and 4.9, Utilities.