

The land uses immediately surrounding the project site should not change in the near future, with the exception of the Mossdale Village area to the northeast. This roughly 1,160-acre area bounded by the San Joaquin River on the west and I-5 on the east (Exhibit 3-4) is proposed for residential development with an associated village center and scenic commercial and highway commercial uses. The planned 480-acre Mossdale Landing development within the Mossdale Village area is currently under California Environmental Quality Act (CEQA) review.

VIEWS OF PROJECT SITE

Views of the project site from the surrounding areas are limited because of the flatness of the topography and the obstruction of views by elevated features such as the levees, I-5, and the UPRR railroad berms. Because I-5 and the I-5/I-205/State Route (SR) 120 interchange are elevated, the project site is most visible from these vantage points. These highways also provide the most common views because drivers on these highways far outnumber any other group that might see the site from the surrounding agricultural lands. However, neither of these highway segments is considered a state scenic highway. The project site is also visible to boaters on the San Joaquin River and Old River. However, views from the rivers consist almost exclusively of levee faces dominated by heavily managed (mowed or burned) vegetation or riprap, with occasional small areas of trees or brush, and isolated structures, such as agricultural water intakes. Although the edges of the project site are visible from agricultural lands and isolated farmsteads surrounding the site, these views are relatively distant and exclusively from limited numbers of privately owned properties; therefore, these views were not individually described. The general nature of the views from each side of the project site is discussed below.

- ▶ **From the north:** Old River generally forms the northern edge of the project site, beyond which are agricultural lands interspersed with farmsteads and associated outbuildings. Exhibit 4.17-5 (viewpoint 7) is a view of the site from near Undine Road, which is almost directly north of the project site. As is typical, views of the site are obscured by the existing levees. Exhibit 4.17-5 (viewpoint 8) is a view from the end of Louise Avenue, northeast of the site. The San Joaquin River levee (on the side of the river opposite the proposed project site) is visible at the far end of the road, but the site itself is obscured by the levee. The tops of the railroad bridge towers (located off the project site) are visible on the left side of the photograph.

- ▶ **From the east/southeast:** Old River and the San Joaquin River form the eastern boundary of the project site, beyond which are agricultural lands that buffer the site from the developed portion of the City of Lathrop to the east and southeast. Exhibit 4.17-6 presents a view toward the project site across the Crossroads Business Park on the western edge of the developed portion of City of Lathrop. This area is on the south side of Louise Avenue, on the side of I-5 opposite the project site. The proposed project site is not visible from this location because I-5 is elevated in this area and obstructs the view. Exhibit 4.17-7 (viewpoint 10) includes a view from the southwestern corner of the Crossroads Industrial Park. From this location, I-5 continues to obscure the proposed project site, with the upper portion of the railroad bridge towers the only visible elements from the project vicinity. A view from the east side of I-5 near the existing residential areas of Lathrop is shown in Exhibit 4.17-7 (viewpoint 11). The project site cannot

be seen from this location because of the distance and the dominance of I-5 in the foreground and midground views.

The UPRR tracks border the site to the southeast, with I-5 running roughly parallel to the tracks further to the southeast. A view of the project area from I-5 just south of the Louise Avenue interchange is shown in Exhibit 4.17-8 (viewpoint 12). From further south on I-5, the view is of the UPRR bridge over the San Joaquin River from the I-5 bridge over the river (Exhibit 4.17-8, viewpoint 13). Glimpses of the project site are visible beyond the railroad bridge. The car in the foreground, traveling to the left, is on the SR 120 merge onto I-5. The vehicle in the background, heading to the right, is on the Manthey Road bridge. A view from the I-5/I-205/SR 120 merge segment, further south, is shown in Exhibit 4.17-9. The grain silos in the foreground are located outside the project site, just south of the UPRR tracks, and are considered historic structures, potentially eligible for listing on the California Register of Historical Resources. The tops of some trees in the RID Area are visible on the opposite side of the UPRR tracks.

- ▶ **From the south/southwest:** Paradise Cut occupies the entire southern and southwestern portions of the project site. Beyond Paradise Cut, agricultural lands interspersed with farmsteads and associated outbuildings characterize the landscape. Exhibit 4.17-10 (viewpoint 15) is a view from Paradise Road facing northeast toward the bridge over Paradise Cut. The road rises over the Paradise Cut levee, and the bridge is barely visible just beyond it; the RID Area is not visible. Southeast of Paradise Road is Cedar Road, which runs roughly parallel. Exhibit 4.17-10 (viewpoint 16) shows a view from the terminus of Cedar Road facing northeast toward the project site. As with the view from Paradise Road, the project site is obscured because of the height of the levee on the near side of Paradise Cut. The tops of the UPRR bridge towers are visible in the distance in the center of the photograph.

4.17.3 ENVIRONMENTAL IMPACTS

ANALYSIS METHODOLOGY

This visual impact analysis is based on a comparison of the project description provided in Chapter 3 of this SEIR and the proposed Urban Design Concept (UDC) for River Islands with applicable policies in the General Plan, design guidelines in the WLSP, and mitigation requirements in the WLSP EIR. In addition, the project was reviewed independently for its overall visual impacts using the standards of quality, consistency, and symmetry typically used for a visual assessment. The visual impacts were compared against the thresholds of significance as discussed below. The proposed project would not change the visual character of the PCC and PCIP Areas, with their function as agricultural lands and a flood bypass remaining the same. Therefore, the PCC and PCIP Areas are not analyzed further in this chapter. In addition, project features would not be visible from the existing developed portion of Lathrop or the Remaining Stewart Tract east of I-5 because the elevated I-5 and I-5/I-205/SR 120 merger corridors block views from these areas. Therefore, views of the project site from east of I-5 are not analyzed further.

The proposed project would be developed in two phases, as described in Chapter 3, “Description of the Proposed Project.” For the purposes of the visual impact analysis, a phase-by-phase evaluation was not

conducted. Rather, visual impacts of the proposed project were evaluated for full project buildout. This approach was taken because certain impacts, such as light and glare, would be greatest only at full buildout. Moreover, one purpose of implementing the UDC is to ensure visual consistency and quality of design and landscaping throughout the project. A separate analysis of each individual phase of development would fail to consider the quality and consistency of the River Islands project as a whole. Therefore, the following analysis applies to the entire River Islands project as proposed.

In addition, a project-level analysis of aesthetic resources was conducted for both Phase 1 and Phase 2, rather than a project-level analysis for Phase 1 and a separate program-level analysis for Phase 2. Although in some instances, Phase 2 project elements are not as highly defined as those in Phase 1, sufficient information on the location and nature of development in Phase 2 is available to allow a project-level analysis of potential aesthetic impacts. In addition, visual design guidelines included in the UDC would be applied across both project phases, allowing an equal level of analysis for Phase 1 and Phase 2 relative to aesthetic effects associated with the UDC.

PRIOR WLSP EIR ANALYSIS

The WLSP acknowledges that the development of the proposed project site would result in a significant change to the visual character of the site because what are currently undeveloped agricultural lands would be developed into urban uses. The WLSP EIR recommends that adherence to the urban design guidelines promulgated in the WLSP would mitigate any negative visual impacts of development to a less-than-significant level. The WLSP EIR also addresses impacts related specifically to light and glare and concluded that all impacts would be reduced to less-than-significant levels with the exception of the incremental increase in the amount of long-term sky glare, which would remain a significant and unavoidable impact. Although the proposed River Islands project was not included in the WLSP, the urban design guidelines in the WLSP do cover the types of development proposed for the River Islands project (e.g., residential, commercial, schools, open space), as well as more visually intrusive facilities, such as theme parks. Although these similarities do exist, it was determined that the River Islands project differs sufficiently from the WLSP to warrant an independent aesthetic resource analysis.

THRESHOLDS OF SIGNIFICANCE

The River Islands project would cause a significant impact on visual resources if it would:

- ▶ cause a substantial adverse impact on a scenic vista;
- ▶ substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a state scenic highway;
- ▶ substantially degrade the existing visual character or quality of the site and its surroundings;
- ▶ cause a substantial inconsistency between the River Islands UDC and guidelines in the General Plan or WLSP; or
- ▶ create a new source of substantial light or glare, which would adversely affect daytime or nighttime views in the area.

IMPACT ANALYSIS

This section provides an evaluation of the proposed project according to the City's adopted regulations pertaining to scenic and visual resources. The proposed project is considered consistent with General Plan and WLSP policies and guidelines related to aesthetic resources unless specifically identified otherwise in the impacts below. Information regarding the visual and architectural characteristics of the proposed project are based on the project description and the UDC.

Impact 4.17-a

Aesthetic Resources - Views of the Site from Surrounding Lands. *After project implementation, the project elements visible from the surrounding lands would be houses on the high-ground corridors and potentially small portions of the project bridges, the electrical transmission line connecting to the project site, and tops of buildings in the Employment Center and potentially the Town Center. However, most views of the houses would be obscured by existing levees and planned landscaping/revegetation, and other project features would be visible only from limited locations. In addition, from most vantage points, viewers from surrounding lands would be limited to the low densities of residents in dispersed farmsteads/homes and farmers and others tending agricultural lands. This impact is considered **less than significant**.*

Currently, views of the project site from surrounding lands are obscured by levees or elevated transportation corridors (e.g., railroad, highway). After project implementation, the visible project features would be houses on the high-ground corridors and potentially small portions of the project bridges, the electrical transmission line connecting to the project site, and tops of buildings in the Employment Center and potentially the Town Center. However, views of the houses would continue to be obscured by existing levees on the side of the rivers opposite the project site. Planned revegetation and landscaping on the project levee faces, Paradise Cut, and the back bay levee remnants would further obscure views of houses on the high-ground corridors. The other potentially visible project features would be seen only from a limited number of locations. In addition, only relatively small portions of the overall project would be visible from any vantage point. Those who do view project features from the surrounding lands typically would be small numbers of residents in dispersed farmsteads/homes in the agricultural lands and farmers and other tending those lands. After the adjacent Mossdale Landing project is built, portions of the homes on the high-ground corridors would be visible to residents in Mossdale Landing. Exhibit 4.17-11 shows a view of the Mossdale Landing project site from a River Islands levee at the proposed location of the Bradshaw's Crossing bridge. Although River Islands homes would be visible from the Mossdale Landing project site, views of homes would be consistent with the surrounding views in this residential development. Because views from the majority of surrounding lands would not be substantially altered, there are only a limited number of viewers in these areas, and views from the future Mossdale Landing project site would be consistent with surrounding views, this impact is considered less than significant.

Impact 4.17-b

Aesthetic Resources - Views from I-5 and the I-5/I-205/SR 120 Merge Segment. *After project implementation, views of the project site from I-5 and the I-5/I-205/SR 120 merge segment would include the cross levee, the top portion of buildings in the Employment Center and potentially the Town Center, the Golden Valley Parkway bridges over the San*

*Joaquin River and Paradise Cut, the electrical transmission line connecting to the project site, and some houses on high-ground corridors. Although this would alter existing views, none of these roadway segments is a scenic highway; in addition, the altered views would not be substantially different from those from other, nearby portions of these highways. This impact is considered **less than significant**.*

Existing views of the project site from I-5 and the I-5/I-205/SR 120 merge segment include the elevated UPRR berm, the UPRR bridge and SR 120 on-ramp bridge over the San Joaquin River, the San Joaquin River and Paradise Cut levees, and Paradise Cut itself. The UPRR berm blocks much of the remainder of the project site from view. After project implementation, features that would be visible from these highway segments would be the cross levee, the top portion of buildings in the Employment Center and potentially the Town Center, the Golden Valley Parkway bridges over the San Joaquin River and Paradise Cut, the electrical transmission line extension, and some houses on high-ground corridors. Foreground views of the area between the highway and the UPRR berm would be altered only by inclusion of the transmission line and towers (60- to 70-foot-tall standard steel poles). Background views of Mt. Diablo and the surrounding hills would not be blocked; however, they may be obscured if some buildings are eventually permitted to exceed five stories. Although views from I-5 and the I-5/I-205/SR 120 merge segment would be altered after project implementation, these roadways are not designated as scenic highways. Postproject visual conditions would be similar to views from I-5, I-205, and SR 120 elsewhere in the project vicinity (e.g., Tracy, Stockton, Manteca). In addition, highway drivers in this area typically would not be considered sensitive visual receptors because of the developed nature of much of the area and the associated low expectations of adjacent views. Because of these conditions, this impact is considered less than significant.



Aesthetic Resources - Views for Recreational Boaters. After project implementation, views of the levee face for recreational boaters along the San Joaquin River and Old River would include docks, homes along the high-ground corridors, restored habitat, and landscaping. This variety of views would replace the managed vegetation and riprap typical of the existing levee faces. This impact is considered **less than significant**.

Currently, views of the project site from the surface of the surrounding rivers consist almost exclusively of the levee faces. Views for recreational boaters are dominated by heavily managed (mowed or burned) vegetation or riprap, with occasional small areas of trees or brush, and isolated structures, such as agricultural intakes. These unvaried views are not considered a highly desirable visual environment. After project implementation, views along the rivers in the project area would include individual docks associated with homes on the high-ground corridors, the homes themselves, landscaping and restored habitat on the levee face, entrances to the back bays, and restored habitat on the levee remnants associated with the back bays. The diverse visual elements associated with the proposed project, especially those involving landscaping and habitat restoration, would be considered by many viewers as an improvement relative to the existing views. Although views by recreational boaters and others using the rivers would be altered under the proposed project, the existing visual conditions are not of high quality, and by many standards the postproject condition would be improved. Therefore, this impact is considered less than significant.

Impact
4.17-d

Aesthetic Resources - Nighttime Views. *The degree of darkness in the City of Lathrop and on the proposed project site would diminish as a result of development, effectively obscuring views of stars, constellations, and other features of the night sky. However, implementation of lighting guidelines in the UDC would substantially reduce the potential level of light generated by the proposed project, thereby minimizing the loss of nighttime views. This impact is considered **less than significant**.*

An incremental increase in the amount of nighttime light and glare would result from the development of the proposed project. However, the UDC lighting guidelines focus on balancing the safety of residents with the value of darkness. Accordingly, the UDC requires that light fixtures have hidden light sources that are aimed downward. In addition, harsh mercury vapor, low-pressure sodium, or fluorescent bulbs are prohibited in residential neighborhoods. These guidelines are consistent with the WLSP and would effectively minimize potential light and glare impacts. Therefore, impacts on views of the night sky would be minimized, and this impact would be reduced to a less-than-significant level.

Impact
4.17-e

Aesthetic Resources - Views of the Grain Silos and Railroad Bridge. *The brick grain silos between I-5 and the UPRR tracks and the UPRR bridge over the San Joaquin River are considered historic structures (see section 4.16, “Cultural Resources”). These structures are not located on the proposed project site; however, project elements would be visible behind these structures when they are viewed from the east. The visual background for these historic structures would be altered, although the structures themselves would not be affected. This impact is considered **less than significant**.*

The brick silos between I-5 and the UPRR tracks and the UPRR bridge over the San Joaquin River are considered historic structures (see section 4.16, “Cultural Resources”). Most viewers of these structures see them from the adjacent highways, with agricultural lands or open space in the background placing these landmarks in a visual context similar to their historic condition. After project implementation, the cross levee and the top portions of some buildings in the Employment Center would provide the background for the grain silos. The Golden Valley Parkway bridge over the San Joaquin River and some houses on the high-ground corridor would be visible behind the UPRR bridge. The introduction of these modern facilities would alter the context in which the silos and bridge are viewed. Any impacts on the historic value of these structures from the altered background are addressed in section 4.16, “Cultural Resources.” From a purely visual perspective, impacts are considered minor because the structures themselves would not be altered, views of the structures from the highways and other points would not be blocked, and the structures would still function as local landmarks as seen from the highways and other locations. Therefore, this impact is considered less than significant.

Impact
4.17-f

Aesthetic Resources - Design and Function of Walls and Fences/Consistency with the WLSP. *Proposed openings in walls adjacent to arterial roads, as described in the UDC, could expose adjacent residential areas to intrusive levels of light and glare. This is inconsistent with guidelines related to the type and function of walls as described in the WLSP. This impact is considered **potentially significant**.*

The UDC suggests that walls between residential neighborhoods and arterial roads contain openings that either lack any fencing or that feature steel “see through” fences. Depending on the specific design and location of the opening, these features could contradict guidelines in the WLSP, which indicate that visual separation between roadways and neighborhoods is required to reduce light and glare and aesthetic impacts. Because of the potential for light and glare from arterial roads to adversely affect residential neighborhoods, and the possible conflict with guidelines in the WLSP, this impact is considered potentially significant.

4.17.4 MITIGATION MEASURES

No mitigation measures are necessary for the following less-than-significant impacts:

- 4.17-a Views of the Site from Surrounding Lands
- 4.17-b Views from I-5 and the I-5/I-205/SR 120 Merge Segment
- 4.17-c Views for Recreational Boaters
- 4.17-d Nighttime Views
- 4.17-e Views of the Grain Silos and Railroad Bridge

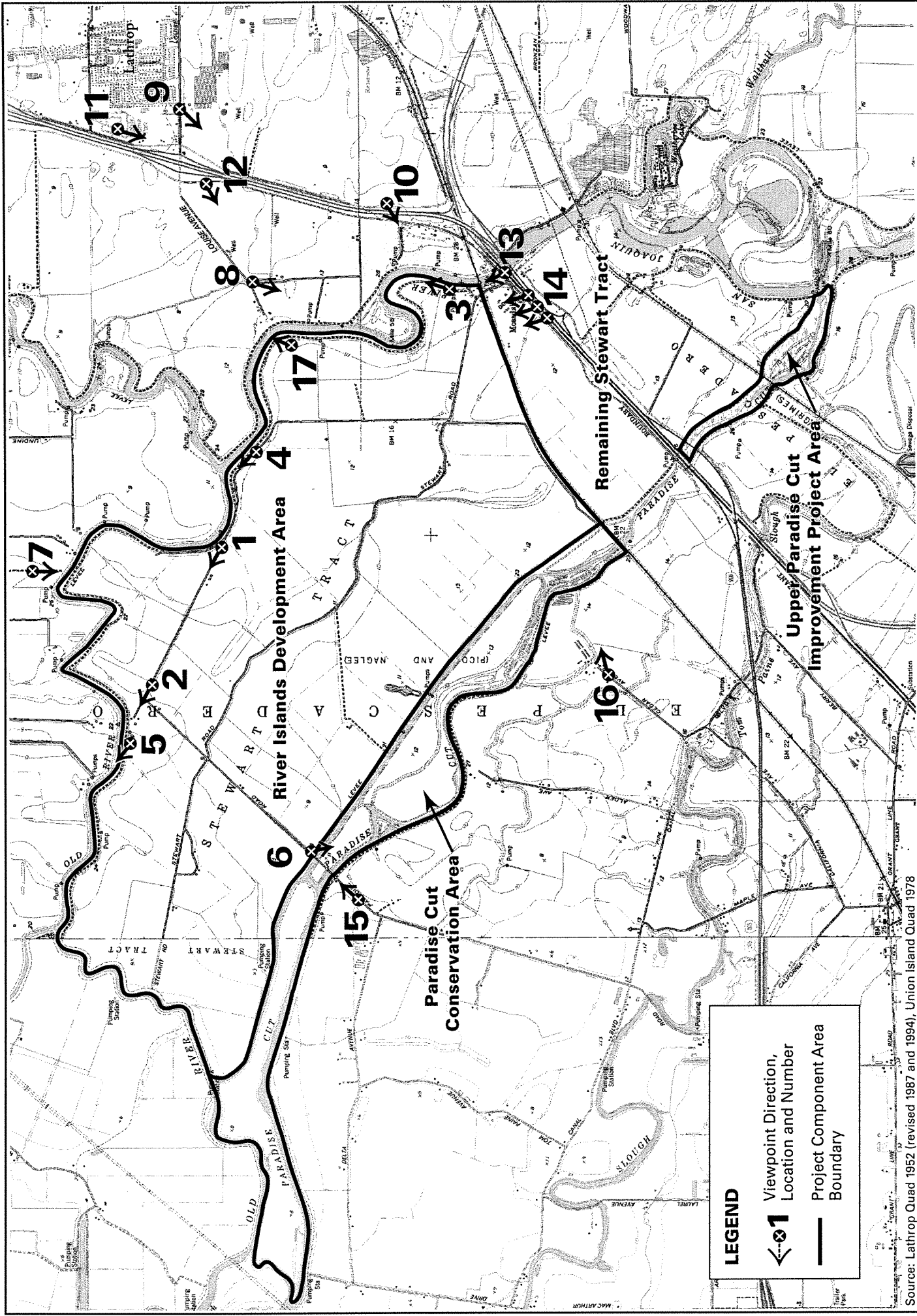
The following mitigation measure is provided for the only potentially significant impact associated with aesthetic resources.

4.17-f Design and Function of Walls and Fences/Consistency with the WLSP. Before approval of any residential development that would be located adjacent to an existing or planned future arterial road, proposed walls and fences shall be included in the architectural and design review. Any proposed gaps or openings in walls along the arterial road shall be evaluated as part of the design review for their potential to permit light and glare from the roadway to enter the residential development. Gaps or other openings shall not be permitted where light or glare may pass through the gap and adversely affect homes or other residences.

Implementation of Mitigation Measure 4.17-f would reduce the potential impact associated with gaps or openings in walls along arterial roadways to a less-than-significant level.

4.17.4 RESIDUAL SIGNIFICANT IMPACTS

No residual significant impacts would occur with implementation of the mitigation measures recommended in this section.

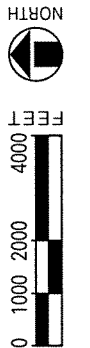


Source: Lathrop Quad 1952 (revised 1987 and 1994), Union Island Quad 1978

Photograph Viewpoint Locations

River Islands at Lathrop
CITY OF LATHROP
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EXHIBIT 4.17-1





Viewpoint 1: Agricultural fields in River Islands Development Area



Viewpoint 2: Farm structures and agricultural fields in River Islands Development Area

Source: EDAW 2002

Photograph Viewpoints 1 and 2

River Islands at Lathrop
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EXHIBIT 4.17-2

EDAW



Viewpoint 3: San Joaquin River levee face



Viewpoint 4: San Joaquin River levee face, head of Old River in background

Source: EDAW 2002

Photograph Viewpoints 3 and 4

EXHIBIT 4.17-3

River Islands at Lathrop
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EDAW



Viewpoint 5: Old River levee face



Viewpoint 6: Paradise Cut

Source: EDAW 2002

Photograph Viewpoints 5 and 6

EXHIBIT 4.17-4



Viewpoint 7: View from vicinity of Undine Road, north of project site



Viewpoint 8: View from end of Louise Avenue, northeast of project site

Source: EDAW 2002

Photograph Viewpoints 7 and 8

EXHIBIT 4.17-5

River Islands at Lathrop
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EDAW



View from Louise Avenue looking across Crossroads Business Park, northeast of project site

Source: EDAW 2002

Photograph Viewpoint 9

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Viewpoint 10: View from southwestern corner of Crossroads Industrial Park, east of I-5



Viewpoint 11: East of I-5, between Louise Avenue and Lathrop Avenue

Source: EDAW 2002

Photograph Viewpoints 10 and 11

EXHIBIT 4.17-7

River Islands at Lathrop
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EDAW



Viewpoint 12: View from I-5 just south of Louise Avenue interchange



Viewpoint 13: View from I-5 bridge over San Joaquin River

Source: EDAW 2002

Photograph Viewpoints 12 and 13

EXHIBIT 4.17-8

River Islands at Lathrop
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EDAW



View from I-5/I-205/SR 120 merge segment

Photos taken at different points from a moving vehicle; therefore, the panorama segments do not match exactly.

Source: EDAW 2002

Photograph Viewpoint 14

River Islands at Lathrop
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EXHIBIT 4.17-9

EDAW



Viewpoint 15: Paradise Road facing north toward bridge over Paradise Cut, south of project site



Viewpoint 16: Facing northeast near terminus of Cedar Avenue, south of project site

Source: EDAW 2002

Photograph Viewpoints 15 and 16

River Islands at Lathrop
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EXHIBIT 4.17-10

EDAW



Looking across San Joaquin River from project site, approximate location of Bradshaw's Crossing bridge

Source: EDAW 2002

Photograph Viewpoint 17

River Islands at Lathrop
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EXHIBIT 4.17-11

EDAW

5 CUMULATIVE IMPACTS

5 CUMULATIVE IMPACTS

5.1 INTRODUCTION

This SEIR provides an analysis of cumulative impacts of the proposed project, as required by §15130 of the California Environmental Quality Act Guidelines (State CEQA Guidelines). Cumulative impacts are defined in State CEQA Guidelines §15355 as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” A cumulative impact occurs from “the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time” (State CEQA Guidelines §15355[b]).

Consistent with State CEQA Guidelines §15130(a), the discussion of cumulative impacts in this SEIR focuses on significant and potentially significant cumulative impacts. State CEQA Guidelines §15130(b), in part, provides the following:

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 is provided for 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.

5.2 PROJECTS CONTRIBUTING TO POTENTIAL CUMULATIVE IMPACTS

The State CEQA Guidelines identify two basic methods for establishing the cumulative environment in which the project is to be considered: the use of a list of past, present, and reasonably anticipated future projects or the use of adopted projections from a general plan or other regional planning document. For this SEIR, both the list and the plan approach are used. A list approach is used to define the local project environment and includes projects within the City of Lathrop. Because the proposed project is large and directly influences, and is influenced by, regional development activities, the plan approach is used to allow a cumulative analysis on this regional scale. Projects and plans included in these two approaches are described below.

5.2.1 CUMULATIVE CONTEXT

The Lathrop area and City of Lathrop have grown moderately since the City’s origin as a railroad maintenance yard in the late 1860s to its gradual and now more rapid urbanization today. Lathrop’s development history was dominated by the railyards, the opening of Sharpe Army Depot in the 1940s (peak employment of more than 1,400), Libby-Owens-Ford glass manufacturing and Best Fertilizer in the 1950s (more than 1,200 employees), and agriculture.

While records are scant, the area history suggests that agriculture has been the driving force over the decades in the conversion of natural lands in Lathrop to utilitarian purposes. This conversion of natural land removed biological habitat and has resulted in such environmental effects as air quality degradation (dust from cultivation and emissions from farm equipment) and runoff of pesticide-laden sediments to the San Joaquin River.

According to U.S. Census records, population in Lathrop grew from around 6,800 in 1990 to more than 10,000 in 2000. This increase in population has come as a result of moderate urbanization over the decade, particularly the development of single-family residences and large-scale warehouses and distribution centers. With this urbanization has come increased traffic, particularly on increasingly crowded local freeways such as Interstate 5 (I-5) and I-205; increased air pollution (vehicles and construction); and loss of farmland. Still, even with this growth, Lathrop accounts for only 2% of the total San Joaquin County population (563,598), up from 1% in 1990.

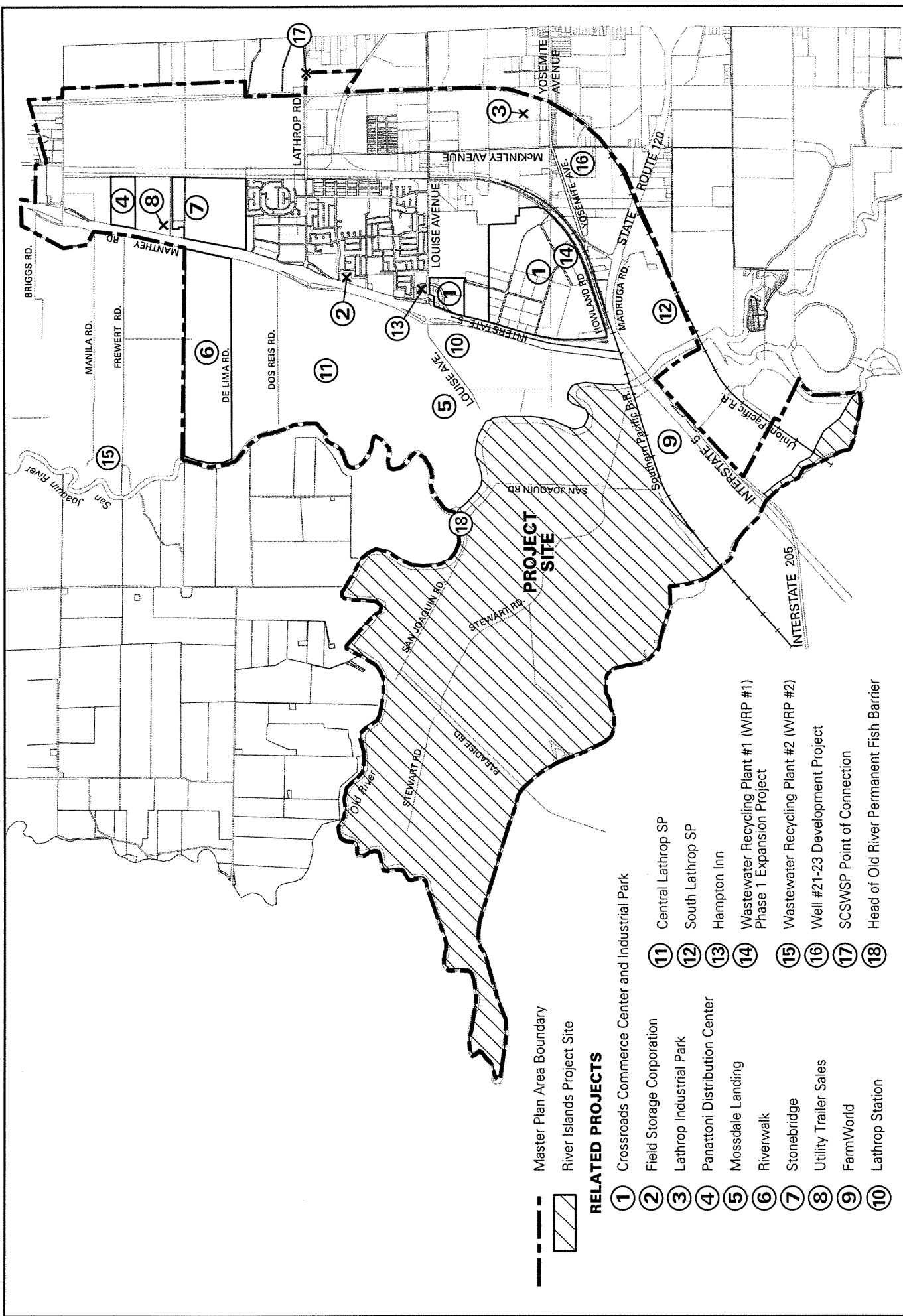
San Joaquin County has grown substantially in recent years, particularly in Tracy and Stockton. Between 1990 and 2000, the City of Tracy added more than 23,000 residents, and Stockton added 33,000 residents. Together, these two cities represent 69% of the County's population gain between 1990 and 2000; Lathrop's growth equaled 4% of the total County population gain. This growth has resulted in similar (to Lathrop), although more pronounced, changes in the environment, and San Joaquin County is addressing numerous regional issues pertaining to severe air quality degradation, traffic congestion, biological habitat loss, loss of farmland, and other urban-related environmental changes.

5.2.2 LIST OF RELATED PROJECTS

The list of past, present, and reasonably anticipated future projects used for this cumulative analysis is restricted to those projects that have occurred or are planned to occur within the City of Lathrop. For the purposes of this discussion, these projects that may have a cumulative effect on the resources in the project area will often be referred to as the "related projects." These related projects are identified in Exhibit 5-1 and Table 5-1 and are described below.

Crossroads Commerce Center and Industrial Park: Located on a site south of Louise Avenue between Howland and Harlan Roads in East Lathrop, Crossroads is an industrial/commercial area comprised of 450 acres of Industrial and 48 acres of Highway Commercial-designated land. The industrial area includes an existing 750,000-square-foot Nestle distribution warehouse, three existing 250,000-square-foot warehouses, and a 435,000-square-foot Longs Drugs warehouse. The Freeway Commercial area contains the existing 138,000-square-foot Lathrop Business Park, four fast-food restaurants, a sit-down restaurant, a 430,770-square-foot Daimler Chrysler facility, and a 31,886-square-foot hotel. Crossroads is the largest project currently approved in the City of Lathrop.

Field Storage Corporation: Field Storage Corporation was recently completed and consists of an 82,000-square-foot mini-storage facility, with 1,025 square feet of office to be located on the east side of Harlan Road, south of J Street. The adjacent parcel to the north contains a 3,024-square-foot car wash.



- Master Plan Area Boundary
- ▨ River Islands Project Site

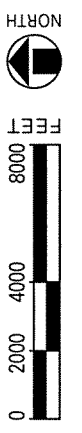
RELATED PROJECTS

- ① Crossroads Commerce Center and Industrial Park
- ② Field Storage Corporation
- ③ Lathrop Industrial Park
- ④ Panattoni Distribution Center
- ⑤ Mossdale Landing
- ⑥ Riverwalk
- ⑦ Stonebridge
- ⑧ Utility Trailer Sales
- ⑨ FarmWorld
- ⑩ Lathrop Station
- ⑪ Central Lathrop SP
- ⑫ South Lathrop SP
- ⑬ Hampton Inn
- ⑭ Wastewater Recycling Plant #1 (WRP #1) Phase 1 Expansion Project
- ⑮ Wastewater Recycling Plant #2 (WRP #2)
- ⑯ Well #21-23 Development Project
- ⑰ SCSWSP Point of Connection
- ⑱ Head of Old River Permanent Fish Barrier

Source: EDAW 2002

Related Projects

River Islands at Lathrop
 CITY OF LATHROP
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**Table 5-1
Related Projects in Lathrop**

# on Exhibit 5-1	Project Name	Status	Acreage	Undeveloped Land Use ¹	Proposed/Existing Use (P)/(E)		
					Residences	Industrial S.F.	Commercial/Office S.F. ²
1	Crossroads	Approved/Partially Developed	498	Agriculture/Open Space		2,323,137 (E)	178,000 (E)
2	Field Storage	Developed	5	Vacant		85,000 (E)	
3	Lathrop Industrial Park	Approved/Partially Developed	59	Vacant		554,040 (E) 407,700 (P)	
4	Panattoni Distribution	Approved/Partially Developed	33	Vacant		436,800 (E) 263,200 (P)	
5	Mossdale Landing ³	Proposed	477	Agriculture/Open Space	1,690 (P)		653,000 (P)
6	Riverwalk ³	Proposed (application withdrawn)	523	Agriculture/Open Space	1,800 (P)		
7	Stonebridge	Approved/Partially Developed	260	Agriculture/Open Space	appx 620 (E) 265 (P)		
8	Utility Trailer	Approved	24	Vacant		75,000 (P)	
9	FarmWorld ³	Proposed	101	Agriculture/Open Space			272,500 (P) 120-room hotel (P)
10	Lathrop Station ³	Proposed	147	Agriculture/Open Space	440 (P)		435,000 (P) ⁴
11	Central Lathrop SP	Proposed	1,044	Agriculture/Open Space	Unknown ⁵	Unknown ⁵	Unknown ⁵
12	South Lathrop SP	Proposed	220	Vacant	Unknown ⁵	Unknown ⁵	Unknown ⁵
13	Hampton Inn	Approved	2	Vacant			45,000 (P)
14	WRP #1	Proposed	16	Vacant			
15	WRP #2	Proposed	16	Agriculture/Open Space			
16	Wells 21-23	Proposed	5	Agriculture/Open Space			
17	SCSWSP Point of Connection	Approved	N/A	N/A			
18	Head of Old River Permanent Fish Barrier	Proposed	N/A	N/A			
Project Site	River Islands ³	Proposed	4,905	Agriculture/Open Space	11,000 (P)		4,753,000 (P)
Totals			8,335	7,976 acres ariculture/oen sace, 359 acres vacant	15,195 (P) 620 (E)	745,900 (P) 3,399,337 (E)	6,158,500 (P) 120-room hotel (P) 178,000 (E)

¹ This represents current land uses if undeveloped or prior (undeveloped) land uses if the site is partially/fully developed.

² Does not include school, parks buildings.

³ Projects are located within the approved West Lathrop Specific Plan area.

⁴ Based on an FAR of 0.20.

⁵ Formal application has not been submitted; land uses only conceptually proposed.

L9athrop Industrial Park: Lathrop Industrial Park was approved by the Lathrop Planning Commission to contain four industrial warehouses. The first warehouse provides 231,840 square feet of warehouse space with supporting offices and was recently completed. The second warehouse contains 322,560 square feet and is currently under construction. The third and fourth warehouses are proposed but not yet constructed. The project is located at 2725 Yosemite Avenue in East Lathrop.

Panattoni Distribution Center: This project would add 263,200 square feet of warehouse space to a recently completed 436,800-square-foot warehouse located at 11190 Harlan Road in East Lathrop. The project has Planning Commission approval but does not have building permits.

Mossdale Landing: Located between Interstate 5 (I-5) and the San Joaquin River and south of Lathrop Road, the Mossdale Landing project is a 477-acre residential and mixed-use commercial development consisting of 1,690 dwelling units, approximately 653,000 square feet of village and service commercial uses, parks, two K-8 schools, a fire station, and open space. Mossdale Landing includes segments of North River Islands Parkway and Golden Valley Parkway, which would also serve the River Islands project. The project is within the area identified as Mossdale Village in the West Lathrop Specific Plan (WLSP) and is consistent with that plan. The Mossdale Landing Urban Design Concept (UDC) is currently undergoing CEQA review, and a draft environmental impact report (EIR) has been prepared.

RiverWalk: West of I-5, east of the San Joaquin River, and north of De Lima Road, the RiverWalk Specific Plan consisted of a subdivision proposed on a 523-acre site to include approximately 1,800 single-family homes and various supporting facilities. Although the application for RiverWalk has been withdrawn by the applicant, it is included here as a likely future development scenario for the site because it was proposed at the time the notice of preparation (NOP) for the River Islands project was released, and there is continued interest in the site from the development community. Other elements of the RiverWalk project include an elementary school, two neighborhood parks, a community park, an open space corridor and detention basin, a landscaped pedestrian/bicycle corridor, a portion of Golden Valley Parkway, and a location for Water Recycling Plant #2 (WRP #2) as described in the Lathrop Water, Wastewater, and Recycled Water Master Plan (Master Plan).

Stonebridge: On Harlan Road north of Warren Avenue in East Lathrop, Stonebridge is an approved 211-acre, 885-unit single-family residential subdivision that includes a 7.6-acre park facility and an elementary school. Currently, approximately 70% of the units have been developed.

Utility Trailer Sales: Utility Trailer Sales will sell new and used truck trailers. Located at 12608 Harlan Road in East Lathrop, this retail establishment would include 54,056 square feet of sales area, with a shop and office, and 19,572 square feet of parts storage area. This project would employ 150 persons (75 persons per shift). This project was approved by the City in July 2002, and building permit applications are currently under review.

FarmWorld: FarmWorld is a proposed retail entertainment project on 101.5 acres adjacent to the west side of I-5 on Stewart Tract. The development would include 250,000 square feet of specialty retail shops and retail uses; a 5,000-square-foot restaurant; a 14.5-acre entertainment area with live entertainment to include an arena, themed rides, food service, and educational exhibit areas; a 120-room

hotel with conference facilities; a highway commercial area with restaurants, two service stations, and a 17,500-square-foot convenience market; and an open-air farmer's market. This project is currently on hold at the request of the developer.

Lathrop Station: This proposed residential/commercial mixed-use development is located within the Mossdale Village area, west of the proposed Golden Valley Parkway alignment and south of Louise Avenue. A UDC and two Vesting Tentative Maps have been filed for approximately 147 acres. The proposal includes 20 acres of Freeway Commercial, 16.5 acres of Service Commercial, 13.5 acres of Village Commercial, 34.3 acres of Low-Density Residential, 15.5 acres of Medium-Density Residential, and 4 acres of Neighborhood Park. A total of 440 dwelling units is proposed. The City is currently processing entitlements for this project.

Central Lathrop Specific Plan: The Central Lathrop Specific Plan area covers 1,044 acres west of I-5, east of the San Joaquin River, and north of Louise Avenue. Proposed land uses include Residential, Commercial, Office, Community and Neighborhood Parks, Cultural Center, Elementary School, and High School. The applicant has filed an Intent to Develop a Specific Plan.

South Lathrop Specific Plan: The South Lathrop Specific Plan area covers 220 acres near the intersection of I-5 and State Route 120 (SR 120), north of the Union Pacific Railroad (UPRR) tracks and east of the San Joaquin River. The proposed development is called the Landmark Logistic Center and would be oriented toward the professional trucking industry. Facilities would include vehicle-related services; a hotel; medical services; financial services; and retail and entertainment facilities, including a fishing pond, a nine-hole golf course, a miniature golf course, a bowling alley, a full-service health club, movie theaters, and an amphitheater.

Hampton Inn: This approved development will consist of a three-story, 45,000-square-foot motel on 1.9 acres east of I-5 and north of Louise Avenue.

Wastewater Recycling Plant #1 (WRP #1) Phase 1 Expansion Project: Under the Master Plan, the existing WRP #1 located on Howland Road near Yosemite Avenue would be expanded from its existing design capacity of 0.6 million gallons per day (mgd) to 6.1 mgd. The plant would also be upgraded from secondary to tertiary treatment and would serve future growth in the City. At present, a CEQA review (EIR) is in process for the first phase of plant expansion under the Master Plan, called the Lathrop Water Recycling Plant No. 1 Phase 1 Expansion Project. Under this project, the plant would be expanded from its existing design capacity of 0.6 mgd to 3.6 mgd and upgraded to tertiary treatment.

Wastewater Recycling Plant #2 (WRP #2): Under the Master Plan, a new treatment plant would be developed (WRP #2) in the northeastern portion of Mossdale Village with a capacity of up to 3.2 mgd. This plant would serve RiverWalk and other development in the Central Lathrop Specific Plan area. The development of this plant was in the process of being planned as part of the RiverWalk project; however, the recent withdrawal of the development application by the RiverWalk applicant has delayed project-level planning and CEQA review for WRP #2.

Well #21-23 Development Project: The City is proposing to construct three water wells (Wells #21, #22 and #23) and approximately 3,000 feet of water transmission pipeline to convey groundwater from the wells to the City's water distribution system. The project also includes proposals to construct associated well and pump houses, telemetry facilities, and pipelines. Each well would produce between 1,200 and 1,500 gallons per minute (gpm) from the Sacramento-San Joaquin River Delta groundwater subbasin. The project is consistent with the facilities planned for in the Master Plan and would help meet the City's water demand from future planned growth as projected in the Master Plan. Consistent with the Master Plan, this project would provide water to future planned growth until such time as surface water deliveries to the City commence associated with the South San Joaquin Irrigation District's (SSJID's) South County Surface Water Supply Project (SCSWSP). Once SCSWSP water deliveries commence, the wells would be used to supplement City water supplies during peak demand and to provide required fire flow.

SSJID South County Surface Water Supply Project: The SCSWSP is a joint project of SSJID and the cities of Manteca, Escalon, Lathrop, and Tracy to supply treated potable water to these participating cities. The primary objective of the SCSWSP is to provide a safe, reliable drinking water supply to these south county cities. The project involves construction and operation of a new water treatment plant at Woodward Reservoir in Stanislaus County, and a 36.5-mile, 20- to 54-inch water transmission pipeline with pumping facilities to deliver treated water to turnouts for each city. The SSJID's source of water is the Stanislaus River, based on its rights for direct diversion and diversion to storage. SSJID proposes to develop the project in two phases: Phase I (2003-2011) would supply approximately 31,000 acre-feet per year (AFY); Phase II (2011-2025) would increase the total supply to approximately 44,000 AFY. The City of Lathrop's requested capacity allocation from the SCSWSP is 14.6 mgd (maximum day demand) under Phase I and an additional 6.5 mgd under Phase II, for a total capacity allocation of 21.1 mgd supplied by the SCSWSP to the City of Lathrop. Two points of connection (POCs) to the City of Lathrop's municipal water system are proposed as part of the SCSWSP: one west of the UPRR tracks between the San Joaquin River and Paradise Cut, and the other along Lathrop Road east of the UPRR tracks. A third potential point of connection is proposed along Yosemite Avenue east of the UPRR tracks. The SCSWSP has been approved and adopted, and the EIR for the project has been certified. The SCSWSP is anticipated to be constructed and in operation by 2005 (EDAW 2001).

Head of Old River Permanent Fish Barrier: As part of the CALFED South Delta Improvement Program, a permanent operable barrier is proposed to replace the temporary rock barrier currently installed at the Head of Old River (HOR). The existing HOR temporary barrier is installed and removed twice each year, once in the spring and once in the fall, to improve water quality conditions and to prevent migrating salmon from entering Old River. The proposed permanent barrier would serve similar purposes but would be in place all year, with gates to control water and fish passage. Various design alternatives are being considered for the permanent barrier, including the use of locks to allow continued boat passage. The California Department of Water Resources (DWR) is leading this project effort, in cooperation with several other public agencies. A draft environmental impact report/environmental impact statement (EIR/EIS) is currently being prepared for the entire South Delta Improvement Program, including the HOR operable barrier.

These projects either have recently resulted in or are proposed to result in development of 8,335 acres in Lathrop. A total of 7,976 acres are currently in agricultural or open space uses. Approximately 75% of this cumulative development would be within the previously approved West Lathrop Specific Plan boundaries.

Related projects are proposed to add 15,195 new residences, in addition to 620 that have been constructed recently. New industrial development would add 745,900 square feet to the 3,399,337 square feet of industrial development already developed recently. A total of 6,158,500 square feet of commercial/office/employment uses (plus a 120-room hotel) are proposed to be added to the 178,000 square feet of these uses that were constructed recently.

5.2.3 REGIONAL PLANNING ENVIRONMENT

Because the proposed project is large and directly influences, and is influenced by, regional development activities, the “plan” approach was used to evaluate cumulative impacts on a regional scale. The regional cumulative analysis area covers San Joaquin County and included an evaluation of the following plans:

- ▶ San Joaquin County General Plan 2010, adopted in 1992 and as amended;
- ▶ San Joaquin County Multi-Species Habitat and Open Space Plan (2000) (SJMSCP);
- ▶ City of Lodi General Plan, adopted in 1990;
- ▶ City of Stockton General Plan, adopted in 1990 and as amended through November 3, 1998;
- ▶ City of Lathrop General Plan, adopted in 1991 and as amended through June 18, 2002;
- ▶ Manteca General Plan, adopted in 1988 and as amended through December 20, 1993;
- ▶ City of Tracy Urban Management Plan/General Plan and Urban Management Plan, adopted in 1993;
- ▶ General Plan, City of Ripon, adopted in 1988, and draft General Plan, City of Ripon 1996;
- ▶ 2001 Regional Transportation Plan, San Joaquin Council of Governments, 2001; and
- ▶ Sacramento and San Joaquin River Basins, California, Comprehensive Study (Draft Interim Report), U.S. Army Corps of Engineers and California Reclamation Board, July 22, 2002.

Much of the information on the overall planning and project environment in San Joaquin County was found in the SJMSCP, which evaluated current conditions and anticipated future development throughout the County based on the individual City and County General Plan documents listed above. Additional information on conditions in the County was obtained from the San Joaquin Council of Governments (SJCOG) Research and Forecasting Center (RFC). A summary of the cumulative planning environment in the County used for the regional cumulative impact analysis is provided below.

San Joaquin County covers approximately 909,000 acres, with approximately 809,000 acres, or nearly 90% of the County, used or available for agriculture (row and field crops, orchards, vineyards, and

grazing lands). The remaining lands are dominated by various types of development (approximately 59,000 acres), natural habitats (woodlands, riparian), and open water (lakes, rivers, Delta waterways). The County population in 2000 was 563,598 (U.S. Census Bureau 2000) with a majority of County residents and development located in the incorporated cities (Escalon, Lathrop, Lodi, Manteca, Ripon, Stockton, and Tracy).

In the SJMSCP, it is anticipated that 147,000 acres of various categories of open space lands (including agriculture, range lands, and natural) in the County (including Lathrop) would be converted to non-open space uses between 2001 and 2051, based on full buildout of each of the general plans in the County and construction of all anticipated transportation and other public projects. In addition, approximately 59,000 acres of infill of urban lands would occur in this 50-year timeframe. Population in the County is expected to more than double by 2040, increasing to 1.26 million (California Department of Finance 1998).

Residential development comprises the majority of planned future developed uses in the County. New residential development is expected to occur in four primary areas in the County: the incorporated cities, the unincorporated areas near the cities where services are available, new communities (e.g., Mountain House, New Jerusalem), and existing unincorporated communities (e.g., Acampo, Banta, Chrisman, Glennwood, French Camp, Lockeford, Linden, Thornton, Vernalis). Commercial development would be concentrated in these same areas as well as along major transportation routes.

5.3 CUMULATIVE IMPACT ANALYSIS

The following sections contain a discussion of the cumulative effects anticipated from implementation of the proposed project, together with the related projects and regional development, for each of the 16 environmental issue areas evaluated in this SEIR. The analysis conforms with §15130 of the State CEQA Guidelines, which specifies that 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 a detail as is provided of the effects attributable to the project alone.”

5.3.1 LAND USE

As described in section 4.2 of this SEIR, implementing the proposed project would not physically divide a community. It therefore also would not contribute to a cumulative impact regarding this issue.

Impacts involving land use plans or policies and zoning generally would not combine to result in cumulative impacts. The determination of significance for impacts related to these issues, as considered in Appendix G of the State CEQA Guidelines, is whether a project would conflict with any applicable land use plan or policy adopted for the purpose of reducing or avoiding environmental impacts. Such a conflict is site specific; it is addressed on a project-by-project basis. As described in section 4.2 of this SEIR, implementing the proposed project would not result in significant land use planning impacts, and the project’s ultimate consistency with local land use plans, policies, and zoning is ensured through entitlements to revise the General Plan and the WLSP. The project is also consistent with the SJMSCP, a regional-scale planning document. Further, related projects in Lathrop are, to the extent proposed land

uses have been identified, apparently consistent with environmental plans and policies. Because no land use impacts would occur on a project-specific basis, the project would not contribute to any potential cumulative land use impacts.

5.3.2 POPULATION, EMPLOYMENT, AND HOUSING

The proposed project would contribute jobs in excess of the number of employable residents that would be expected to live on the project site. As such, the project would have a beneficial effect on the jobs-housing balance of San Joaquin County since the County currently has more housing units than jobs (jobs-housing balance index of approximately 1.22) and the imbalance is expected to intensify through 2025 (project jobs-housing balance of 1.48) (Table 4.3-3). Therefore, the proposed project would assist in alleviating a Countywide cumulative impact.

More locally, the City of Lathrop is considered to have a housing shortage (vacancy rates below 5%). Although the excess of jobs associated with the proposed project might be considered as contributing to this shortage (through increased housing demand), when looked at in conjunction with related current and future housing projects in the City, overall housing opportunities in the City should increase.

Population growth, by itself, is not considered a significant cumulative effect because it is not an environmental impact. However, population growth, and related housing and infrastructure, does lead to conversion of land to other uses, the impacts of which are considered in the appropriate sections of this document.

5.3.3 TRAFFIC

Section 4.4, "Traffic," of this SEIR evaluates both project and cumulative traffic impacts. Project-only impacts are addressed in the discussion of "baseline plus project" impacts. Cumulative impacts are addressed in the "base case plus project" impacts discussion. Base case represents cumulative development levels modeled by SJCOG to occur over time up to year 2025.

5.3.4 AIR QUALITY

Past development in the County and the San Joaquin Valley has resulted, in combination with meteorologic conditions and transport of pollutants from other air basins, in substantial to severe air quality problems in the San Joaquin Air Basin (SJAB). As described in section 4.5, the SJAB is in severe nonattainment with state and federal ozone standards and nonattainment with state and federal standards for particulate matter 10 microns or less in diameter (PM_{10}). As a consequence, the San Joaquin Valley Air Pollution Control District (SJVAPCD) is required to submit a plan demonstrating reductions in the emissions inventory of 300 tons per day by between 2005 and 2010.

SJCOG projects population in the County to grow from 566,600 in 2000 to 900,338 in 2025, an increase of 333,738. Lathrop is projected to grow by nearly 14,000 people over this same period. SJCOG bases its air quality attainment planning on projections of Countywide growth and has indicated (along with SJVAPCD staff) that higher growth than projected in one community, such as Lathrop, translates to

lower growth in another and that Countywide growth would not change. See the discussion in section 4.4, “Traffic.” Thus, if Lathrop does add nearly 16,000 dwellings (Table 5-1) and the City builds out by 2025, Lathrop would triple its projected population growth, but projected growth would be commensurately reduced elsewhere in the County. Conversely, if growth occurs throughout the County, by community, as projected by SJCOG,¹ the level of cumulative development shown in Table 5-1 would not be achieved in Lathrop. What this all means is that SJCOG and the SJVAPCD have assumed a substantial level of cumulative development over the next 25 years in their air quality planning, and project development would not alter attainment with district plans. It is important to recognize that the SJVAPCD has already seen significant progress in meeting attainment status for ozone; federal ozone standards were exceeded more than 70 days per year between 1980 and 1990, and the number of exceedences has been steadily reduced to an average of approximately 30 days per year over the past 5 years, despite substantial population growth.

Much of the past development in the project region has occurred to meet demands for more affordable housing for those employed in the Bay Area. Increased commuting associated with this development scenario has contributed substantially to existing air quality problems in the SJAB. Although the proposed project would counter this trend to a small degree by generating more jobs than employable residents (see section 4.3, “Population, Employment, and Housing”), it would still result in an individual significant air quality impact with respect to long-term regional emissions. Emissions attributable to the proposed project, along with emissions from other reasonably foreseeable future projects in Lathrop and the SJAB as a whole, would continue to contribute to long-term increases in emissions that would exacerbate existing and projected (over the next 3–8 years) nonattainment conditions in the SJAB. Thus, the proposed project would contribute to a significant and unavoidable cumulative air quality impact.

The proposed project would result in less-than-significant construction-related air quality impacts with implementation of mitigation measures identified in section 4.5. Assuming all related projects also implement all feasible construction emission control measures consistent with SJVAPCD guidelines, construction emissions on a project-by-project basis would be less than significant. However, the large scale and number of related projects, taken in total and combined with the nonattainment status of the SJAB for PM₁₀, would result in a significant and unavoidable cumulative construction-related air quality impact. The proposed project would contribute to this impact.

Cumulative traffic data (proposed project plus foreseeable future development) were used to specifically evaluate local mobile source carbon monoxide (CO) concentrations for future conditions (i.e., year 2015 and 2025). The analysis was conducted for intersections projected to operate at an unacceptable level of service (LOS), including the Louise Avenue/I-5 northbound and southbound ramp intersections for 2015 and 2025 conditions, and the Golden Valley Parkway/South River Islands Parkway intersection and the MacArthur Drive/I-205 westbound ramp intersection for 2025 conditions. Both 1-hour and 8-hour CO concentrations were estimated based on worst-case meteorological conditions, p.m. peak-hour traffic volumes as presented in the traffic analysis, and emission factors modeled using the CT-EMFAC

¹ SJCOG staff projects population growth on a countywide level, then allocates growth from this projection to individual communities (geographic areas based in large part on past trends). See section 4.4, “Traffic.”

Computer Model. As indicated in Table 5-2, the estimated maximum 1-hour and 8-hour CO concentrations for 2015 and 2025 cumulative conditions would not exceed the significance thresholds of 20 parts per million (ppm) and 9 ppm. Consequently, the cumulative impact of the project's contribution to traffic volumes on the local roadway network relative to CO concentrations is considered less than significant.

Table 5-2 Localized Mobile Source Carbon Monoxide Concentrations under 2015 and 2025 Cumulative Conditions					
Intersection	Time Period	Maximum CO Concentration (ppm) ¹			
		2015		2025	
		Base Case	Base Case + Project	Base Case	Base Case + Project
Golden Valley Parkway/River Island Parkway	1 hour	--	--	10.3	13.9
	8 hour	--	--	6.75	7.31
MacArthur Drive/I-205 westbound ramp	1 hour	--	--	8.0	9.7
	8 hour	--	--	4.16	5.21
Louise Avenue/I-5 northbound ramp	1 hour	13.4	16.0	14.5	15.8
	8 hour	6.68	7.73	7.17	7.59
Louise Avenue/I-5 southbound ramp	1 hour	11.4	13.8	12.0	13.9
	8 hour	5.7	7.03	6.19	7.1
Significance thresholds ²	1 hour	20			
	8 hour	9			
<p>¹ 1-hour and 8-hour CO concentrations were estimated using the CALINE4 model based on the assumptions outlined above, 1-hour and 8-hour CO background concentrations of 7.0 ppm and 3.6 ppm, 2015 and 2020 composite emission factors from CT-EMFAC, and a persistence factor of 0.7, interpolated from the 2000 and 2001 Stockton-Hazelton air quality monitoring station data.</p> <p>² Based on the more stringent California Ambient Air Quality Standards.</p> <p>Source: EDAW 2002</p>					

5.3.5 NOISE

Implementing the proposed project would result in significant noise impacts before mitigation associated with construction activities and noise generated by onsite land uses, such as residential, commercial, schools, parks, and golf courses. These impacts would be reduced to less-than-significant levels with implementation of the mitigation measures recommended in section 4.6. However, impacts associated with onsite exterior noise levels resulting from adjacent land uses (e.g., I-5, the UPRR tracks, use of watercraft on surrounding waterways) are considered significant and unavoidable.

Noise is a localized occurrence, and attenuates with distance. Therefore, only future cumulative development projects in the direct vicinity of the project site would have the potential to add to anticipated stationary project-generated noise, thus resulting in cumulative noise impacts. Several related projects are planned in the vicinity of the proposed project: Mossdale Landing, Lathrop Station, and FarmWorld (Exhibit 5-1). Each of these projects would generate types of noise similar to that of the proposed project, and like the proposed project, each would have the potential to affect nearby residences and other sensitive receptors proposed at each project site.

The City's noise regulations limit construction activities to daytime hours. For River Islands, it was determined that adherence to these noise regulations alone would not be sufficient to avoid significant construction noise impacts. It is similarly anticipated that these regulations alone would not avoid significant construction noise impacts associated with the related projects. Therefore, significant cumulative noise impacts associated with construction activities could occur. However, because the proposed project would not result in significant construction noise impacts after mitigation, it would not contribute to any such significant cumulative noise impacts.

Stationary noise associated with the proposed and related projects could potentially result in exceedence of the City's noise regulations at sensitive receptors. While the noise from any stationary noise sources associated with the related projects could be controlled at the source (via noise walls, enclosures, site planning, and so on), there is no guarantee that all the related projects would include such noise controls as part of their proposals. Hence, significant cumulative noise impacts associated with stationary noise sources could occur. However, because the proposed project would not result in significant stationary noise impacts after mitigation, it would not contribute to any such significant cumulative noise impacts.

While construction and stationary source noise can be controlled onsite at the point of origin, traffic noise may extend beyond a project site along existing and proposed offsite roadways and result in significant traffic noise impacts on sensitive uses along these roadways. The proposed project alone would not contribute to a perceptible increase in traffic noise on major roadways (Impact 4.6-c in the noise analysis). However, the combined cumulative increase in traffic on I-5, I-205, and the I-5/I-205/SR120 interchange anticipated for 2025 resulting from the related projects and regional growth extends the 65-dBA noise contours for these roadway segments by approximately 2,000 feet (Exhibits 4.6-3 and 4.6-4), resulting in a substantial number of additional existing and proposed sensitive receptors falling within this contour. This is considered a significant cumulative traffic noise impact, and because the proposed project would contribute traffic to the local roadway system, it would contribute to this cumulative impact. Construction of sound walls and other noise-attenuating features (e.g., berms, dual-pane windows) throughout the region would require a regional program and may not be feasible to implement. Because it is considered infeasible to sufficiently reduce noise at every existing and proposed sensitive receptor that would be affected, this cumulative traffic noise impact is considered significant and unavoidable.

5.3.6 GEOLOGY, SOILS, AND MINERAL RESOURCES

Various areas in the City of Lathrop and the project region are subject to ground shaking, liquefaction, lateral spreading, settlement, levee failure, and other seismically induced hazards (City of Lathrop 1991,

1996). Although the City is located in an area of low seismic activity, faults in the greater San Joaquin Valley could cause moderate ground shaking throughout the region. Implementation of the various related projects could expose additional structures and people to seismic hazards. Proposed projects closer to the San Joaquin River and Old River (e.g., west of I-5) may be exposed to the additional risk of flooding associated with seismically induced levee failures. The potential seismic and soil hazards in the City of Lathrop, therefore, could represent a significant cumulative impact if projects are not developed to the latest building standards and do not incorporate recommendations from site-specific geotechnical reports and grading/erosion plans prepared for these projects.

As discussed in section 4.7, “Geology, Soils, and Mineral Resources,” the River Islands project would be exposed to potentially significant seismic hazard impacts. However, these impacts would be mitigated to less-than-significant levels through completion of site-specific geotechnical studies and implementation of construction and design measures developed in response to the studies. Implementation of the proposed project therefore would not create additional facilities under increased risk of hazards and would not contribute to any significant cumulative impacts. Furthermore, implementation of the project would improve existing levees and involve construction of new levees using more stringent design standards. As such, the proposed project would have a beneficial cumulative reduction in the risk of levee failure from seismic activity.

The River Islands project and three related projects, Mossdale Landing, FarmWorld, and the South Lathrop Specific Plan, occur in areas of potential mineable sand deposits classified as MRZ-2 by the California Department of Mines and Geology (Exhibits 5-1 and 4.7-3). The total MRZ-2 area in the project vicinity covers approximately 1,100 acres, with several locations already developed. Assuming roughly 1,000 acres of mineable area is available, up to 35% of this area (roughly 325-350 acres) could be excluded from future mining through development of the proposed and related projects. Although there currently is not a large market demand for these sand deposits, there may be increased demand in the future. Project construction over these deposits could permanently remove access to more than one-third of the mineable area. This impact is therefore considered a significant cumulative impact. However, the proposed project’s contribution to this impact would be minor, with only 10 acres, or 2-3% of the overall cumulative impact attributable to the proposed project.

5.3.7 HYDROLOGY AND WATER QUALITY

Because waterways adjacent to the proposed project site (San Joaquin River, Old River, Paradise Cut) are part of the Sacramento-San Joaquin River Delta system, local hydrology and water quality conditions are often affected by regional activities. Past and present projects from the Sierra Nevada (dams and reservoirs, mining operations, logging, urban development) through the Delta (water supply diversions, agricultural diversions, flood control projects, urban development, river channelization) affect hydrology and water quality conditions in the project vicinity. The capacity of waterways surrounding the project site to accommodate changes resulting from the proposed project and related projects is directly influenced by the effects of other activities in the Sacramento-San Joaquin River Delta. The following evaluation of cumulative hydrology and water quality impacts is made in light of the interrelated nature of the Delta system. However, the focus is on effects on water bodies in the project vicinity (San Joaquin

River, Old River, Paradise Cut) and how the proposed project and related projects may alter hydrologic and water quality conditions in these areas.

SURFACE WATER QUALITY

The proposed project, along with several of the related projects (e.g., Mossdale Landing, RiverWalk, FarmWorld, Central Lathrop Specific Plan) would discharge stormwater runoff to the nearby Delta waterways and would potentially degrade water quality of the system. As indicated under Impact 4.8-i of this SEIR, the existing agricultural uses at the project site currently discharge stormwater and agricultural runoff from the site to Paradise Cut. Under the proposed project, due to the conversion to differing land uses and the system of parks and paseos, water treatment wetlands, and the central lake, the total volume of discharges and the annual loading for 12 of 18 water contaminants would decrease. For the six contaminants where concentrations and mass loading would increase under the proposed project, the increased levels of these contaminants would not violate any water quality standards or waste discharge requirements. In addition, discharges under the proposed project would not occur every year as under the existing condition, and when they do occur, they would do so in the winter months, when higher flows in the Delta would further reduce postproject concentrations. Hence, the proposed project would result in beneficial or less-than-significant water quality impacts related to stormwater discharges.

While there are no assurances the related projects would incorporate the same degree of treatment methods as the River Islands project, several of the related projects would phase out existing agricultural runoff discharges from their respective sites and like the proposed project could provide some level of water quality improvement. Also, each related project that would discharge stormwater runoff would be required to comply with National Pollutant Discharge Elimination System (NPDES) discharge permits from the Regional Water Quality Control Board (RWQCB), which adjusts requirements on a case-by-case basis to avoid significant degradation of water quality. Therefore, while a greater quantity of urban runoff may be discharged to the Delta system with implementation of the related projects due to an increase in impervious surfaces, the associated surface water quality impacts would be expected to be less than significant because of improved or similar quality of runoff compared to existing conditions. This is especially true in light of the CALFED Bay-Delta Program, the State of California Total Maximum Demand Load (TMDL) Program, and other programs and regulations currently being reviewed, adopted, and/or implemented to reduce regional water quality impacts on the Delta.

The proposed project along with several of the related projects (e.g., Mossdale Landing, South Lathrop Specific Plan, FarmWorld) would, or may, require construction activities that could result in sediment or contaminant releases in the San Joaquin River; such as stormwater outfalls and utility crossings under the river. The proposed project includes additional construction activities that could affect water quality in Old River and Paradise Cut, such as installation of docks and levee breaching. Mitigation measures are included in section 4.8, "Hydrology and Water Quality," of this SEIR to reduce/eliminate the potential for releases of sediment and contaminants as well as specific requirements to be included in Storm Water Pollution Prevention Plans prepared for project development. These measures would reduce impacts on water quality from construction activities associated with the proposed project to less-than-significant levels. While there are no assurances that the related projects would incorporate the same degree of mitigation as the River Islands project, each related project that would include construction within the

levees of the San Joaquin River would, at a minimum, be required to obtain and comply with permits from the RWQCB, the California Department of Fish and Game (CDFG), California State Lands Commission, and the appropriate reclamation district (RD). Permits would likely be required from this same list of agencies for utilities bored under the river. Each permit would include measures to protect water quality in the San Joaquin River during construction. Therefore, any potential for construction related sedimentation or contamination would be limited for each individual project and the cumulative affect would be considered less than significant.

SURFACE DRAINAGE

The project site would be surrounded by levees, therefore, all stormwater runoff would be naturally contained within the project site. Stormwater runoff that does collect in the River Islands Development Area (RID Area) would be held in the central project lake and would percolate to groundwater or be discharged into Paradise Cut. Therefore, the proposed project would not have the potential to divert runoff to adjacent properties, causing drainage impacts to such properties. Therefore, no cumulative drainage impact on adjacent properties would occur.

FLOOD CONTROL

As discussed in the analysis included under Impact 4.8-m, providing 100-year levees designed to provide 1-in-200 Annual Exceedence Probability (AEP) (i.e., 200-year flood event) flood protection in the RID Area could result in increases to flood stage elevations in downstream areas during severe flood events. Because of improvements to Paradise Cut completed in tandem with removal of the RID Area from the 1-in-100 AEP floodplain, the project would result in reduced flood elevations up to the 1-in-100 AEP. During more severe flood events, only minor increases in downstream flood elevations would occur. Based on modeling of potential downstream levee failures, these increases would result in no additional levee breaks compared to existing conditions. Because the beneficial effects of the proposed project would occur much more frequently than the potential impacts (reduced flood elevations every flood event less than 1-in-100 AEP), and because when impacts do occur they would result in only minor increases in flood elevations and no increases in downstream levee breaks, the individual impact of the proposed project was considered less than significant.

Further, the project is consistent with the Sacramento and San Joaquin River Basins Comprehensive Study (USACE and California Reclamation Board 2002). The study addresses and recommends programs for flood control and habitat restoration in these two river basins. Programs include improving the integrity of the levee system and making better use of Paradise Cut, both programs being implemented with the project.

None of the related projects in the City of Lathrop would remove new areas from the 1-in-100 AEP floodplain. Therefore, these projects could not contribute to a cumulative increase in flood elevations in this manner. However, several related projects would result in additional discharges of stormwater into the San Joaquin River during storm events (e.g., Mossdale Landing, RiverWalk, FarmWorld, Lathrop Station). This could lead to an incremental increase in peak stormwater runoff to the San Joaquin River and potential increases in downstream flood elevations. However, the City requires a 30% reduction in

peak flows via the use of onsite retention basins so that a large percentage of onsite runoff from the related projects would be discharged to the river after peak storm events and after water levels in the river have subsided. In addition, because retention basins would be available, discharges could be temporarily limited in some instances during peak river flows. Also, the proposed project would reduce flood elevations in the San Joaquin River for all flood events less than the 1-100 AEP, compensating for any increased discharges associated with the related projects. Therefore, the incremental addition of stormwater discharges from the related projects and increased flows associated with the proposed project are not considered to have a significant cumulative effect on peak flows in the San Joaquin River during flood events.

The proposed construction of the permanent HOR operable barrier to replace the existing temporary fish barrier could alter the flood hydrology of the San Joaquin River and Old River. However, a specific design for the permanent barrier has not been proposed by DWR, and no hydrologic modeling has been conducted. Because of the complex nature of Delta hydrology in this area, preliminary modeling using a tentative barrier design would not be of value. Therefore, estimates of any cumulative hydrologic effects associated with the HOR operable barrier would be purely speculative and are not addressed in this SEIR.

GROUNDWATER QUALITY

The proposed project would include construction activities that could affect shallow groundwater and project elements that would intersect groundwater (the central lake and expanded Paradise Cut canal), would generate urban runoff that could come into contact with groundwater, and would dispose of treated wastewater on land. Each of these elements would represent a potential source of groundwater quality degradation. However, the proposed project would implement multiple measures to prevent contaminants from reaching the groundwater. These include implementation of best management practices (BMPs) to reduce potential contamination during construction, passage of urban runoff through grassy swales and water treatment wetlands before entering the central lake, tertiary treatment of wastewater to Title 22 standards for unrestricted use to avoid potential contamination of the environment, application of recycled water at agronomic rates to minimize percolation of recycled water below the root zone, and compliance with discharge and application regulations and permits. In addition, the depth to potable groundwater is substantial (150 feet or more). Therefore, percolation of pollutants to potable groundwater used for local private or municipal wells would not occur.

The related projects would be developed at multiple locations with varying depths to groundwater, would generate varying degrees of construction and urban runoff, would likely implement varying levels of application rates for the land disposal of recycled water, and would likely implement varying levels of BMPs that would protect groundwater. Some of the related projects, such as WRPs #1-3, the Crossroads Industrial Park, and the South Lathrop Specific Plan, would include industrial components that could potentially involve the use and/or storage of untreated wastewater and/or hazardous materials that, if allowed to percolate to the groundwater, could result in groundwater quality degradation. Although there would likely be considerable variation among the related projects, and thus potentially varying levels of possible groundwater impacts, there are a considerable number of regulatory safeguards in place to ensure that groundwater contamination does not occur. These include, but are not limited to, treated

wastewater discharge requirements, separation distance requirements between wastewater storage ponds and groundwater, storage pond lining requirements, and hazardous materials handling requirements. Furthermore, the majority of the related projects would replace existing agricultural operations that use pesticides, herbicides, and fertilizers over large areas. Therefore, it is anticipated that less-than-significant cumulative impacts would occur, and if such impacts were to occur, the proposed project would not contribute to them.

The proposed River Islands project does not include the development of new wells, nor do the proposals for most of the related projects. However, the proposed project along with some of the related projects (e.g., Mossdale Landing, Lathrop Station) would rely on new City wells for potable water. Impacts associated with supplying future citywide water demands were evaluated in the Master Plan EIR. The Master Plan EIR found that the planned groundwater use would result in a significant impact associated with the advancement eastward of the 500 milligrams per liter (mg/l) total dissolved solids (TDS) groundwater concentration front. However, this impact would be mitigated to a less-than-significant level through site-specific analysis and well design to maximize the quality of water produced by each well; monitoring of water produced by each well; and treatment, blending with groundwater, or other actions to improve water quality if monitoring showed water produced by the well did not meet applicable drinking water standards. Because impacts associated with groundwater production on a citywide basis would not be significant after mitigation, cumulative impacts associated with groundwater use in the City are not considered significant.

5.3.8 HAZARDOUS MATERIALS AND PUBLIC HEALTH

The proposed project and related projects would all involve the storage, use, disposal, and transport of hazardous materials to varying degrees during construction and operation. Impacts related to these activities are considered less than significant under the proposed project because the storage, use, disposal, and transport of hazardous materials are heavily regulated by various federal, state, and local agencies, and it is assumed that those involved with the project would implement and comply with these existing hazardous materials regulations. Therefore, significant hazards to the public would not occur. Because these laws and regulations would also apply to each related project, this impact would be considered less than significant on both an individual project and cumulative basis. Although some of the related project would include industrial components that could result in the use and storage of larger quantities of hazardous materials, such as WRPs #1-3, the Crossroads Industrial Park, and the South Lathrop Specific Plan, these larger users are subject to more stringent regulation and monitoring, resulting in reduced risk and the same less-than-significant impact conclusion.

The proposed project includes the use of recycled water to irrigate public landscaping. If wastewater recycling facilities do not operate properly, the public could come into contact with contaminated water, resulting in a public health hazard. Some of the related projects would also irrigate public landscaping areas with recycled water (e.g., Mossdale Landing, Lathrop Station), increasing the overall risk of the public being exposed to contaminated water. However, recycled water treated in the City would comply with Title 22 of the California Code of Regulations requirements for unrestricted use (i.e., disinfected tertiary treatment). Locations and methods of application for irrigation would also meet Title 22

requirements. Therefore, the risk of a public health hazard associated with the use of recycled water is considered less than significant on both an individual project and cumulative basis.

5.3.9 PUBLIC SERVICES

The proposed project would generate a significant increase in demand for fire, police, animal control, and school services and facilities and could significantly impede the provision of emergency services during construction. Significant project impacts would be mitigated to less-than-significant levels through implementation of mitigation measures identified in section 4.10 of this SEIR. These mitigation measures include, but are not limited to, preparing and implementing traffic control plans during construction to prevent obstructions of emergency vehicles; limiting occupancy of structures until a fully operational fire station is available to provide a 3- to 4-minute emergency response times to the structures; limiting occupancy of structures adjacent to water bodies until an agreement for provision of a fire/rescue boat is finalized; limiting occupancy of structures until adequate minimum fire flows have been confirmed; requiring payment by the applicant of fees and equipment costs to provide new police officers; including an animal control element within the City's capital facilities fee for the project; and limiting occupancy of project residences until a mitigation agreement has been executed between the applicant and the school districts regarding the provision of school services or until appropriate school impact fees have been paid.

In terms of cumulative impacts, the City of Lathrop and the appropriate school districts are responsible for ensuring adequate provision of public services within their jurisdictional boundaries. At this time, it is unclear whether sufficient police, fire, animal control, and school facilities are planned to serve the related projects identified earlier in this chapter. It is a City of Lathrop policy to ensure that balanced fiscal resources are available to fund public services for new development. While some of the related projects include proposals for the construction of service facilities, others do not. However, it is clear that sufficient police and animal control facilities, fire stations, and schools would need to be constructed to serve the related projects.

Although a shortage of cumulative public services and facilities would not represent a significant environmental impact, it would lead to the need to develop additional public services facilities, which could lead to significant environment effects. It is assumed that the development of the related projects, and/or development of the additional public service facilities required to serve them, would be preceded by the required CEQA review. However, conducting the required CEQA review would not necessarily guarantee that significant environmental effects associated with construction of new fire, police, animal control, and school facilities would not occur. Hence, significant cumulative environmental effects associated with the development of new fire, police, animal control, and school facilities could potentially occur associated with the cumulative impacts of related projects. Although the proposed project would not create a significant demand for public services after implementation of the mitigation measures identified above, and although the development of the proposed project, including the proposed onsite fire stations and schools, would result in less-than-significant impacts for the majority of environmental issues evaluated in this SEIR, development of the proposed project, including the onsite fire stations and schools, would result in significant unavoidable traffic, air quality, noise, and farmland conversion impacts (see Chapter 7). It would also contribute to significant and unavoidable cumulative

traffic, air quality, and noise impacts (see Chapter 7). Therefore, the proposed project would contribute to significant cumulative environmental effects associated with the development of new public service facilities required to serve the project and cumulative development, and thus would contribute to significant cumulative public services impacts.

Project impacts related to increased generation of solid waste would be considered less than significant. The receiving landfill, the Foothill Sanitary Landfill, has approximately 44 million tons of capacity remaining and is expected to remain open until 2048, including provision for growth in its service area (Johnson, pers. comm., 2002). Because this landfill would have adequate capacity to serve the project and other development in its service area, the proposed project would not have a significant cumulative impact on solid waste disposal.

5.3.10 PUBLIC UTILITIES

As indicated in section 4.11, the proposed project would generate less-than-significant impacts associated with recycled water storage and disposal capacity during Phase 1a and Phase 1, stormwater/surface runoff management, and demand for electricity and natural gas. Significant impacts are related to demand for potable water at buildout, demand for wastewater treatment capacity during Phase 1a and Phase 1, demand for wastewater treatment capacity for Phase 2, and demand for recycled water storage and disposal capacity for Phase 2. These significant project impacts, however, can be reduced to less-than-significant levels with implementation of recommended mitigation measures. Mitigation for significant impacts involves limiting the amount of project development that would generate demand for these services until such a time that the service is made available. This involves ensuring that adequate water infrastructure, wastewater treatment capacity, tertiary treatment to Title 22 standards, and additional storage and disposal capacity for recycled water are available.

As indicated in section 4.11, utility infrastructure projects currently being planned pursuant to the City's adopted Master Plan and undergoing CEQA review would provide water, wastewater treatment, and wastewater disposal capacity to the proposed project. These include the City Well Field Expansion Project and the WRP #1 Phase 1 Expansion Project. These projects would provide sufficient services for Phase 1 of the proposed project and sufficient water for Phase 2. Implementation of the Master Plan, including construction of planned wastewater treatment capacity, would provide sufficient wastewater treatment and recycled water disposal capacity for Phase 2. However, mitigation identified in section 4.11 prohibits buildout of individual developments within the proposed project until wastewater treatment and recycled water disposal capacity to serve those developments is available. If and when such treatment and disposal capacity is made available, the environmental effects associated with providing these utility services would be expected to be the same as those described in the Master Plan EIR and as outlined in Impact 4.11-e in this SEIR.

In terms of cumulative impacts, the City of Lathrop is responsible for ensuring that water, wastewater, and recycled water services are adequately provided within its jurisdictional boundaries and that development within the City can be adequately served by electrical and natural gas providers. The General Plan, WLSP, and WLSP EIR identify goals, policies, and mitigation measures associated with providing water, wastewater, recycled water, stormwater conveyance, electricity and natural gas to new

development, including many of the related projects identified in this chapter. The Master Plan provides for all the water and wastewater needs for cumulative City development (see discussion below). For this cumulative analysis, it has been assumed that the following future utility projects would be implemented: Lathrop Water Recycling Plant No. 1 Phase Expansion, South County Surface Water Supply Project (SCSWSP), the City of Lathrop Well Field Expansion Project, and other projects outlined in the Master Plan.

In addition, the project applicant formed the Lathrop Irrigation District (LID), with the authority to provide electrical, potable water, and wastewater service to the project site. Local voters approved formation of the LID in May 2002. The LID would be able to function as a utility provider to the project site and finance infrastructure development and construction through the use of land bonds, revenue bonds, and other forms of financing available to public agencies.

WATER, WASTEWATER, AND RECYCLED WATER

In 2001, the City of Lathrop completed the Master Plan, which programmatically plans for the provision of adequate water and wastewater treatment/disposal capacity to serve City growth through 2030. Pursuant to this plan, the City Well Field Expansion Project and WRP #1 Phase 1 Expansion Project are currently being planned and undergoing CEQA review to provide required water and wastewater treatment/disposal capacity to serve initial growth in the City. Other facilities are included in the Master Plan to provide for buildout of the City, and the Master Plan EIR evaluates related impacts. It is assumed that the development of related projects, and/or the development of the additional utility systems required to serve them, would be preceded by the required CEQA review. However, it cannot be assumed that all the potential environmental impacts associated with the development of the additional water and wastewater capacity and infrastructure required to serve these related projects would necessarily be less than significant after mitigation. Therefore, potentially significant cumulative utilities impacts could occur related to water and wastewater treatment/disposal capacity. Because Phase 2 of the proposed project could contribute to the need for discharges of recycled water to the San Joaquin River associated with further expansion of WRP #1, which could result in significant unavoidable cumulative water quality and fisheries impacts, it would contribute to such potential significant cumulative impacts.

As discussed in section 4.11 of this SEIR, a Senate Bill (SB) 610 Water Supply Assessment has been prepared for the proposed project. The assessment evaluates the adequacy of existing and future water supplies to meet the water demand created by the River Islands project in conjunction with existing development in the City and two of the future related projects: Mossdale Landing and Lathrop Station. The Master Plan addresses provision of water for full buildout of the City.

As indicated in the assessment and Table 4.11-1, future water supply for the City would consist of groundwater from the City's existing planned municipal wells and surface water deliveries from the SCSWSP. Groundwater pumping during normal years would range from 2,700 AFY in 2005 to 5,100 AFY in 2025. Deliveries from the SCSWSP would begin in 2005, and during normal years would range from 5,200 AFY in 2005 to 15,900 in 2025. At the same time, it is projected that future water demand (i.e., proposed project plus existing/future cumulative development) would range from 4,514 AFY in 2005 to 15,868 in 2025. As indicated in Table 4.11-1, future water supply available to the City during

normal years, as well as multidrought years, would be adequate to meet future water demand during all horizon (2005, 2010, 2015, 2020, 2025) years. Therefore, cumulative impacts related to water supply would not occur.

STORMWATER CONVEYANCE

As evaluated in Impact 4.11-h, the project's planned stormwater system is sufficient to prevent flooding through storage, and pumping when necessary, and no significant impacts would occur. Therefore, the proposed project would not contribute to any significant cumulative impacts relative to the provision of stormwater conveyance. The City has a storm drainage master plan for areas east of the San Joaquin River, and the WLSP includes a storm drainage master plan for Stewart Tract. A storm drainage master plan is also being prepared for the Mossdale Village area. The Stewart Tract plan includes the concept of large internal lakes for collecting and cleaning all drainage before being discharged to nearby rivers. This is included as part of the River Islands project. In other new developments within the City, stormwater conveyance would consist of surface runoff to detention ponds, with subsequent conveyance to the San Joaquin River. New development would be required to comply with the policies of the City's drainage master plans. In addition, future cumulative impacts of related projects would undergo separate environmental review to ensure that adequate conveyance facilities are included as part of those projects. As such, it is expected that cumulative future development would result in less-than-significant cumulative stormwater conveyance impacts.

ELECTRICITY AND NATURAL GAS

The City of Lathrop obtains its electrical and natural gas supply from Pacific Gas and Electric Company (PG&E). The LID may also deliver electrical power. As evaluated in Impact 4.11-i, the energy demands to be created by the proposed project would not be considered "substantial" in relation to the total amount of energy supplied. Cumulative development would increase the amount of demand for electrical and natural gas supply. PG&E has acknowledged that it has adequate electricity and natural gas supplies to support the project without affecting service to existing customers. In addition, multiple new power plants have come on-line and multiple other power plants are in the planning and construction stages, since the state's energy crises of early summer 2001. The total amount of energy supplied by PG&E in its northern and central California service area was estimated to be 81,923 million kilowatts per day of electricity and 887 million cubic feet per day of natural gas in 2000. Additional energy is expected to be available in the future. The LID also is able to purchase electricity from suppliers other than PG&E if desired. In addition, because future development would be required to comply with all existing City, PG&E, and applicable Building Code requirements, it is anticipated that electricity and natural gas supplies would be available. Therefore, cumulative electricity and natural gas impacts are expected to be less than significant.

5.3.11 RECREATION

Planned residential development in the City of Lathrop and associated increases in population would result in a cumulative increase in the demand for parkland. The proposed project would develop more

parkland per 1,000 residents than required by the General Plan standard. Thus, the project would provide a net surplus of park facilities and result in a beneficial cumulative impact with regard to parkland.

The proposed project would include a network trails and landscaped open space corridors that may be connected to a regional network of similar facilities via pedestrian and bicycle access across project bridges and connections to an open space corridors along the San Joaquin River. Future development in and outside the City of Lathrop may extend trails and open space corridors beyond the project site and increase the regional recreation opportunities. Because the proposed project facilitates the development of a regional network of trails and open space corridors, the River Islands project would result in a beneficial impact with regard to regional recreational opportunities.

Installation of piers along the San Joaquin River and Old River would result in the creation of speed restrictions/“no-wake zones” on these stretches of the rivers. This would add incrementally to the cumulative reduction in locations on the Delta where unrestricted boat use is available. Continuing installations of docks, piers, marinas, and other facilities on the Delta that reduce the locations where boats can travel without speed restrictions limit opportunities for water skiing, wake boarding, and similar activities. Currently, speed restrictions already exist in portions of the San Joaquin River in the project vicinity (e.g., adjacent to Mossdale Marina, Dos Reis Community Park, and Mossdale Crossing County Park). The existing temporary fish barrier on Old River requires boats to stop and wait for boat portage during 2-4 months of the year. The proposed permanent fish barrier would extend this speed restriction throughout the year. As such, using boats at unrestricted speeds is not considered to be the primary recreational opportunity in the immediate project vicinity. Instead, the proposed project would provide additional launching facilities from which watercraft may travel to areas where unrestricted speed is permitted, such as the Grant Line Canal. Given that the use of boats and personal watercraft would not be precluded by the boat speed restrictions that would be required for the proposed piers, the cumulative impact related to the loss of non-speed-restricted boating opportunity is considered to be less than significant.

Development of future projects in the region would increase the demand for boating opportunities. A significant cumulative impact would result if the demand from planned projects would exceed the carrying capacity of Delta waterways or if adequate access to the waterways is not provided. Carrying capacity for recreational boat users in the Sacramento-San Joaquin River Delta is not believed to be a limiting factor. The California Department of Boating and Waterways considers recreational boating capacity on river systems to typically be limited by boat launch facilities rather than available waterways, since these systems provide an extensive area for boating (Johnson, pers. comm., 2002). Therefore, the addition of boats in the Delta system associated with the proposed project and other planned projects in the City and County is not expected to degrade the recreational experience for existing boaters in the Delta. No significant cumulative impact related to carrying capacity of the Delta would result.

Development of future projects in the region would increase the demand for boat launches, docks, and other water recreation facilities that provide access to the waterways. The proposed project includes a substantial number of these facilities and would increase public and private recreational access to the waterways in the Delta. As such, the project would result in a beneficial cumulative impact with regard to water-related recreational opportunities.

5.3.12 AGRICULTURAL RESOURCES

According to the most recent Agriculture Census for San Joaquin County, conducted in 1997, 3,862 farms comprise approximately 809,000 acres of farmland in the County (e.g., crops, grazing); this is approximately 90% of the County's 909,000-acre total land area. The percentage of agricultural land has fluctuated according to the agriculture censuses from approximately 824,000 acres (91%) in 1987 down to approximately 784,000 acres (86%) in 1992 and then back up again in 1997 to the figures mentioned above. In 1997, total cropland in the County was approximately 559,000 acres, and in this area, roughly 519,000 acres were irrigated lands. The California Department of Conservation (CDC) also estimates that in 1999, San Joaquin County had approximately 548,000 acres of land under Williamson Act contracts (CDC 2001).

Among the agricultural lands in San Joaquin County, the CDC Division of Land Resource Protection estimates that the County has 630,990 acres of Important Farmland, further classified as 423,158 acres of Prime Farmland, 93,846 acres of Farmland of Statewide Importance, 57,977 acres of Unique Farmland, and 56,009 acres of Farmland of Local Importance (CDC 2001). According to the CDC land conversions tables for San Joaquin County, 4,665 acres of Important Farmland were converted to other uses between 1992 and 2000 (Table 4.13-2). Lands classified as Unique Farmland and Farmland of Local Importance actually increased during this period (likely due more to designation of existing farmland as unique or important rather than new farmland being put into production). However, the overall loss of Important Farmland occurred due to conversions of Prime Farmland (12,845 acres) and Farmland of Statewide Importance (5,702 acres). On average, these combined categories lost approximately 2,300 acres a year over the 8-year period. The County reports 8,733 acres of farmland to be slated for nonagricultural use in the near future; more than half of this is Prime Farmland. The California Department of Finance projects the County's population to grow from 585,600 to 920,900 by 2020, putting continued pressure on agricultural lands for conversion (CDC 2002). The San Joaquin County General Plan 2010 Review (San Joaquin County 2000) estimates that between 2000 and 2040, 110,000 acres of Important Farmland in the County (17%) could be converted to urban uses. Additional conversions can be expected from implementation of habitat restoration and water storage projects associated with CALFED, the SJMSCP, and other regional efforts.

The loss of an estimated 3,620 acres of Prime Farmland and Farmland of Statewide Importance at the River Islands site is considered a significant cumulative impact when considered along with past farmland conversions and planned future development proposed in the City of Lathrop (which would lose a total of 7,976 acres of agriculture), the surrounding cities, and the County as a whole. The River Islands project applicants would participate in the SJMSCP by contributing fees, on a per-acre basis, for agricultural lands that are developed. The SJCOG would use these fees, in part, to purchase conservation easements on agricultural lands, providing greater protection to these farmlands in the County. However, this measure cannot fully mitigate the project's cumulative contribution to the loss of agricultural land in San Joaquin County; therefore, the impact remains significant.

5.3.13 TERRESTRIAL BIOLOGY

The majority of the native vegetation in the project area and the larger region has been lost in the past 150 years, primarily as a result of conversion to agricultural and urban land uses. This habitat conversion has substantially affected many plant and wildlife species, resulting in a variety of species being listed as Threatened or Endangered under the California and federal Endangered Species Acts, although some species that use agricultural habitats and others that can thrive in developed areas have benefitted. Future conversions of open space lands in San Joaquin County would primarily consist of converting agricultural lands to residential and urban development.

The SJMSCP projects conversion of up approximately 109,000 acres of open space land to non-open space uses in San Joaquin County between 2001 and 2051 (San Joaquin County 2000). The proposed project and related projects in the City of Lathrop would contribute to this Countywide conversion. In Lathrop, related projects (including the proposed project) would convert 8,335 acres to developed uses. However, the SJMSCP was developed to minimize and mitigate impacts on plant and wildlife habitat (and associated species) resulting from this regional loss of open space lands. The SJMSCP relies, in part, on compensation for such conversion through preservation of agricultural lands and preservation and creation of natural habitats to be managed in perpetuity through the establishment of conservation easements and preserves. The goal of the SJMSCP is to provide approximately 101,000 acres of agricultural and habitat preserve. The SJMSCP concludes that this would adequately compensate for cumulative impacts on plant and wildlife species covered by the plan. Because the SJMSCP potentially provides a streamlined mechanisms for impacts on resources covered under the plan, it is assumed that a majority of qualifying projects within the County would use the SJMSCP for mitigation. Therefore, cumulative impacts on terrestrial biological resources covered under the SJMSCP are considered less than significant.

Terrestrial biology impacts resulting from the proposed project that are not expected to be compensated for by coverage under the SJMSCP are the temporary loss of riparian brush rabbit habitat and loss of U.S. Army Corps of Engineers (USACE) jurisdictional habitats (wetlands and waters of the United States). However, implementation of the proposed project and mitigation measures outlined in section 4.14 are expected to result in an overall increase in the amount of brush rabbit habitat and USACE jurisdictional habitats. In addition, the riparian brush rabbit has a very limited range, with populations known only from the Caswell State Park and the proposed project site. Therefore, the related projects would not contribute impacts on riparian brush rabbit. The USACE requires no net loss of wetland functions and values when impacts on jurisdiction habitats occur. It is assumed that this requirement would be applied to all related projects that may affect wetlands; therefore, no cumulative net loss of wetlands should occur. Therefore, potential cumulative impacts on riparian brush rabbit and wetlands are considered less than significant.

Because the project component would participate in the SJMSCP and implement mitigation measures to compensate for additional resources not covered by the SJMSCP, the proposed project, with mitigation, would not result in significant cumulative impacts on terrestrial biological resources.

5.3.14 FISHERIES

The proposed project would result in significant impacts on local aquatic habitat and on sensitive fish species before mitigation. These impacts would be due to proposed construction activities in and near the San Joaquin River, Old River, and Paradise Cut associated with bridge and utility crossings and levee breaching. Maintenance dredging of backbays during project operation would also result in significant fisheries impacts. These impacts would be reduced to less-than-significant levels with implementation of mitigation measures identified in sections 4.15, "Fisheries," and 4.8 "Hydrology and Water Quality," of this SEIR. The mitigation measures include BMPs to avoid, minimize, and clean up if necessary, any releases of sediments or contaminants into the San Joaquin River, Old River, and Paradise Cut during project construction and operation, not allowing construction in Paradise Cut when floodwaters from the San Joaquin River are present or are anticipated to overtop the Paradise Weir, and limiting in-water construction activities to periods when sensitive fish species have the least potential to be present.

Potential fisheries impacts associated construction in the RID Area, dock construction, changes in fisheries habitat resulting from in-water project features, altered hydrology in Paradise Cut, potential introductions of exotic fish species to the Delta, and increased water consumption were all considered less than significant. The proposed project would result in several beneficial fisheries impacts resulting from changes to the volume and timing of diversions into the RID Area, the replacement of existing unscreened agricultural intakes with screened intakes, improved quality of water discharged to Paradise Cut, improvements to fisheries habitat in Paradise Cut, and creation of new fish habitat in the central lake.

One or more of the related projects (e.g., Mossdale Landing, South Lathrop Specific Plan, FarmWorld) would, or may, require construction activities that could result in impacts on fisheries in the San Joaquin River, such as stormwater outfalls and utility crossings under the river. Any proposed construction activities and operation of stormwater outfalls or other devices within the river side of the levees would require regulatory review and/or permitting by the CDFG, National Marine Fisheries Service (NMFS), USACE, and/or the RWQCB with one of the intended goals being to protect sensitive fish species. Permits would likely be required from this same list of agencies for utilities bored under the river. Also, any such activities would be required to undergo CEQA review where, it is anticipated, mitigation measures in the form of construction and operational BMPs would be required as mitigation to avoid or minimize impacts on sensitive fish species. Still, such activities could result in the take of listed fish species, releases of sediment or contaminants into the Delta, and/or the removal of riparian and aquatic habitat. While these impacts would likely not be significant on a project-by-project basis after the aforementioned regulatory review and implementation of associated mitigation, the combined effect of multiple such incursions into the river and associated impacts on listed fish species and their habitat could result in a significant cumulative fisheries impact. However, the proposed project, overall would serve to mitigate this cumulative impact to a small degree through the beneficial effects on water quality and fisheries habitat associated with the project. Further mitigation would need to be developed in conjunction with the related projects that would contribute impacts or through ongoing large-scale regional efforts, such as CALFED.

Because the related projects would result in less-than-significant water quality impacts on the San Joaquin River associated with stormwater discharges and recycled water use, as evaluated above in the hydrology and water quality analysis in this section, any stormwater discharges of the San Joaquin River and/or the land application of recycled water associated with the related projects would result in less-than-significant cumulative impacts on fisheries resources.

The related projects could include the disposal of a portion of their treated wastewater via discharge to the San Joaquin River. As evaluated in the Master Plan EIR, the discharge of tertiary treated wastewater to the river by cumulative development in Lathrop could add a small increment (calculable but likely not measurable) of biochemical oxygen demand (BOD) and other pollutants of concern to the San Joaquin River and consequently the Stockton Ship Channel (where low dissolved oxygen [DO] levels occur). These discharges could contribute to significant surface water quality impacts and hence, potentially significant impacts on fisheries. If a portion of the treated wastewater generated by the proposed project is river disposed instead of land disposed, the proposed project would contribute to these impacts. Regulatory agencies are currently preparing/reviewing proposed TMDLs for DO and other pollutants of concern in the Delta. If these TMDLs are adopted and prove effective in reducing DO to acceptable levels, these surface water quality impacts and associated impacts on fisheries would be avoided. Otherwise, significant and unavoidable adverse fisheries impacts would occur.

5.3.15 CULTURAL RESOURCES

Cultural resources in the project region generally consist of prehistoric sites, isolated artifacts, and agricultural features. During the 19th and 20th centuries, intensive agricultural use of the region resulted in the destruction or disturbance of numerous prehistoric sites while many structures now considered to be historic were erected. From the latter half of the 20th century to the present, prehistoric and historic structures have been disturbed and destroyed. During this period, the creation and enforcement of various regulations protecting cultural resources have substantially reduced the rate and intensity of these impacts; however, even with these regulations, cultural resources are still degraded or destroyed as cumulative development in the region proceeds.

Farmsteads and various agriculture-related historic features in the region are relatively common, and continued removal of some of these features does not significantly reduce or eliminate the resource in the region. Prehistoric sites, however, are relatively rare, and cumulative impacts from the loss of these resources in the region increase proportionately as the resource base dwindles.

The results of the cultural resources records searches conducted for the proposed project indicate that the project area contains several previously recorded prehistoric and historic cultural resource sites. Additional sites were identified during the archaeological field survey. Cultural resources have also been identified on the site of one of the related projects (e.g., Mossdale Landing) and more may be found as surveys are conducted at the locations of future projects. As-yet-undiscovered subsurface cultural resources might also underlay the River Islands and related project sites. Mitigation measures are outlined in section 4.16 of this SEIR, "Cultural Resources," to minimize impacts on important cultural resources to less-than-significant levels. Implementing these mitigation measures also would ensure that implementing the proposed project would not contribute to cumulative impacts on important cultural

resources in the project region. These measures are fairly standard to ensure compliance with the National Historic Preservation Act, and it is assumed that similar measures would be applied to related projects as appropriate.

Less important resources (e.g., archeological isolates, degraded structures) not eligible for listing in the California Register of Historical Resources would be removed during project construction. However, these less important sites are relatively common in the region, and the cumulative loss from this project and other projects would not adversely affect the ability of archeologists and historians to study and collect data regarding the history and prehistory of the area.

Because important sites in the project area are protected and the loss of other sites is not significant, implementing the proposed project would not contribute to a significant cumulative effect on cultural resources.

5.3.16 AESTHETIC RESOURCES

Past development along the I-5, I-205, and SR 120 corridors has increasingly changed the visual character along these corridors from agricultural and open space uses to urban uses, thus altering and limiting the views available to motorists on these roadways. This trend would continue as future projects are implemented in the region, and the proposed project would contribute to this cumulative change in views. Concurrent with the conversion from agricultural to urban uses is increases in the level of nighttime light and glare, which obscure views of the night sky. Implementation of the proposed project and related projects would contribute to this effect in the City. Implementation of the proposed project also would contribute to the ongoing intrusion of urban development into the Sacramento-San Joaquin River Delta, altering views from adjacent agricultural lands and open space areas. Although many of the project elements would be screened by levees, landscaping, and habitat restoration activities, homes on high-ground corridors, the top levels of buildings in the employment center, bridges, and an electrical transmission line would be visible from various locations.

As development proceeds in the project region, there would continue to be substantial changes in visual conditions as agricultural lands and open space are replaced by urban development. Increased urban development would also lead to increased nighttime light and glare in the region and more limited views of the night sky. The cumulative effect of these changes on aesthetic resources from past and planned future projects, as well as the contribution from the proposed project, is considered significant. Although these cumulative impacts can be minimized to a degree through vegetative and topographic screening of structures, use of outdoor lighting that limits glare, appropriate building design, and other measures, the impact cannot be fully mitigated. Therefore, the cumulative change of agricultural and open space views in the project region to urban land uses and the associated increase in nighttime light and glare are considered significant and unavoidable impacts.

5.3.17 INDIRECT CUMULATIVE IMPACTS

The proposed River Islands project would not be able to be constructed/occupied without two of the related projects that would provide services to existing development, River Islands, and other projects:

the WRP #1 Phase 1 Expansion and the Well #21-23 Development Project. While not directly causing any cumulative impacts associated with implementation of these projects, the River Islands project would indirectly contribute to the cumulative impacts of these projects because they would be needed to serve River Islands.

The expansion of WRP #1 and development of Wells #21-23 were evaluated in the Master Plan and Master Plan EIR. The Master Plan EIR indicated that expansion of WRP #1, along with the development of two other WRPs planned for in the Master Plan, and the planned disposal of treated wastewater from all three of these WRPs to the San Joaquin River, would result in significant and unavoidable cumulative odor, surface water quality, and fisheries impacts. The Master Plan EIR further indicated that development of the planned wells would result in less-than-significant cumulative groundwater impacts. Because the proposed project would not be able to be constructed/occupied without expansion of WRP #1 and construction of the new City wells, the proposed project would indirectly contribute to the significant and less-than-significant impacts identified above (i.e., indirect cumulative impacts). Below is a summary of each of these cumulative impacts from the Master Plan.

AIR QUALITY (ODORS)

Expansion of WRP #1 would contribute to significant and unavoidable cumulative odor impacts associated with new storage and treatment processes. These impacts would occur at the existing and future land uses adjacent to WRP #1.

SURFACE WATER QUALITY

Expansion of WRP #1 would contribute to minor and potentially immeasurable (downstream) amounts of mercury and BOD₅ entering the San Joaquin River if/when discharges of tertiary treated wastewater to the river occur. The inclusion of mercury in discharges would contribute to cumulative violations of mercury standards, and the BOD₅ could contribute to low dissolved oxygen (DO) levels in the Stockton Ship Channel. In both cases, TMDL programs are in the process of being established, and if effective, would eliminate violations of water quality standards for these constituents. If the TMDLs are not effective, the contribution of mercury and BOD₅ would represent a potentially significant cumulative impact on surface water quality that would be unavoidable.

FISHERIES

Expansion of WRP #1 would generate minor and less-than-significant surface water quality impacts on the San Joaquin River and the Sacramento-San Joaquin River Delta once it discharges treated wastewater to the San Joaquin River. These impacts, as they relate to fisheries, would include a small reduction in downstream DO levels. TMDL programs in the process of being established, if effective, would eliminate violations of water quality standards for DO and other 303(d)-listed constituents. If the TMDLs are not effective, the contribution to the cumulative reductions in DO would represent a potentially significant cumulative impact on fisheries that would then be unavoidable.

GROUNDWATER

Development of Wells #21-23 would contribute to the migration of the 500-mg/l salinity intrusion front eastward over time associated with increased groundwater pumping in the Delta. It is likely that existing wells located between the existing and future 2030 500-mg/l TDS contour would either need to cease operation or require the addition of treatment facilities during the time horizon of the Master Plan to comply with safe drinking water standards. However, the Master Plan requires the City to provide municipal water to any users within the City limits currently reliant on well water should closure of said wells resulting from salinity intrusion be required. Hence, a less-than-significant impact would occur.

6 GROWTH-INDUCING IMPACTS

6 GROWTH-INDUCING IMPACTS

6.1 INTRODUCTION

The State CEQA Guidelines (§15126.2[d]) require that an environmental impact report (EIR) evaluate the growth-inducing impacts of a proposed project as follows:

Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also, discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if a project involved construction of new housing. Indirect growth inducement would result, for instance, if implementing a project resulted in substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises); or a construction effort with substantial short-term employment opportunities that indirectly stimulate the need for additional housing and services to support the new employment demand; and/or removal of an obstacle to additional growth and development, such as removing a constraint on a required public utility or service (e.g., construction of a major sewer line through an undeveloped area).

Growth inducement itself is not an environmental effect but may lead to environmental effects. Such environmental effects may include increased demand on other community and public services and infrastructure, increased traffic and noise, degradation of air or water quality, degradation or loss of plant or animal habitats, or conversion of agricultural and open space land to urban uses.

6.2 SUMMARY OF WEST LATHROP SPECIFIC PLAN EIR ANALYSIS OF GROWTH-INDUCING IMPACTS

The “Growth-Inducing Impact” section of the West Lathrop Specific Plan EIR (WLSP EIR) states that implementation of the WLSP would “encourage, indirectly, a substantial increase in population and economic activity, and all of the public and private facilities and services needed to serve that population and activity.” Impacts associated with these growth elements were incorporated into the overall impact analysis developed for each environmental issue area in the EIR.

It was also noted in the “Growth-Inducing Impacts” section that although the WLSP seeks to confine urban expansion within the boundaries of the plan area, there is a risk that planned development could

result in increased pressure for further urban expansion into surrounding agricultural lands. Roberts Island, located north and west of the WLSP area, and lands in the City of Tracy's planning area west of Paradise Cut and north of Interstate 205 (I-205) were identified as areas where urban expansion pressures might occur. However, the EIR states that Roberts Island is designated as an Agricultural Preserve by San Joaquin County and is in the Primary Zone of jurisdiction of the Delta Protection Commission. It was expected that San Joaquin County would implement Delta Protection Commission policies to retain the integrity of Roberts Island. Lands in the Tracy planning area west of Paradise Cut and north of I-205 were considered in the WLSP EIR to be more likely areas for urban expansion. However, it was noted that the Tracy General Plan and the San Joaquin County General Plan call for retention of most of this area in agricultural use. Urban expansion pressures were also considered limited in both areas because they are located in the 100-year floodplain.

6.3 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

The proposed developed portion of the River Islands project, the River Islands Development Area, would be located on Stewart Tract, and open space areas would be included in Paradise Cut. These areas were planned for development (Stewart Tract) and open space uses (Paradise Cut) under the City of Lathrop General Plan (General Plan) and the WLSP adopted by the City in 1996. However, the River Islands project differs substantially from the entertainment-oriented, theme park-centered development envisioned in the WLSP. The proposed project is a mixed-use residential/commercial development with no theme parks, no resort hotels, approximately 2,500 more housing units than previously approved, almost 12,000 more residents, and a 300-acre business park/employment center.

Although these are substantive differences from the WLSP, many aspects of the River Islands project are consistent with the WLSP and other City planning documents. The proposed project would develop portions of the areawide road network (Golden Valley Parkway, Gold Rush Boulevard/River Islands Parkway, I-205 interchange) consistent with that planned for in the WLSP and would pay the required WLSP transportation impact fees. The proposed project includes a drainage system consistent with the WLSP and enhances the drainage system with water treatment wetlands around the central lake. Furthermore, the project would initially convey its wastewater to Water Recycling Plant (WRP) #1 for treatment and would convey the treated wastewater back to the project site for onsite land disposal, consistent with the Lathrop Water, Wastewater, and Recycled Water Master Plan (Master Plan). Later project phases also would be consistent with the Master Plan, with wastewater treated at the proposed WRP #3, or an expanded WRP #1, and land disposal or river discharge used to dispose of recycled water. Finally, mitigation in section 4.14, "Terrestrial Biology," of this SEIR requires that the project applicant pay all applicable San Joaquin County Multi-Species Habitat and Open Space Conservation Plan (SJMSCP) fees as development proceeds. Therefore, the proposed project would be consistent with all applicable land use, infrastructure, fee, and environmental plans. In this respect, the proposed project would not be growth inducing because it would not result in urban development in an area not already planned for such development.

Nevertheless, the proposed project would contribute to the development of a new roadway network and drainage system consistent with the WLSP. The proposed project also would extend wastewater pipelines from the project site to WRP #1 and recycled water pipelines from WRP #1 back to the project

site consistent with the “contingency pipelines” planned for in the Master Plan. During Phase 1 of the proposed project, the applicant would contribute to the development of water well #21 and the WRP #1 Phase 1 Expansion Project by paying its fair share of these utility infrastructure improvements designed to serve City-approved and planned development. When needed during later project development, the project applicant also would pay its fair share for additional well development and WRP construction or expansion consistent with the Master Plan. The above would represent both an extension of roadways and municipal storm drain and utility infrastructure to an area not currently served by such systems and a contribution to the creation of additional potable water and wastewater treatment capacity planned to support development in the City. As the first development project on Stewart Tract under the WLSP, it would remove obstacles to further growth on the Remaining Stewart Tract (Exhibit 3-5). In this respect, the proposed project would be growth inducing. In addition, extension of Golden Valley Parkway south to I-205 could increase growth pressures along this corridor south of the project site.

The proposed project would involve a substantial construction effort over a 20-year period that during peak periods would bring up to 300 construction workers to the project site on a daily basis. Because construction workers typically do not change where they live each time they are assigned to a new construction site, it is not anticipated that there would be any substantial relocation of construction workers to the City of Lathrop associated with the proposed project. In addition, 236 residents in the City of Lathrop and 15,301 residents in San Joaquin County are employed in the construction industry (U.S. Census 2002). This existing number of residents in the City and County who are employed in the construction industry would likely be sufficient to meet the demand for construction workers that would be generated by the proposed project. Therefore, no substantial increase in demand for housing or goods and services would be created by project construction workers, and thus no growth inducement associated with these workers would occur.

The River Islands project would include the development of 11,000 residential units with an estimated population of 31,680. Although the project includes the provision of commercial services in the Town Center and office/retail center and anticipates commercial services to be located in the Employment Center, onsite services would meet only some of the needs of the project population. The additional population associated with the proposed project would spur an increase in demand for goods and services in the City and region, which could potentially result in additional development to satisfy this demand. In this respect, the proposed project would be growth inducing.

Schools and fire stations would be developed onsite as part of the proposed project. Except during the very early stages of project development, all students associated with the proposed project would be served by onsite schools. The River Islands school system is not expected to serve students from offsite areas. Similarly, fire stations would be constructed to serve the project site and would provide service to offsite areas only when mutual aid agreements with other stations or agencies are exercised. Police, animal control; and other City services would be expanded only as necessary to meet project demand. Therefore, with respect to public services, the proposed project would not facilitate additional development because the proposed project would not create additional public service capacity in the City.

Jobs generated by the proposed project would exceed employable residents by approximately 5,000 jobs. Therefore, the proposed project could generate additional housing demand in the City and facilitate additional housing development. However, as discussed in section 4.3, “Population, Employment, and Housing,” San Joaquin County is considered jobs-poor and housing-rich, with at least 45,000 County residents currently commuting to jobs outside the County. By 2025, the number of out-commuters is expected to exceed 137,000. Given these conditions, jobs generated by the proposed project are expected to be filled in large part by the existing resident labor pool in the region. Therefore, any potential increases in housing demand in the City and the County attributable to jobs generated from the proposed project would be minimal, and the project would not be growth inducing in this respect.

Overall, the River Islands project would be growth inducing because it would extend roadway and utility infrastructure to an area not currently served by such infrastructure (Stewart Tract) and would extend/improve roadway access between the project site and I-205 via Golden Valley Parkway and a new interchange on I-205, thereby removing obstacles to growth. Increased population associated with the proposed project would increase demand for goods and services, which would foster population and economic growth in the City of Lathrop or nearby communities. Further, implementing the River Islands project would effectively result in development of a population and employment base that is the size of a large town/small city. Similar to the description in the WLSP EIR, it can be expected that a successful River Islands project would place pressure on adjacent areas to seek development entitlements. It would be speculative, however, to assume that these areas, designated for retention for agriculture in the San Joaquin County and Tracy General Plans, would in fact develop with urban uses. Much of the growth the project would induce has been evaluated and provided for in the General Plan, WLSP, WLSP EIR, and the Master Plan.

7 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

7 SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

7.1 INTRODUCTION

Section 15126.2(b) of the California Environmental Quality Act Guidelines (State CEQA Guidelines) requires environmental impact reports (EIRs) to include a discussion of any significant environmental impacts that cannot be avoided if the project is implemented. Chapter 4 of this subsequent EIR (SEIR) provides a detailed analysis of all potential significant environmental impacts of the River Islands project, feasible mitigation measures that could reduce or avoid the project's significant impacts, and whether these mitigation measures would reduce these impacts to less-than-significant levels. Chapter 5 identifies the significant cumulative impacts of the project. If a specific impact cannot be reduced to a less-than-significant level, it is considered a significant and unavoidable adverse impact.

7.2 SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

The proposed River Islands project would result in significant and unavoidable adverse impacts in five environmental issue areas, as described below.

7.2.1 TRAFFIC

As discussed in section 4.4, the project would generate a substantial amount of traffic. At the same time, congestion is increasing on regional roadways. The traffic analysis in section 4.4 evaluates both project and cumulative plus project traffic impacts. Several regional funding programs are in place to improve regional roadways and freeways. In spite of this, several significant and unavoidable impacts would occur. As described under Impacts 4.4-c and 4.4-l, existing plus project traffic and cumulative ("base case") plus project traffic would result in significant impacts on Interstate 205 (I-205) in both directions in the project vicinity. This impact would be most pronounced in Phase 1a and Phase 1, after which California Department of Transportation freeway improvements would assist in reducing impacts. However, impacts would remain significant and unavoidable after full buildout (2025). Similarly, both existing and cumulative plus project traffic (Impacts 4.4-d and 4.4-m) would result in unavoidable impacts on freeway ramp-freeway mainline merge/diverge operations on I-205.

7.2.2 AIR QUALITY

As indicated in section 4.5 (Impact 4.5-d), implementation of the proposed project would result in a potentially significant increase in mobile source toxic air contaminants (TACs), associated primarily with diesel trucks generated by commercial and industrial-related land uses. Mobile source TACs are a relatively new concern for the California Air Resources Board (ARB), so specific guidelines and practices regarding assessing impacts and providing mitigation are not available. It is also unclear what effects new ARB diesel engine emission standards and diesel particulate matter regulations would have on the level of impact and the necessity for, or type of, mitigation. Therefore, the specific conditions of mobile source TAC impacts cannot be determined at this time. The only available mitigation of completely separating emission sources (diesel vehicles) from all sensitive receptors is not feasible.

Therefore, no mitigation is available for Impact 4.5-d to reduce the impact to a less-than-significant level. Thus, implementing the proposed project would result in a significant and unavoidable adverse impact with respect to mobile source TACs.

As indicated in section 4.5 (Impact 4.5-f), implementation of the proposed project would result in a significant increase in long-term regional emissions, associated primarily with mobile sources, that would exceed the San Joaquin Valley Air Pollution Control District's recommended significance threshold of 10 tons per year for reactive organic gases (ROG) and oxides of nitrogen (NO_x). Mitigation Measure 4.5-f is identified to reduce this impact to the greatest extent feasible. It requires the provision of transit-enhancing infrastructure (e.g., bus stops, route signs), park-and-ride lots, telecommuting centers, pedestrian and bicycle infrastructure, and use of energy reduction measures to minimize stationary source emissions. However, even with implementation of this mitigation, implementing the proposed project would result in long-term regional emissions that would exceed the San Joaquin Valley Air Pollution Control District's recommended significance threshold of 10 tons per year for ROG and NO_x. Thus, implementing the proposed project would result in a significant and unavoidable adverse impact with respect to long-term regional emissions.

7.2.3 NOISE

As indicated in section 4.6 (Impact 4.6-d), implementation of the proposed project would result in significant impacts on some noise-sensitive receptors associated with noise generated by I-5 and other sources exceeding the City's "normally acceptable" land use compatibility noise standards. Mitigation Measure 4.6-d is identified to reduce this impact to the greatest extent feasible. It requires the City to evaluate projects during the permitting process for compliance with the City's Noise Ordinance and policies in the Lathrop General Plan. If projects would exceed the standards in the ordinance, mitigation measures such as use of dual-pane windows, exterior wall insulation, and other noise-reducing materials would be required to reduce interior noise exposure. Landscaping, sound walls, building orientation/location, and other measures would be used to reduce exterior noise levels. Implementation of these mitigation measures would reduce impacts associated with interior noise levels to less-than-significant levels; however, exterior noise levels would continue to exceed City noise standards in some areas. Site-specific studies would be required to determine precise locations where standards would be exceeded. As a result, impacts associated with exterior noise level compatibility with proposed land uses are significant and unavoidable.

7.2.4 AGRICULTURAL RESOURCES

As indicated in section 4.13 (Impact 4.13-a), implementation of the proposed project would permanently convert 4,115 gross acres (3,620 net acres) of designated Important Farmland (identified by the Farmland Mapping and Monitoring Program of the California Department of Conservation as Prime Farmland or Farmland of Statewide Importance) to a nonagricultural use. Mitigation Measure 4.13-a is identified to reduce this impact. It requires participation in the San Joaquin Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), which would provide funds to purchase conservation easements on agricultural and wildlife habitat lands in the project vicinity. Easements are purchased for a variety of land types benefitting wildlife, including a combination of habitat, open space, and agricultural lands;

therefore, the overall compensation for the loss of agricultural land is less than a 1:1 ratio. Even if the ratio exceeded 1:1, 3,620 acres of farmland would still be lost. Full compensation for the loss of Important Farmland would not be achieved; therefore, the impact is considered significant and unavoidable.

As indicated in section 4.13 (Impact 4.13-b), implementation of the proposed project would result in the cancellation of Williamson Act contracts for up to 1,770 total acres of agricultural land, which is considered a significant impact. Mitigation Measure 4.13-b is identified to reduce this impact. It requires agricultural operations to continue on Williamson Act lands as long as possible until development actually occurs on the land. Like Mitigation Measure 4.13-a, mentioned above, this mitigation measure also requires participation in the SJMSCP, which would contribute to the preservation of agricultural lands under Williamson Act contracts. Implementing this mitigation would reduce overall impacts associated with Williamson Act contract cancellations, but not sufficiently to reduce the impact to a less-than-significant level. This impact is therefore considered significant and unavoidable. It is noted that this area has been planned for development for several years, as reflected in both the WLSP and the Lathrop General Plan. Development would require conversion of agricultural land and the termination of Williamson Act contracts.

7.2.5 CUMULATIVE IMPACTS

As indicated in Chapter 5, “Cumulative Impacts,” implementing the River Islands project would contribute to significant cumulative impacts related to traffic; air quality; noise; geology, soils, and mineral resources; public services; public utilities; agricultural resources; fisheries; and odor; it also would potentially contribute to significant cumulative surface water quality impacts.¹ Because these impacts are a product of cumulative growth, and because no feasible mitigation is available to reduce these impacts to less-than-significant levels, these significant impacts cannot be avoided and thus represent significant and unavoidable adverse impacts.

¹ The potentially significant and unavoidable cumulative surface water quality impact would occur only if the incremental increase in recycled water generated during Phase 2 of the proposed project was to be discharged to the San Joaquin River rather than disposed of on land. Even if river discharge did occur, a significant and unavoidable adverse surface water quality impact would occur only if the total maximum daily loads currently being reviewed by the regulatory agencies for dissolved oxygen (DO) are implemented and are ultimately not effective in reducing cumulative DO levels in portions of the San Joaquin River (e.g., the Stockton Ship Channel) to acceptable levels.

8 ALTERNATIVES ANALYSIS

8 ALTERNATIVES ANALYSIS

8.1 INTRODUCTION

The guiding principles for the selection of alternatives for analysis in this SEIR are provided by the California Environmental Quality Act Guidelines (State CEQA Guidelines) (§15126.6), which indicate that the alternatives analysis must:

- ▶ describe a range of reasonable alternatives to the project that could feasibly attain most of the basic objectives of the project;
- ▶ consider alternatives that could reduce or eliminate any significant environmental impacts of the proposed project, including alternatives that may be more costly or could otherwise impede the project's objectives; and
- ▶ evaluate the comparative merits of the alternatives.

The focus and definition of the alternatives evaluated in this SEIR are governed by the “rule of reason” in accordance with §15126.6(f) of the State CEQA Guidelines. That is, the range of alternatives presented in this SEIR must permit a reasoned choice by the City of Lathrop's (City's) decision makers. The State CEQA Guidelines (§15126.6) require that an EIR evaluate a “No Project Alternative,” evaluate a reasonable range of alternatives to the project, identify alternatives that were initially considered but then rejected from further evaluation, and identify the “environmentally superior alternative.”

The State CEQA Guidelines (§15126.6[d]) require an evaluation of alternatives in this SEIR, but permit the evaluation to be conducted in less detail than is done for the proposed project. Consistent with §15126.6(d), sufficient information is provided in this SEIR about each alternative to allow for a meaningful evaluation, analysis, and comparison of the alternatives with the proposed project.

The following discussion is intended to inform the public and decision-makers of feasible alternatives to the proposed project that could be implemented to attain the basic project objectives while substantially reducing the potentially significant effects of the project.

BASIC PROJECT OBJECTIVES

As described above, one of the key factors in considering alternatives is whether they can feasibly attain most of the basic objectives of the project. Section 3.3 of this SEIR describes the basic project objectives. In summary, the objectives include:

- ▶ providing substantial employment opportunities to Lathrop;
- ▶ creating a community that is consistent with many of the goals of the Lathrop General Plan and the WLSP;

- ▶ incorporating water features, including recreation activities such as boating, into the overall development;
- ▶ Providing an integrated and harmonious mix of residential and visitor oriented land uses in West Lathrop that provide jobs, homes, and revenue-generating uses; and
- ▶ Retaining and enhancing habitat in West Lathrop, where feasible.

SIGNIFICANT EFFECTS OF THE PROPOSED PROJECT

Impacts associated with the proposed project are evaluated in Chapters 4 and 5 of this SEIR. Listed below in Table 8-1 are the 16 environmental issue areas evaluated in this SEIR. For each issue area, the table indicates whether the project would result in a less-than-significant impact, significant impact, or significant unavoidable impact prior to, and after mitigation. As shown in Table 8-1, the project would result in significant impacts prior to mitigation related to traffic; air quality; noise; geology, soils, and mineral resources; hydrology and water quality; hazardous materials and public health; public services; utilities; terrestrial biology, fisheries; cultural resources; and aesthetic resources. After mitigation significant impacts would still remain for traffic, air quality, noise, and agricultural resources (i.e., significant and unavoidable impacts).

Table 8-1 Summary of Project Impact Levels before and after Mitigation		
Environmental Topic	Before Mitigation	After Mitigation
Land use	Less than significant	Less than significant
Population, employment, and housing	Less than significant	Less than significant
Traffic	Significant	Significant (Unavoidable)
Air quality	Significant	Significant (Unavoidable)
Noise	Significant	Significant (Unavoidable)
Geology, soils, and mineral resources	Significant	Less than significant
Hydrology and water quality	Significant	Less than significant
Hazardous materials and public health	Significant	Less than significant
Public services	Significant	Less than significant
Public utilities	Significant	Less than significant
Recreation	Less than significant	Less than significant
Agricultural resources	Significant	Significant (Unavoidable)
Terrestrial biology	Significant	Less than significant
Fisheries	Significant	Less than significant
Cultural resources	Significant	Less than significant
Aesthetic resources	Significant	Less than significant

8.2 ALTERNATIVES CONSIDERED AND REMOVED FROM FURTHER CONSIDERATION

8.2.1 OFFSITE ALTERNATIVE

Offsite alternatives are usually considered in EIRs when one of the means to avoid or eliminate the significant impacts of a project is to develop it in a different available location. The 1995 West Lathrop Specific Plan (WLSP) EIR analyzed the possibility of alternative locations for the theme park centered development proposed for the project site. The WLSP EIR determined that while alternative locations outside the City of Lathrop potentially existed for the project, Stewart Tract best met the site selection criteria, which included environmental considerations. A total of 26 sites were considered in San Joaquin, Contra Costa, Solano, Alameda, and San Mateo counties. Each of the sites had physical, social/political, or economic constraints that made them infeasible. The River Islands development is different in several respects from the theme park proposed as a part of the WLSP and some location selection criteria for the project are also different. To be feasible, development on potential offsite locations must be able to attain the basic objectives of the River Islands project. In addition, offsite locations must be considered in light of the objectives of the original WLSP that are still applicable to River Islands.

To satisfy the River Islands project objectives a large undeveloped site in the City of Lathrop would be needed. The proposed project site represents the only available major undeveloped land area in Lathrop that is capable of providing the substantial job opportunities, mix of uses, and water oriented development that would attain the basic project objectives. The balance of the WLSP area is currently undergoing project-level planning for separate projects (e.g., Mossdale Landing, Lathrop Station, RiverWalk, FarmWorld). Therefore, alternative locations for the proposed project inside the City of Lathrop are not considered feasible. Further, while there are large, undeveloped tracts of land outside the City of Lathrop, development outside of the City's corporate boundaries would not attain basic objectives such as providing employment opportunities in Lathrop and creating a community consistent with many of the goals of the General Plan and WLSP.

In addition, there are no known sites of substantial size (the project site is nearly 5,000 acres and another site of several thousand acres would be needed to attain many of the project objectives) in the region upon which development would not result in similar impacts (traffic, air quality, noise, agriculture) as the proposed project. Undeveloped areas in the region are primarily used for agriculture, the region is experiencing substantial growth in traffic, and it is in nonattainment of air quality standards. Consequently, any major development in San Joaquin County would be expected to generate significant agricultural, traffic, and air quality impacts, and any development that adds significant levels of traffic to regional roadways would contribute to substantial noise levels. While the project site contains, or is adjacent to, sensitive biological, archaeological, historic, and aquatic resources (as discussed in Chapter 4 of this SEIR), the project site does not appear to be any more sensitive than the other agricultural parcels in the vicinity. It is not likely that any significant impacts of the project would be avoided or substantially lessened by the selection of an alternative site in the area. In addition, any alternative sites would likely be more distant than the proposed project from freeways and urban areas, requiring construction of additional utility and transportation infrastructure to serve the alternative site. Several of

the project's environmentally beneficial elements, such as habitat restoration on Paradise Cut, also might not be possible if the project is to be developed on an alternative site.

Given the above, there are no feasible sites that can meet the River Islands project objectives and the WLSP objectives and there are no known alternative sites that would reduce the significant impacts of the project. For this reason, an offsite alternative is not evaluated further in this SEIR.

8.2.2 ALTERNATIVES EVALUATED IN THE WLSP EIR

Two on-site alternatives (other than the "No Project" alternative) were evaluated in 1995 WLSP EIR. The first was a "Reducing the Area of Urban Expansion" Alternative where a 26% reduction of population growth would result from the elimination of 2,500 housing units and approximately 50% of the recreation-oriented commercial and open space uses in the WLSP area. This alternative would result in a more compact urban development concentrated in the south and eastern portion of the project site, with the balance of the project site remaining in agricultural uses. As described in Section VI of the WLSP EIR, such an alternative would reduce impacts on traffic, air quality, agriculture, habitat, and water use. The other alternative, "Enlarging the Area of Urban Expansion" Alternative, would expand the development area of the WLSP, but the land uses designated for the project site would be largely the same. The WLSP EIR found that this alternative would increase traffic, air quality impacts, water demands, and the amount of land converted from agricultural use. The proposed River Islands project differs in several respects from the theme park centered WLSP project and these two alternatives. Consequently, the use of these alternatives in this SEIR would not allow a true comparative evaluation of the merits of each alternative. These alternatives, therefore, are not evaluated further in this SEIR.

8.2.3 OTHER ALTERNATIVES

Other alternatives considered, but removed from further consideration, focused on alterations to specific project features. These are described below.

A modified flood control approach was considered consisting of leaving Paradise Cut in its current configuration to minimize earth moving activities and not lowering the bench near Paradise Weir to avoid disturbance of riparian brush rabbit habitat. This alternative was rejected from further consideration because it would allow postproject downstream flood elevations on the San Joaquin River to rise to unacceptable levels, potentially flooding downstream properties.

- ▶ Several existing sources for electricity and natural gas are available in the vicinity of the project site. Various alternative utility routes were examined based on the locations of the source lines and right-of-way options to the project site. All but the proposed routes were discounted either because the source line did not have sufficient capacity to support the proposed project or because there were increased environmental effects.
- ▶ Including no habitat restoration in Paradise Cut or on the outer levee faces was considered in order to minimize potential conflicts between riparian vegetation and high water flows during flood events. However, it was determined that habitat restoration would be necessary to minimize

and compensate for impacts to biological resources and would be valuable as a project amenity. Therefore, this alternative was not considered further.

- ▶ Lake management regimes that would not require pumping of water between the central lake and the surrounding waterways were evaluated to attempt to minimize potential fisheries, hydrology, and water quality impacts. However, it was determined that these management practices would result in unacceptable fluctuations in lake levels and would limit the capacity to maintain desired water quality within the lake. Several beneficial fisheries, hydrology, and water quality effects associated with the proposed project also would not occur.

8.3 DESCRIPTION AND ANALYSIS OF ALTERNATIVES

The following alternatives are evaluated in this section:

- ▶ No Project (No Development) Alternative,
- ▶ No Project (WLSP) Alternative, and
- ▶ Environmental Constraints (50% Development) Alternative.

Each alternative is described and a qualitative analysis is provided of the alternative for each environmental issue area evaluated in this SEIR. The analysis is comparative, identifying whether the alternative would result in a “greater,” “less,” or “similar” impact to the proposed project. This determination is made in brackets at the end of the discussion for each environmental issue analyzed.

8.3.1 NO PROJECT (NO DEVELOPMENT) ALTERNATIVE

Under this alternative, no actions would be taken at the project site. No development of the proposed project site would occur and existing agricultural use of the site would continue. However, the site has been approved for development in the City of Lathrop General Plan (General Plan) and the WLSP; therefore, it is expected that new development applications would be submitted for the property some time in the future.

The project site is located in an area of the City covered by the WLSP. Entitlements are actively being sought for development in the vicinity of the project site (e.g., Mossdale Landing, Lathrop Station). Infrastructure planning is also occurring for the area, in the Lathrop Water, Wastewater & Recycled Water Master Plan (Master Plan), WRP #1 Phase 1 Expansion Project, Master Drainage Plan for Mossdale Village, Golden Valley Parkway Precise Plan Line (PLL), and I-5/Louise Avenue Interchange PSR. The regional economic base will continue to expand as a result of these and other development projects in the region, and the associated growth in housing demand will increase the development pressure on the proposed project site. Therefore, it is unreasonable to assume that the site would remain in agricultural use on a long-term basis. It would be speculative to assume what type of development, other than the proposed project and the WLSP (evaluated below) would be planned in the future.

Consistent with CEQA requirements, this No Project (No Development) Alternative is evaluated in this SEIR. The No Project (No Development) Alternative would not meet any of the objectives of the

proposed project. This alternative also would not be consistent with the intent of the WLSP, which calls for development of the project site with theme park-related uses and commercial and residential uses, and would not be consistent with the utility plans for the area listed above, which assume buildout of the project site as described in the WLSP (Master Plan) or as described in this SEIR (Water Recycling Plant [WRP] #1 Phase 1 Expansion).

IMPACT ANALYSIS

Land Use

The proposed project includes amendments to the General Plan and the WLSP. These amendments would not be required under the No Project (No Development) Alternative and any potential inconsistencies between the proposed project and the General Plan and WLSP would not occur. However, no significant land use impacts were identified for the proposed project, so this alternative would not reduce or avoid any significant land use impacts associated with the project. [*Similar*]

Population, Employment, and Housing

The No Project (No Development) Alternative would not generate any new residents, jobs, or homes in the City of Lathrop. Hence there would be no potential for unplanned population growth, increased demand for new housing, or displacement of existing housing. In comparison, the proposed project would result in limited population growth associated with construction activities; population growth exceeding that anticipated in the General Plan, WLSP, and the Master Plan; increased housing demand due to project related jobs exceeding anticipated employable residents; and displacement of less than 10 farm related residences. No significant impacts related to population, employment, and housing were identified for the proposed project, so this alternative would not reduce or avoid any significant land use impacts associated with the project. However, impacts are still considered less because displacement of existing housing would not occur under this alternative. [*Less*]

Traffic

The No Project (No Development) Alternative would not include any new development and thus would not generate any traffic. No new traffic would be generated. By comparison, the proposed project would generate more than 13,700 peak-hour trips and would significantly affect several intersections, roadways, and freeways. After mitigation, significant and unavoidable impacts would still occur along I-205 and at freeway ramp merge/diverge points. Implementation of the No Project (No Development) Alternative would avoid the project's contribution to these impacts, although cumulative development also would result in these impacts. [*Less*]

Air Quality

The No Project (No Development) Alternative would not include any new development, and thus would not generate new construction or operations-related air emissions. By comparison, the proposed project would include new construction and operational activities resulting in significant and potentially

significant impacts before mitigation related to construction emissions, increases in mobile source toxic air contaminants (TACs), and long-term regional emissions. After mitigation, residual significant air quality impacts would remain related to mobile source TAC emissions and long-term regional emissions. Implementation of the No Project (No Development) Alternative would not result in these significant unavoidable air quality impacts; therefore, this alternative would result in less air quality impacts than the proposed project. [*Less*]

Noise

Under the No Project (No Development) Alternative, no new construction activities would occur, no new noise generating land uses or sensitive noise receptors would be developed, and no additional traffic would be generated. Therefore, there would be no increase in potential noise conflicts under this alternative. By comparison, the proposed project would include temporary noise generated by construction activities; development of various noise generating land uses; small, but imperceptible (less than 1.4 dBA) increases in traffic noise; and development of sensitive receptors that would be exposed to existing or project generated noise levels exceeding City standards. Several of these actions would result in significant noise impacts before mitigation. After mitigation, residual significant noise impacts would remain related to incompatibility between some proposed project land uses and projected on-site exterior noise levels. Implementation of the No Project (No Development) Alternative would not result in this significant unavoidable noise impact; therefore, this alternative would result in less noise impacts than the proposed project. [*Less*]

Geology, Soils, and Mineral Resources

The No Project (No Development) Alternative would not include any new construction activities and existing buildings, levees, and other facilities would remain in their current state on the project site. Therefore, there would be no construction-related erosion potential and no potential increase in risk of exposure to injury or property damage due to a seismic event. However, it is unlikely that the existing levees surrounding the project site are designed according to the latest seismic requirements since they were built as part of a U.S. Army Corps of Engineers flood control project in the 1950s. As such, the No Project (No Development) Alternative may result in existing on-site residents and workers being exposed to greater seismic hazards than residents and workers associated with the proposed project (where levees would be improved). Access to mineable sand deposits on the project site would be preserved temporarily under the No Project (No Development) Alternative since no development would occur over the approximately 10-acres on the project site containing these deposits.

By comparison, the proposed project would result in significant impacts related to seismic hazards, such as ground shaking, liquefaction, and lateral spreading; shrink-swell soils; and corrosive soils. However, all impacts would be reduced to less-than-significant levels after mitigation. Because the proposed project would not result in any significant impacts related to geology, soils, and mineral resources after mitigation, and the No Project (No Development) Alternative may result in greater seismic hazards because levee improvements would not occur, this alternative is considered to have greater impacts than the proposed project. [*Greater*]

Hydrology and Water Quality

Under the No Project (No Development) Alternative no new construction would occur; therefore, there would be no potential construction related releases of sediment and contaminants into surface waters and groundwater. In-water work associated with maintenance dredging of backbays and construction of bridges also would not occur and there would be no directional drilling of utilities under the San Joaquin River. Because the project site would not be developed under this alternative, there would not be a need to replace the existing storm drain system with the proposed system of parks, paseos, water treatment wetlands, and the Central Lake. Agricultural diversions and discharges would continue under the current timing and volume regime. Because there would be no levee improvements, the project site would remain within the 100-year floodplain. However, modifications to Paradise Cut to compensate for the effects of removing the River Islands Development Area (RID Area) from the 100-year floodplain would not be needed and flood stage elevations in downstream areas would not change. Because no new homes, docks, or boat access facilities would be built, boat traffic on the surrounding waterways (which can affect water quality) would not change. Demands on domestic water supplies (groundwater and surface water) would remain the same because there would be no new residents on the project site.

Under the proposed project potentially significant and significant impacts would occur related to releases of sediment and contaminants to groundwater and surface water during construction, earth moving and construction of project features (e.g. bridges) in waterways, potential releases of drilling slurry into the San Joaquin River during installation of a natural gas pipeline under the river, maintenance dredging of backbays, and increased boat traffic affecting water quality in surrounding waterways. These impacts would be reduced to less-than-significant levels after mitigation.

Impacts under the proposed project related to Delta hydrology and water quality from stormwater discharges to the Delta were considered less than significant because overall discharge volumes would be reduced, annual loading in post-project discharges would be less for 12 of 18 water quality parameters, of the six parameters where annual loading would increase (nitrate, total copper, dissolved lead, total lead, total nickel, and total zinc) concentrations would remain well within the allowable limits, and the timing of discharges would be shifted to the winter and spring months when water quality and water volumes (dilution potential) in the Delta is higher. Increases in downstream flood elevations resulting from the proposed project were also considered less than significant because they would be small (fractions of a foot), infrequent (only occurring at approximately the 1-in-100 Annual Exceedence Probability (AEP) flood event or greater) and would not increase modeled incidents of levee failures. Other less-than-significant impacts include effects on non-flood hydrology in surrounding waterways, groundwater quality and supply, and water supplies for other users.

Two beneficial effects were also identified for the proposed project; reduced diversions from Old River to manage Central Lake levels compared to current agricultural diversions, and increased flood protection for the RID Area resulting from levee improvements.

Because the proposed project would not result in any significant impacts related to hydrology and water quality after mitigation, and beneficial impacts associated with the proposed project would not occur

under the No Project (No Development) Alternative, this alternative is considered to have greater impacts than the proposed project. [*Greater*]

Hazards and Hazardous Materials

Under The No Project (No Development) Alternative no new development would occur; therefore, no new facilities that use hazardous materials (e.g., dry cleaners, gas stations) would be located on the project site, and no new residents, workers, or visitors would have the potential be exposed to existing or new sources of hazardous materials on the site. The use of hazardous substances (e.g. herbicides and pesticides) by the existing agricultural operations would continue; however, it is assumed that during the use of these materials existing application, storage, and disposal regulations would continue to be followed. Because no additional wastewater would be generated under the No Project (No Development) Alternative it is assumed that no recycled water would be applied on the project site; although the City would possibly consider the project site for land disposal of recycled water generated by other development in the City. If this were to occur, recycled water applications on the project site would need to comply with all applicable local, state, and federal regulations which would prevent any potential conflicts with public health.

In comparison, the proposed project would result in increased storage, use, and transport of hazardous materials during construction and operation of project facilities. There would be increased potential for construction workers, residents, and visitors to be exposed to hazardous materials at existing contaminated areas on the project site. There is also potential for potential public health impacts through the use of recycled water to irrigate public landscaped areas. However, all these effects are considered less than significant either before or after mitigation through adherence with applicable regulations and appropriate testing and clean-up of potentially contaminated sites. Because, no significant impacts related to hazardous materials and public health were identified for the proposed project, the No Project (No Development) Alternative would not reduce or avoid any significant impacts related to this issue area. However, because there is less overall opportunities for workers and residents to be exposed to hazardous materials under the No Project (No Development) Alternative, impacts are considered slightly less than those associated with the proposed project. [*Less*]

Public Services

The No Project (No Development) Alternative would not include any new development. Therefore, this alternative would not generate increased demand for fire, police, school or solid waste disposal services; and would not potentially obstruct access by emergency vehicles due to construction activities. By contrast, the proposed project would include 11,000 new dwelling units, generating an estimated 31,680 residents. This would create significant demands for fire, police, and school services and facilities; create demand for water related emergency services because of the water elements (central lake, docks, homes adjacent to waterways) associated with the proposed project; and potentially result in significant roadway obstructions to emergency vehicles during construction. Increased demand for solid waste disposal services was not considered significant because the receiving landfill has ample capacity to support the project. The significant public services impacts associated with the proposed project would be reduced to less-than-significant levels through implementation of recommended mitigation measures.

Because the proposed project would not result in any significant public services impacts after mitigation, the No Project (No Development) Alternative would not reduce or avoid any significant impacts related to this issue. However, the proposed project would create an incremental increase in service demand that would not occur under the No Project (No Development) Alternative. [*Less*]

Public Utilities

Under the No Project (No Development) Alternative, no new development would be constructed or operated at the project site. Therefore, there would be no additional demand for water, wastewater treatment, recycled water disposal, stormwater conveyance, electricity, or natural gas; and no need for new facilities and infrastructure to support additional demand. By comparison, the proposed project would create significant demand for potable water, wastewater treatment capacity, and during Phase 2 significant demand for recycled water storage and disposal. All of these impacts would be reduced to less-than-significant levels with mitigation. Several utility impacts would be less than significant prior to mitigation; recycled water storage and disposal during Phases 1a and 1, stormwater/surface runoff management, and demand for electricity and natural gas. In addition, the proposed project would contribute to the generation of less-than-significant environmental impacts after mitigation associated with the development of planned new City wells (Wells #21-23 and Emergency Wells #1 and #2) and the expansion of WRP #1 and construction of WRPs #2 and #3. The expansion and construction of the WRPs would also result in significant unavoidable odors impacts and significant unavoidable cumulative water quality and fisheries impacts. However, many of the facility expansion/construction activities which would generate these impacts would occur regardless of whether or not the River Islands project is developed since they also support other planned development in the City.

Because the proposed project would not result in direct residual significant utilities impacts after mitigation, and the significant impacts associated with expansion and construction of the WRPs would likely occur regardless of whether the River Islands project is developed, the No Project (No Development) Alternative would not avoid any such impacts. However, this alternative would substantially reduce the demand for potable water, wastewater treatment, and recycled water storage and disposal capacity in the City; therefore, overall utilities impacts associated with this alternative are considered less than under the proposed project. [*Less*]

Recreation

The No Project (No Development) Alternative would not include any new development. Therefore, this alternative would not generate increased demand for recreational facilities, reduce availability of any existing recreational opportunities, or create new recreation facilities/opportunities in the City. By contrast, the proposed project would include 11,000 new dwelling units, generating an estimated 31,680 residents and associated demand for recreational facilities. However, the proposed project also includes more than 260 acres of parkland, boat launching facilities, increased boating opportunities due to the creation of the central lake and the widening and deepening of Paradise Cut, and an open space and trail system. It is also assumed that various municipal and commercial recreational facilities would be developed in the Town Center and other portions of the project site.

The proposed project would create parks and other recreational opportunities/facilities in excess of anticipated demand; therefore, it would have a beneficial impact on recreation in Lathrop considering that there is a deficit of park acreage in the City relative to General Plan standards. Some recreational boating opportunities (water skiing, wake boarding) would be limited in Old River and the San Joaquin River adjacent to the proposed project due to the creation of no wake zones/speed restricted areas to protect project docks. However, the increased boater access provided by project boat launch facilities and the creation of the Central Lake and deepening and widening of Paradise Cut reduce this impact to less-than-significant levels. Because the proposed project would not result in any significant impacts related to recreation, and beneficial impacts associated with the proposed project would not occur under the No Project (No Development) Alternative, this alternative is considered to have greater impacts than the proposed project. [*Greater*]

Agricultural Resources

Under the No Project (No Development) Alternative agricultural operations would continue on the project site with no loss of important farmland, no Williamson Act Cancellations, and no opportunities for conflicts between new development and agricultural operations. By comparison, the proposed project would result in significant or potentially significant impacts related to each of these three issues. Impacts related to conflicts between development and adjacent agricultural operations would be reduced to less-than-significant levels with mitigation. However, impacts related to the loss of important farmland and cancellations of Williamson Act contracts would remain significant after mitigation. Implementation of the No Project (No Development) Alternative would not result in these significant unavoidable impacts; therefore, this alternative would result in less impacts to agricultural resources than the proposed project. Some notices of nonrenewal of Williamson Act lands have already been filed, indicating that these properties will no longer have the tax reduction advantages afforded by the Williamson Act.¹ This may place economic pressure on the property owner to develop the site in the future. [*Less*]

Terrestrial Biology

The No Project (No Development) Alternative would not include any development of the project site or the construction of off-site facilities, and would thus not disturb any existing onsite sensitive species or habitat. The project site would be retained in its existing agricultural open space use and would continue to provide the same type, extent, and quality of habitat. By comparison, the proposed project would develop the RID Area with urban uses, resulting in significant and potentially significant impacts on sensitive and special-status plant, invertebrate, and animal species, and waters of the United States. However, these impacts would all be reduced to less-than-significant levels after mitigation.

Because the proposed project would not result in any significant terrestrial biology impacts after mitigation, the No Project (No Development) Alternative would not avoid any significant impacts of the proposed project. However, the No Project (No Development) Alternative would retain, at least for the time being, farmland, wetlands, and other habitats currently used, or potentially used, by sensitive species, which would be eliminated under the proposed project. [*Less*]

¹ Once a Notice of Nonrenewal is filed, Williamson Act contracts are terminated within 10 years.

Fisheries

Under the No Project (No Development) Alternative no new construction would occur; therefore, there would be no potential construction related releases of sediment and contaminants into surface waters. In-water work associated with levee breaching, maintenance dredging of backbays, and construction of bridges and docks also would not occur and there would be no directional drilling of utilities under the San Joaquin River. Because the site would not be developed under this alternative, there would not be a need to replace the existing storm drain system with the proposed system of parks, paseos, water treatment wetlands, and the Central Lake. There would be no increased potential for exotic fish species to be introduced into the Delta because the Central Lake would not be constructed and stocked with fish. Agricultural diversions and discharges would continue under the current timing and volume regime using the same existing intakes. Modifications to Paradise Cut to compensate for the effects of removing the RID Area from the 100-year floodplain would not be needed and flood flow and habitat changes in Paradise Cut would not occur. Demands surface water supplies for domestic use would remain the same because there would be no new residents on the project site.

Under the proposed project potentially significant and significant fisheries impacts would occur related to releases of sediment and contaminants during levee breaching, in-water work during construction of bridges, potential releases of drilling slurry into the San Joaquin River during installation of a natural gas pipeline under the river, and maintenance dredging of backbays. These impacts would be reduced to less-than-significant levels after mitigation.

Fisheries impacts related to pumping water in and out of the Central Lake were considered beneficial since under the proposed project less water would be pumped into the Central Lake than currently pumped into the RID Area for agricultural production; water would be diverted into the Central Lake when fewer special-status fish species may be present in the surrounding rivers; existing non-screened agricultural intakes would be replaced with screened intakes; and the water quality of discharges to Paradise Cut would be higher under the proposed project relative to existing agricultural discharges. Proposed modifications to Paradise Cut were also considered beneficial as they could improve fisheries habitat conditions in the Cut.

Less-than-significant fisheries impacts identified for the proposed project include releases of construction sediment in the RID Area, dock construction, habitat modifications associated with in-water project features, effects of altered hydrology resulting from water discharges and modifications to Paradise Cut, potential introductions of exotic fish species to the Delta, and increased use of surface water for domestic consumption.

Because the proposed project would not result in any significant fisheries impacts after mitigation, and beneficial impacts associated with the proposed project would not occur under the No Project (No Development) Alternative, this alternative is considered to have greater impacts than the proposed project. [*Greater*]

Cultural Resources

The No Project (No Development) Alternative would not require any construction activities, thereby avoiding impacts related to the disturbance, destruction, and physical or visual alteration of any known or as yet undiscovered/unrecorded cultural resource sites. Under the proposed project ground disturbance and development of new structures would occur resulting in significant and potentially significant impacts related to the alteration of the visual context surrounding a listed California Historic Landmark and other historic structures, disturbance of a recorded archeological site, and the potential disturbance of undiscovered/unrecorded subsurface archeological sites and human remains. These impacts would be reduced to less-than-significant levels after mitigation. However, because the No Project (No Development) Alternative does not include any new development or ground disturbance, it has a lesser potential to result in the disturbance of as yet undiscovered subsurface archeological resources and/or human remains. Therefore, cultural resources impacts would be slightly less under this alternative. [Less]

Aesthetic Resources

Under the No Project (No Development) Alternative, no new development would occur; as such, there would be no alteration of the visual character of the project site, views of the project site from surrounding vantage points would not change, and no new sources of light and glare would be created. By comparison, under the proposed project, views of the project site from surrounding lands, Interstate 5 (I-5), the I-5/I-205/State Route (SR) 120 merge segment, and surrounding waterways would be altered; new sources of nighttime lighting would be created; the visual context of the nearby historic grain silos and the Union Pacific Railroad (UPRR) bridge would be altered; and potential onsite conflicts between proposed residential uses and arterial roadways would occur. However, these impacts are all considered less than significant, or less than significant after mitigation. The proposed project would not result in any significant aesthetic resource impacts after mitigation, and thus the No Project (No Development) Alternative would not avoid any significant impacts of the proposed project. However, because the overall visual character of the project site would not be altered under the No Project (No Development) Alternative, impacts are considered less than the proposed project. [Less]

Impact Summary

The No Project (No Development) Alternative would result in greater impacts than the proposed project in four issue areas, less impacts in ten, and similar impacts in one. Significant unavoidable impacts related to traffic, air quality, noise, and agricultural resources associated with the proposed project would not occur under this alternative.

8.3.2 NO PROJECT (WLSP) ALTERNATIVE

Under the No Project (WLSP) Alternative, the project site would be developed in accordance with the existing WLSP, which is the City of Lathrop's approved land use plan applicable to the area. No changes to the Lathrop General Plan would be required. The WLSP envisions an entertainment-oriented development at the project site that includes four theme parks, 5,000 hotel rooms, a regional retail mall,

and other associated entertainment-oriented uses, and up to 8,500 housing units. Other project components include two fire stations, a police station as well as a security facility in the theme park complex, and four joint use elementary schools/parks. Development would occur in four phases over a 30-year period.

As discussed previously in Chapter 3 of this SEIR, “Description of the Proposed Project,” the theme park development is no longer economically feasible at the project site, and Measure D, approved by the City in 2000, eliminated the WLSP’s “theme park first” requirement. However, the theme park development is the designated development scenario prescribed by the most current City land use plans. Therefore, consistent with CEQA requirements, this No Project (General Plan Buildout) Alternative is evaluated in this SEIR.

IMPACT ANALYSIS

Land Use

The proposed project includes amendments to the General Plan and the WLSP. These amendments would not be required under the No Project (WLSP) Alternative since this alternative, by its nature, is consistent the General Plan and WLSP. No significant land use impacts were identified for the proposed project, so this alternative would not reduce or avoid any significant land use impacts associated with the project. However, land use impacts are still considered less because of the alternative’s inherent consistency with City planning documents. [*Less*]

Population, Employment, and Housing

By its nature, population growth under the No Project (WLSP) Alternative would be consistent with City population projections since this alternative reflects development proposed in the WLSP. The same is true regarding consistency with housing policies since the WLSP is the source for many of these policies. Population growth associated with the proposed project exceeds projections included in the General Plan, WLSP, and the Master Plan. During some periods in project development availability of non-single family housing may not meet the City’s target ratios. However, these impacts are considered less than significant. The WLSP does not include assumptions regarding expected population growth and housing demand during project construction. However, it is assumed that construction jobs generated by both project scenarios would be similar, given a similar magnitude of development, and impacts would be less than significant. Both development scenarios would have equal impacts regarding displacement of existing housing on the project site

The proposed project’s high employment potential would generate increased demand for housing, as expressed by a job-rich job-housing balance of 0.75. However, because of an existing and projected regional job-housing balance that is job-poor (increasing from 1.22 to 1.48 between 2000 and 2025), the jobs generated by the proposed project are expected to be filled in large part by the existing labor pool in the region. Therefore, impacts associated with increased housing demand are considered less than significant. The job-housing balance on Stewart Tract under the WLSP would be 0.65 (assuming 17,050 jobs and 8,500 housing units), indicating higher relative job creation and potentially greater increases in

housing demand for this alternative. However, the regional job-poor conditions are still considered sufficient to result in jobs generated by the WLSP to be filled by the existing labor pool in the region. Therefore, this impact is considered less than significant for both development scenarios.

No significant population, employment, and housing impacts were identified for the proposed project; therefore, the No Development (WLSP) Alternative would not reduce or avoid any significant impacts regarding this issue area. However, overall population, employment, and housing impacts are still considered to be slightly reduced under this alternative due to its inherent consistency with the City's planning documents. [*Less*]

Traffic

The No Project (WLSP) Alternative would generate 15,429 p.m. peak-hour (the highest peak hour) traffic, compared to 13,712 p.m. peak-hour trips from the project. The project would generate more than 10% fewer trips than this alternative. Thus, traffic impacts under this alternative would be greater than the project's, particularly at those locations where significant and unavoidable impacts would occur. [*Greater*]

Air Quality

It is not appropriate to compare emission estimates for the proposed project with estimates in the overall WLSP since the WLSP estimates include emissions from Mossdale Village and portions of Stewart Tract beyond the River Islands project area. Therefore, a general comparison of air quality impacts included in this SEIR and the WLSP EIR is provided.

Both the proposed project and the No Project (WLSP) Alternative would result in significant impacts related to construction emissions, and both provide mitigation measures which would reduce these impacts to less-than-significant levels. The WLSP EIR identifies a potentially significant impact associated with localized traffic generated violations of CO levels. However, the impact is based on conservative assumptions and violations would only be slightly above acceptable levels. Under the proposed project this impact is considered less than significant. In addition, the proposed project also includes impacts related to odors, increases in stationary source toxic air contaminants (TACs), and consistency with air quality plans. These impacts are all considered less than significant.

Concerns regarding mobile source TACs are relatively recent and this emission criteria was not evaluated when the WLSP EIR was prepared. Impacts related to mobile source TACs under the proposed project are considered significant and unavoidable since specific conditions regarding this impact cannot be determined and the only available mitigation of completely separating emission sources (diesel vehicles) from sensitive receptors is not feasible (see the discussion for impact 4.5-d in section 4.5, "Air Quality"). Because of higher traffic levels, the WLSP alternative would generate a greater quantity of mobile source emissions. Both development scenarios identify significant unavoidable impacts related to increases in long-term regional emissions from stationary and mobile sources.

Although the air quality analysis for the proposed project differs in several respects from the analysis in the WLSP EIR (in large part because of changes in air quality standards and guidelines since the WLSP EIR was prepared); based on the available information air quality impacts of the proposed project would be less than those of the No Project (WLSP) Alternative. [*Greater*]

Noise

Both the proposed project and the No Project (WLSP) Alternative would result in temporary noise generated by construction activities, development of noise generating land uses, and development of sensitive receptors that would be exposed to existing or projected noise levels exceeding City standards. A majority of these impacts would be reduced to less-than-significant levels after mitigation under both development scenarios. The noise analysis in the WLSP EIR states that all noise impacts would be reduced to less-than-significant levels for this project scenario; however, based on projected noise contours for I-5 developed for this SEIR, some residential uses proposed in the No Project (WLSP) Alternative would be exposed to exterior noise levels exceeding City standards. This impact could not be fully mitigated for the proposed project or this alternative. Increases in traffic noise attributable to the proposed project would be imperceptible (less than 1.4 dBA). The WLSP EIR identifies increases in traffic noise associated with this development scenario exceeding 3.0 dBA in several locations, resulting in a significant impact. However, mitigation is provided to reduce this impact to less-than-significant levels.

Significant noise impacts would occur under both the proposed project and the No Project (WLSP) Alternative. Although the sources of noise and locations and amount of sensitive receptors differ somewhat for both development scenarios, the end results after mitigation would be similar, with all impacts reduced to less-than-significant levels except for exterior noise levels at some residential land uses in I-5 65-dBA noise contour. The relatively higher traffic from this alternative is not sufficient to generate noticeably more noise. Therefore, overall noise impacts for these two development scenarios are considered similar. [*Similar*]

Geology, Soils, and Mineral Resources

The WLSP EIR identified significant impacts related to soil erosion and foundation failures caused by various seismic hazards (lateral spreading, ground shaking, settlement); however, these impacts would be mitigated to less-than-significant levels. The WLSP EIR also identified significant, unavoidable adverse impacts resulting from soil liquefaction during a major seismic event, the severity of which is unknown, and for which unacceptable levels of damage cannot be wholly prevented by project design and construction planned in the WLSP. Since the WLSP EIR was prepared, geotechnical studies for the project site have gathered additional information on liquefaction potential and evaluated the probabilistic seismic events, and concluded that liquefaction impacts can be mitigated to less-than-significant levels with appropriate engineering methods.

Both the No Project (WLSP) Alternative and the proposed project would develop the entire RID Area, resulting in similar acreages of surface disturbance. However, the proposed project includes more extensive earthwork to create highground corridors, setback levees, and to lower the bench in Paradise

Cut. Therefore, the proposed project would have a higher potential for construction-related erosion impacts. This impact would be mitigated to a less-than-significant level under both development scenarios.

Structures and foundations developed under both the No Project (WLSP) Alternative and the proposed project would need to comply with the 1997 Uniform Building Code requirements, and based on mitigation measures for both projects would be designed based on site specific soil analysis. Therefore, no significant impacts related to the exposure of residents, visitors, and workers to seismic and soils hazards (e.g., ground shaking, ground lurching, lateral spreading, expansive soils, and corrosive soils) would be expected under either development scenario. However, risks would be expected to be slightly greater under the No Project (WLSP) Alternative due to the inclusion of theme park-related facilities (roller coasters, thrill rides) which could be more susceptible to seismic hazards.

Both the No Project (WLSP) Alternative and the proposed project would result in development preventing future access to the 10-acres of mineable sands on the project site classified as MRZ-2. This impact would be the same for both development scenarios, and is considered less than significant.

No significant impacts related to geology, soils, and mineral resources were identified for the proposed project after mitigation; therefore, the No Project (WLSP) Alternative would not reduce or avoid any significant earth resources impacts of the proposed project. Although some impacts differ slightly between the two scenarios, overall the impacts are considered similar. [*Similar*]

Hydrology and Water Quality

Water quality impacts related to potential releases of sediments and contaminants during construction within the project levees (surface water and groundwater) and construction of bridges and utility crossings (surface water only) would be the similar for both the No Project (WLSP) Alternative and the proposed project. The No Project (WLSP) Alternative does not include backbays or widening of Paradise Cut; therefore, water quality impacts associated with levee breaching and maintenance dredging of backbays would not occur under this alternative. These impacts would be reduced to less-than-significant levels after mitigation under the proposed project. This alternative also does not include docks along the San Joaquin River, Old River, and Paradise Cut. Therefore, water quality impacts associated with construction of these in-water features and the increased boat traffic they would generate would not occur. However, these impacts are considered less than significant after mitigation under the proposed project.

Development as described in the WLSP includes provision of a central lake to hold stormwater on the project site, but the Plan does not provide data on anticipated water diversions and discharges associated with management of the lake. Therefore, impacts associated with alterations in local hydrology and water quality cannot be evaluated. It is assumed that the water quality of lake discharges will be higher under the proposed project since it includes water treatment wetlands around the Central Lake while the No Project (WLSP) Alternative does not.

Both development scenarios would remove the RID Area from the 100-year floodplain. However, the No Project (WLSP) Alternative does not include modifications to Paradise Cut to alleviate associated increases in downstream flood elevations. Therefore, impact associated with increased flood elevations would be greater under this alternative. Neither development scenario would significantly affect non-flood hydrology.

In the WLSP EIR it is estimated that the domestic water demand for the portions of Stewart Tract within the planning area would be 6.78 million gallons per day (MGD). A demand estimate was not calculated for just the portion of Stewart Tract encompassing the RID Area. Estimated domestic water demand for the proposed project at full buildout is 4.56 MGD. Although the demand estimate in the WLSP EIR encompasses a larger area, the 2.22 MGD differential between the WLSP and River Islands project cannot be entirely accounted for by demand from other portions of Stewart Tract. Therefore, it is assumed that the No Project (WLSP) Alternative would have greater water demand than the proposed project. Therefore, impacts related to groundwater supply and water supplies to other users would be somewhat greater under this alternative. However, from a hydrology and water quality perspective these impacts would still be considered less than significant for both development scenarios.

No significant impacts related to hydrology and water quality were identified for the proposed project after mitigation; therefore, the No Project (WLSP) Alternative would not reduce or avoid any significant impacts of the proposed project. Although some impacts would be less under this alternative, impacts associated with changes in downstream flood elevations and water demand would be greater. Therefore, overall hydrology and water quality impacts are considered greater for the No Project (WLSP) Alternative than for the proposed project. [*Greater*]

Hazardous Materials and Public Health

The construction area under the No Project (General Plan Buildout) Alternative and the proposed project would be similar, and thus both development scenarios would result in similar impacts related to the use of hazardous materials during construction and the potential exposure of construction workers to existing hazardous materials on the project site. Under both scenarios, new facilities that use hazardous materials would be developed on the project site; and residents, workers, and visitors would have similar potential to be exposed to hazardous materials. Also under both scenarios, recycled water may be applied to public landscaping, resulting in similar potential health risks. All these impacts would be considered less than significant due to compliance with existing laws and regulations and/or implementation of appropriate mitigation measures. Because the proposed project and the No Project (WLSP) Alternative would result in similar exposure mechanisms and risks associated with hazardous materials and public health, impacts from the two development scenarios are also considered similar. [*Similar*]

Public Services

Both the proposed project and the No Project (WLSP) Alternative would result in significant increases in demand for public services. Demand comparisons cannot be directly related to population since population estimates for Stewart Tract in the WLSP include areas beyond the proposed project site. However, comparisons of housing units (11,000 for the proposed project vs. 8,500 for the No Project

(WLSP) Alternative) indicate that permanent population would be substantially higher for the proposed project. The No Project (WLSP) Alternative also includes 5,000 hotel rooms, and a substantial number of single day visitors to the theme parks would be anticipated. Therefore, the day-to-day or transient population at the project site, which would also place demands on public services, would be significantly higher for this alternative.

Both project scenarios would generate increased demand for fire protection facilities and services which would be met through planned construction of 2 or more fire stations. The proposed project would generate greater demand for water-related emergency services due to the construction of docks and associated increases in boat traffic along the surrounding rivers. The No Project (WLSP) Alternative would generate immediate demand for specialized emergency response equipment (aerial/hook and ladder trucks) to serve facilities associated with the theme parks. Given these conditions, overall demands for fire protection facilities and services would be considered similar for the two scenarios.

Demand for police protection facilities and services would be greater under the No Project (No Development) Alternative because the overall day-to-day population on the project site would be substantially greater. However, demand for animal control facilities and services would be less because the permanent resident population would be lower. Demand for public school facilities and services would also be less under this alternative because of the reduced permanent resident population. The WLSP EIR only provides a solid waste generation estimate for the entire plan area (stated as 50,000-60,000 tons per year with approximately 50% to be recycled); therefore, an accurate comparison with solid waste generation rates for the substantially smaller proposed project site cannot be made.

All public services impacts described for the No Project (WLSP) Alternative and the proposed project are considered less than significant, or less than significant after mitigation. Overall demand for public services is considered slightly greater for this alternative due to the increased day-to-day population on the project site and special service needs associated with the theme park related uses. [*Greater*]

Public Utilities

In the WLSP EIR it is estimated that the domestic water demand for the portions of Stewart Tract within the planning area would be 6.78 million gallons per day (MGD). A demand estimate was not calculated for just the portion of Stewart Tract encompassing the RID Area. Estimated domestic water demand for the proposed project at full buildout is 4.56 MGD. Although the demand estimate in the WLSP EIR encompasses a larger area, the 2.22 MGD differential between the WLSP and River Islands project cannot be entirely accounted for by demand from other portions of Stewart Tract. Therefore, it is assumed that the No Project (WLSP) Alternative would have greater water demand than the proposed project. Based on the SB 610 Analysis included in Appendix J of this document, under multi-year drought conditions the City's annual available water supply may exceed demand by less than 100 acre-feet in some years. Therefore, increased water demand associated with the No Project (WLSP) Alternative could result in water demand exceeding available supply in some circumstances.

If this alternative results in increased water use, it is assumed that it will also have greater demand for wastewater treatment capacity and associated storage and disposal of recycled water. However, impacts

associated with wastewater treatment and recycled water are considered less than significant after mitigation under the proposed project and a similar conclusion would be expected for the No Project (WLSP) Alternative. Impacts associated with construction and operation of water delivery and treatment infrastructure would be similar for both development scenarios.

The WLSP EIR estimates that electrical demand associated with development on Stewart Tract would be 103,100 kilowatt hours (kW), or 2,474,400 kW per day (kWh/day). Natural gas demand would be 417,240 cubic feet (cf) (*Note: No time period is provided for this unit in the WLSP. It is assumed that it reflects cubic feet per day*). Energy usage estimates for the proposed project are 1,310,000 kWh/day of electricity and 32,576 cf/day of natural gas. Although the demand estimate in the WLSP EIR encompasses a larger area, the 1,164,400 kWh/day and 384,664 cf/day differential between the WLSP and River Islands project cannot be entirely accounted for by demand from other portions of Stewart Tract. Therefore, it is assumed that the No Project (WLSP) Alternative would have greater electricity and natural gas demand than the proposed project. Under both scenarios local utility providers have indicated they have sufficient capacity to meet the project demand.

Based on the above information, the No Project (WLSP) Alternative would have greater public utility impacts than the proposed project, and could potentially result in a new significant impact relative to water supply. [*Greater*]

Recreation

The proposed project would create parks and other recreational opportunities/facilities in excess of anticipated demand; therefore, it would have a beneficial impact on recreation in Lathrop considering that there is a deficit of park acreage in the City relative to General Plan standards. By its nature, park development under the No Project (WLSP) Alternative would be consistent with City park standards since this alternative reflects development proposed in the WLSP. This alternative would also provide overall recreation opportunities in excess of demand since it generates less permanent population than the proposed project (therefore generating less demand for recreational services) while providing increased overall acreage of recreational facilities.

Unlike the proposed project, the No Project (WLSP) Alternative does not include docks along the San Joaquin River and Old River; therefore, reductions in recreational boating opportunities (water skiing, wake boarding) resulting from creation of no-wake zones to protect project docks would not occur. However, the increased boater access under the proposed project provided by planned boat launch facilities and the deepening and widening of Paradise Cut would not occur under this alternative. These impacts would not be considered significant for either development scenario.

Consistent with the General Plan, the No Project (WLSP) Alternative provides for a continuous open space corridor around the project site along the San Joaquin River, Old River, and Paradise Cut. The proposed project does not provide this continuous corridor, but is considered consistent with the intent of the General Plan by providing an extensive park and trail system through the project site and public access to the San Joaquin River, Old River, and Paradise Cut at various parks and other facilities.

No significant recreation impacts were identified for the proposed project; therefore, this alternative would not reduce or avoid any significant impacts. However, because the No Project (WLSP) Alternative would provide a greater amount of recreational opportunities relative to demand, and is inherently consistent with City recreation guidelines, impacts under this alternative are considered less than those for the proposed project. [*Less*]

Agricultural Resources

Both the No Project (WLSP) Alternative and the proposed project would result in the conversion of all agricultural land in RID Area to other uses over a 25- to 30-year period. Therefore, impacts associated with losses of important farmland, Williamson Act cancellations, and potential conflicts between agricultural operations and nearby development would be similar for both scenarios. Both scenarios would preserve agricultural land in Paradise Cut, and the proposed project would result in preservation of agricultural land elsewhere in the County via participation in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). Although the SJMSCP was not available when the WLSP was prepared, it is assumed that if the No Project (WLSP) Alternative were implemented now, the SJMSCP would be used to assist in mitigating biological and agricultural resources impacts. Therefore, preservation of agricultural lands would be similar for both development scenarios. Overall, agricultural resources impacts are considered similar for the No Project (WLSP) Alternative and the proposed project. [*Similar*]

Terrestrial Biology

Both the No Project (WLSP) Alternative and the proposed project would develop a majority of the RID Area with urban uses, resulting in similar significant and potentially significant impacts to sensitive and special-status plant, invertebrate, and animal species, and waters of the United States. Both development scenarios would preserve habitat and agricultural land in Paradise Cut, although the proposed project also includes a habitat restoration and enhancement component in Paradise Cut and in various locations along the perimeter levees. The widening and deepening of the Paradise Cut channel included in the proposed project also provides a substantially larger buffer between preserve areas and project development than found in the No Project (WLSP) Alternative. This alternative includes a continuous open space corridor along the San Joaquin River, consistent with requirements in the SJMSCP. The proposed project reduces the overall length of the habitat corridor, although not sufficiently to be considered biologically significant.

The proposed project would also result in preservation of natural habitats and agricultural land elsewhere in the County via participation in the SJMSCP. Although the SJMSCP was not available when the WLSP was prepared, it is assumed that if the No Project (WLSP) Alternative were implemented now, the SJMSCP would be used to assist in mitigating biological resources impacts. Therefore, preservation of off-site habitat lands would be similar for both development scenarios. The proposed project includes lowering of an earthen bench in Paradise Cut near the Paradise Weir. This bench contains potential habitat for riparian brush rabbit which would be temporarily removed during the earthwork. This impact would be less than significant after mitigation, but would not occur at all under the No Project (WLSP) Alternative.

A majority of biological resources impacts are similar for the proposed project and the No Project (WLSP) Alternative. However, the proposed project includes additional habitat restoration and enhancement activities that are not a part of this alternative and a wider aquatic buffer between the Paradise Cut habitat lands and project development. The proposed project also results in additional impacts associated with reducing the length of the planned San Joaquin River habitat corridor and temporary removal of riparian brush rabbit habitat in Paradise Cut. However, given the habitat improvements that are associated with the proposed project, overall biological resources impacts are considered greater for the No Project (WLSP) Alternative. [*Greater*]

Fisheries

Fisheries impacts related to potential releases of sediments and contaminants during construction within the project levees and construction of bridges and utility crossings would be similar for both the No Project (WLSP) Alternative and the proposed project. This alternative does not include backbays or widening of Paradise Cut; therefore, fisheries impacts associated with levee breaching and maintenance dredging of backbays would not occur. These impacts would be reduced to less-than-significant levels under the proposed project. The No Impact (WLSP) Alternative also does not include docks along the San Joaquin River, Old River, and Paradise Cut. Therefore, impacts associated with these project features also would not occur. However, these impacts are considered less than significant under the proposed project.

Development as described in the WLSP includes provision of a central lake to hold stormwater on the project site, but the WLSP and the WLSP EIR do not provide data on anticipated water diversions and discharges associated with management of the lake. Therefore fisheries impacts associated with alterations in local hydrology and potential entrainment in project pumps cannot be evaluated. It is assumed that the water quality of lake discharges will be higher under the proposed project since it includes water treatment wetlands around the Central Lake while the WLSP project does not. Because there is a Central Lake associated with both projects it is also assumed that impacts associated with creation of fish habitat in the lake and potential introduction of exotic fish into the Delta from the lake would be similar. The No Project (WLSP) Alternative does not include modifications to Paradise Cut; therefore, beneficial effects on fisheries habitat associated with this activity and less-than-significant impacts on chinook salmon smolts associated with alterations in flood hydrology would not occur. The proposed project would result in some enhancements to fish habitat associated with the construction of the backbays, improvements to Paradise Cut, and creation of shaded riverine aquatic habitat in Paradise Cut and along the project levees. This alternative does not include these habitat enhancement features.

Although the proposed project includes additional in water features that could generate fisheries impacts that wouldn't occur under the No Project (WLSP) Alternative, these impacts would be reduced to less-than-significant levels with mitigation. Many of these same in water features would provide enhanced fisheries habitat not included in the alternative. When considering all impacts, adverse and beneficial, the No Project (WLSP) Alternative is considered to have greater fisheries impacts than the proposed project. [*Greater*]

Cultural Resources

The construction surface area would be similar under the No Project (WLSP) Alternative and the proposed project. Therefore, impacts related to the disturbance of known archeological sites and potential disturbance of previously unrecorded/undiscovered sub-surface resources would be similar. These impacts would be reduced to less-than-significant levels after mitigation under both development scenarios.

Under the proposed project development of the Golden Valley Parkway bridge over the San Joaquin River, construction of some homes on the high ground corridor, and limited portions of other project features would result in the alteration of the visual context surrounding the UPRR San Joaquin River Bridge, a listed California Historic Landmark. This impact would be reduced to less-than-significant levels with mitigation. The No Project (WLSP) Alternative does not include construction of homes or other structures on high ground corridors; therefore this impact would be reduced, although the Golden Valley Parkway Bridge and portions of other project features would still be visible behind the UPRR bridge.

Under either development scenario cultural resource impacts would be less than significant after mitigation, thus the No Project (WLSP) Alternative would not avoid any significant impacts of the proposed project. However, impacts would still be considered slightly less under this alternative due to the reduction in structures modifying the visual context of the UPRR bridge. [*Less*]

Aesthetic Resources

Under the proposed project, views of the project site from surrounding lands, I-5, the I-5/I-205/SR 120 merge segment, and surrounding waterways would be altered; new sources of nighttime lighting would be created; and the visual context of the nearby historic grain silos and the UPRR bridge would be altered. These impacts are all considered less than significant, or less than significant after mitigation. The same impacts would occur under the No Project (WLSP) Alternative; however, alterations of the visual context of the UPRR bridge would be less because no development would occur on nearby high ground corridors.

The WLSP EIR includes a significant impact associated with diminished, or totally obscured views of the night sky resulting from glare from nighttime commercial operations. The WLSP EIR further identifies a significant unavoidable impact from the “incremental increase in the amount of long-term sky glare as development proceeds in the community, and especially on Stewart Tract...” The proposed project includes far less nighttime lighting than the No Project (WLSP) Alternative since there are no theme parks and other typically brightly lit regional recreational components. Therefore, nighttime view impacts are considered less than significant under the proposed project with implementation of lighting guidelines included in the project’s Urban Design Concept (UDC).

Because the No Project (WLSP) Alternative includes a significant unavoidable impact that would not occur under the proposed project, impacts on aesthetic resources are considered greater for this alternative. [*Greater*]

Impact Summary

The No Project (WLSP) Alternative would result in greater impacts than the proposed project in eight issue areas, less impacts in four, and similar impacts in four. Significant unavoidable impacts related to traffic, air quality, noise, and agricultural resources associated with the proposed project would also occur under this alternative. An additional significant impact resulting from domestic water demand exceeding supply might also occur under this alternative.

8.3.3 ENVIRONMENTAL CONSTRAINTS (50% DEVELOPMENT) ALTERNATIVE

The Environmental Constraints (50% Development) Alternative assumes 50% of the facilities described as part of the proposed project would be constructed and substantially less land would be converted to urban uses. This alternative is included to allow comparisons between both the proposed project and no development (No Project [No Development] Alternative), and the proposed project and a mid-range development scenario. A mid-range alternative was selected to determine whether a substantial reduction in the size of project development would avoid some of the significant and unavoidable impacts that have been identified for the proposed project. Given the large scale of the proposed project and the extensive infrastructure needed to support the project (levees, wet utilities, roads, bridges) it is unknown whether this substantially reduced development scenario would be financially feasible or could be effectively integrated into the City's planning goals. Further, it is uncertain if this alternative could attain most of the basic project objectives, including providing substantial employment opportunities and a harmonious mix of land uses. However, this alternative is evaluated to allow the impact comparisons described above.

Under the Environmental Constraints (50% Development) Alternative, all development in the RID Area would be reduced by 50% (residential, retail/commercial, Employment Center, central lake, backbays, schools, parks, etc.). The two proposed project golf courses would be reduced to one. All proposed habitat restoration/enhancement would also be cut in half. Reductions in dwelling unit numbers would be spread evenly among all housing types (single-family, multifamily, active adult, homes on highground corridors). The approximately 1,962 acres of remaining land in the RID Area that would no longer be developed would be retained in agricultural production.

It is also assumed under this alternative that sufficient levee improvements would be completed to remove the RID Area from the 100-year floodplain and modifications/improvements to Paradise Cut would be completed to compensate for associated affects to downstream flood elevations. The same bridges and traffic infrastructure described for the proposed project would also be built under the Environmental Constraints (50% Development) Alternative; however, the number of lanes may be reduced to adjust for the anticipated reduction in traffic demands. Methods for delivery of utilities and public services and necessary offsite facilities would not differ between the two alternatives.

The Environmental Constraints (50% Development) Alternative would also include several focused project modifications incorporated to reduce potential environmental effects. These include:

- ▶ preserving the existing 2.5-acre pond in the southwestern portion of the RID Area to minimize wetland impacts;
- ▶ retaining a right-of-way easement along Golden Valley Parkway for potential future lightrail consistent with the existing General Plan;
- ▶ not allowing any dwelling units within the 65 dBA noise contour for I-5 to avoid potential violations of City exterior noise standards;
- ▶ not permitting development in the 10-acres classified as MRZ-2 for mineable sands until this resource has been extracted, or testing proves the resource is not present in mineable quantities;
- ▶ not allowing buildings to be constructed where they would be visible immediately behind the existing UPRR bridge over the San Joaquin River and alter the visual context of this historic structure; and
- ▶ preserving the potential archeological site identified during pedestrian surveys by retaining the area as agricultural land or “capping” the site with a park, parking lot, or other suitable feature.

Table 8-2 indicates the net change in several key development parameters that would occur under the Environmental Constraints (50% Development) Alternative.

Table 8-2 Environmental Constraints (50% Development) Alternative			
Project Component	Proposed Project	Constraints Alternative	Net Change
Development acreage in RID Area	3,925	1,963	1,962 acres
Single-family dwelling units	7,971	3,985	-3,985 dwelling units
Multi-family dwelling units	1629	815	-814 dwelling units
Active adult dwelling units	1,400	700	-700 dwelling units
Total housing units	11,000	5,500	-5,500 dwelling units
Population	31,680	15,840	- 15,840 persons
Employment Center district acreage	471	236	-235 acres
Jobs generated	16,751	8,376	-8,375 jobs
Docks/berths on exterior waterways	921	461	- 460 berths
Backbays	9	4	-5

IMPACT ANALYSIS

Land Use

The Environmental Constraints (50% Development) Alternative would require many of the same amendments to the General Plan and the WLSP as the proposed project, with the exception of references to the lightrail corridor along Golden Valley Parkway described in the General Plan. This Alternative would be consistent with this element of the General Plan while the proposed project is not. However, the Environmental Constraints (50% Development) Alternative would require additional amendments to the General Plan and the WLSP if the remaining agricultural lands in the RID Area were to be preserved as such in perpetuity. The proposed project does not result in any significant land use impacts; therefore, this alternative would not reduce or avoid any significant impacts. Both development scenarios have inconsistencies with the General Plan and WLSP and would require modifications to these plans. Therefore, land use impacts are considered similar for the proposed project and the Environmental Constraints (50% Development) Alternative. [*Similar*]

Population, Employment, and Housing

Compared to the proposed project the Environmental Constraints (50% Development) Alternative would result in a lesser impact related to population growth and housing demand during construction since there would be fewer construction workers associated with this alternative. Housing displacement would also be less under this alternative because half of the RID Area would remain in its current condition, thereby preserving existing homes in these areas. Although fewer homes are proposed under the Environmental Constraints (50% Development) Alternative, the types of homes and ratios between types would remain the same. Therefore, impacts related to inconsistency/consistency with General Plan housing policies would remain the same. As shown in Table 8-2, the Environmental Constraints (50% Development) Alternative would result in an estimated 15,840 residents. This would be less than population estimates in the City of Lathrop Planning documents; therefore, impacts related to population growth exceeding that expected in the General Plan, WLSP, and the Master Plan would not occur. Ratios of jobs to housing would be the same for both development scenarios; therefore impacts associated with increased demand for housing would not differ. All these impacts are considered less-than significant under the proposed project.

All these impacts are considered less than significant under the proposed project. Therefore, this alternative would not reduce or avoid any significant impacts associated with population, employment, and housing. Because several impacts would be less under the Environmental Constraints (50% Development) Alternative, overall population, employment, and housing impacts are considered less than for the proposed project. [*Less*]

Traffic

The Environmental Constraints (50% Development) Alternative includes the retention of the lightrail right-of-way along Golden Valley Parkway. It is intended to preserve the option of lightrail, or other local transit vehicle, as an alternative to the automobile to move people within the community. This

modification to the proposed project is consistent with transportation plans identified in the General Plan. If the lightrail system is eventually constructed it could reduce traffic impacts on local streets. However, the reduced overall project size under this alternative would substantially reduce demand for public transit service. Therefore, although the lightrail corridor may be preserved, the use of lightrail may no longer be feasible due to decreased demand.

Significant unavoidable traffic and circulation impacts were identified for the proposed project. The Environmental Constraints (50% Development) Alternative would reduce these impacts slightly due to the modifications described above. However, as described in the existing conditions discussion of section 4.4, cumulative development would result in significant and unavoidable impacts to the same freeways affected by the project. Under this alternative, the project's contribution to the impacts would be less. It is anticipated that the impacts would remain significant and unavoidable even with these reductions. [Less]

Air Quality

Both the Environmental Constraints (50% Development) Alternative and the proposed project would result in development of the project site and the generation of associated construction- and operations-related air emissions. However, overall air emissions would be less under the Environmental Constraints (50% Development) Alternative because of the reduced development, project population, and vehicle trips. Less-than-significant air quality impacts identified for the proposed project related to odors, stationary source toxic air contaminant, local mobile source carbon monoxide (CO) concentrations, and consistency with air quality plans would be reduced under this alternative. The same is true for impacts associated with construction emissions, which would be considered less than significant after mitigation under both alternatives.

Impacts associated with long-term regional emissions are considered significant and unavoidable under the proposed project. Emissions would need to be reduced in the range of 90-95% to meet the 10-ton per year significance threshold. Although the Environmental Constraints (50% Development) Alternative would result in a substantial reduction in project development, the associated reductions in air emissions would not be sufficient to meet the 10-ton per year San Joaquin Valley Air Pollution Control District (SJVAPCD) significance threshold. Therefore, this alternative would also result in significant unavoidable long-term regional emissions impacts. Impacts associated with mobile source TACs would also be considered significant and unavoidable under the proposed project and the Environmental Constraints (50% Development) Alternative since specific conditions regarding this impact cannot be determined at this time and there is no feasible mitigation approach available for this impact (see the discussion for impact 4.5-d in Section 4.5 "Air Quality"). Although significant unavoidable air quality impacts would still occur under this alternative, overall emissions would be less than under the proposed project; therefore, overall impacts are considered less. [Less]

Noise

Both the Environmental Constraints (50% Development) Alternative and the proposed project would result in temporary noise generated by construction activities; development of various noise generating

land uses; small, but imperceptible (less than 1.4 dBA) increases in traffic noise; and development of sensitive receptors that would be exposed to existing or project generated noise levels exceeding City standards. After mitigation, under both scenarios, residual significant noise impacts would remain related to incompatibility between some proposed project land uses and projected on-site exterior noise levels. However, this impact would be less under the Environmental Constraints (50% Development) Alternative because with a 50% reduction in development there would be fewer sensitive receptors overall, and sensitive receptors would specifically not be permitted within the I-5 65 dBA noise contour. However, exterior noise conflicts would still occur related to other noise sources (e.g. boat noise, installation and removal of the temporary fish barrier). Although the Environmental Constraints (50% Development) Alternative does not avoid this significant unavoidable impact, it does reduce the effects relative to the proposed project. [Less]

Geology, Soils, and Mineral Resources

Under the Environmental Constraints (50% Development) Alternative there would be a 50% reduction in project development; therefore impacts related to construction erosion and risks from seismic and soil hazards would be reduced. This alternative includes the same levee construction and reinforcement and flood control measures as under the proposed project (although a lesser linear distance of highground corridors would be created); therefore, seismic hazards associated with levees and flood protection would not change. Development would not be permitted in the 10-acres classified as MRZ-2 for mineable sands until this resource has been extracted, or testing proves the resource is not present in mineable quantities. Therefore, the impact described for the proposed project associated the loss of access to this resource would not occur.

All impacts related to geology, soils, and mineral resources are considered less than significant, or less than significant after mitigation under the proposed project. Therefore, the Environmental Constraints (50% Development) Alternative would not reduce or avoid any significant impacts. However, overall earth resources impacts are considered less for this alternative for the reasons described above. [Less]

Hydrology and Water Quality

All project flood control elements are the same for both the Environmental Constraints (50% Development) Alternative and the proposed project (e.g., widening of Paradise Cut, levee improvements). Therefore, impacts related to flood control and downstream flood elevations would be the same for both development scenarios. The Environmental Constraints (50% Development) Alternative includes the removal of 50% of the homes from the high ground corridors along the San Joaquin River, Old River, and Paradise Cut. Since individual docks associated with these homes also would not be built, as well as fewer group docks being constructed because of the reduced number of backbays, it is assumed that only 461 of the 921 docks planned along these waterways under the proposed project would be constructed. Therefore, construction of in-water features would be less under this alternative. Potential reductions in the sizes of project bridges (e.g., numbers of lanes), dependant on traffic demand, would also minimize the construction of in-water features. Water quality impacts related to increased boat use would be reduced due to the lower dock numbers, and the overall reduction in project population. However, these impacts are all considered less than significant, or less than

significant after mitigation under the proposed project, and these impact conclusions would not change under the Environmental Constraints (50% Development) Alternative.

Implementation of the Environmental Constraints (50% Development) Alternative would result in the Central Lake, water treatment wetlands, and parks and paseos being reduced in size by 50%. However, the level of development and impervious surface would also be reduced by 50%. Therefore, the stormwater treatment effectiveness of the Central Lake and associated parks, paseos, and treatment wetlands would remain the same and the overall management strategy for the lake (pumping water in and out of the Delta to maintain water levels) would not be altered. Under both this alternative and the proposed project the water pumped out of the Central Lake would be of higher quality than existing agricultural runoff, and both intakes and outflows would occur at times when impacts to the Delta would be less than under existing conditions. The only difference would be that overall pumping volumes of diversions and discharges would be less under the Environmental Constraints (50% Development) Alternative. Under both development scenarios hydrology and water quality impacts associated with stormwater management and management of the Central Lake would be less than significant or beneficial. However, because 50% of the RID Area would remain in agricultural production under this alternative, beneficial effects would be less since the existing diversion and discharge conditions would continue.

Impacts to water supplies for other users are considered less than significant under the proposed project. This impact would be less under the Environmental Constraints (50% Development) Alternative because of the reduced population and associated reduced demand for domestic water. Degradation of water quality during maintenance dredging of backbays is considered a less-than-significant impact after mitigation under the proposed project. This impact would be less under the Environmental Constraints (50% Development) Alternative because of the reduced number of backbays. However, the same mitigation measures would be required for both development scenarios.

Other hydrology and water quality impacts associated with the proposed project include potential effects on groundwater quality and supply, potential releases of drilling slurry during directional drilling of a natural gas pipeline under the San Joaquin River, and changes in non-flood hydrology. These less-than-significant impacts (either before or after mitigation) would be the same under the Environmental Constraints (50% Development) Alternative.

All hydrology and water quality impacts identified for the proposed project are considered less than significant either before or after mitigation. Therefore, the Environmental Constraints (50% Development) Alternative would not avoid any significant impacts. Implementation of this alternative would result in some hydrology and water quality impacts being reduced, but would also result in some beneficial effects being lessened. Comparing both beneficial and adverse affects, hydrology and water quality impacts under these two development scenarios are considered similar. [*Similar*]

Hazardous Materials and Public Health

Th proposed project would result in impacts related to the use of hazardous materials during project construction and operation; the potential exposure of construction workers, residents, and visitors to

existing sources of hazardous materials during project construction and operation; and potential public health impacts associated with the use of recycled water. All these impacts are considered less than significant, or less than significant after mitigation. These same impacts would occur under the Environmental Constraints (50% Development) Alternative, although to a slightly lesser degree due to the reduced development area and population size. [Less]

Public Services

The proposed project would result in significant public services impacts related to potential obstruction of emergency vehicle access during project construction and increased demand for fire protection, police protection, animal control, and public school facilities and services. These impacts would be reduced to less-than-significant levels after mitigation. Increased demand for solid waste disposal services was not considered significant because the receiving landfill has ample capacity to support the project. These same impacts would occur under the Environmental Constraints (50% Development) Alternative, but to a lesser degree due to the reduced population and residential development associated with the alternative. However, impacts would still remain significant prior to mitigation since new facilities and services would be required to meet project demand. Although this alternative would not reduce or avoid any significant impacts to public services, impacts are still considered less relative to the proposed project because of the reduced demand. [Less]

Public Utilities

The proposed project would create significant demand for potable water, wastewater treatment capacity, and during Phase 2 significant demand for recycled water storage and disposal. All of these impacts would be reduced to less-than-significant levels with mitigation. Several utility impacts would be less than significant prior to mitigation; recycled water storage and disposal during Phases 1a and 1, stormwater/surface runoff management, and demand for electricity and natural gas. In addition, the proposed project would contribute to the generation of less-than-significant environmental impacts after mitigation associated with the development of planned new City wells (Wells #21-23 and Emergency Wells #1 and #2) and the expansion of WRP #1 and construction of WRPs #2 and #3 (if these WRPs are needed with this reduced density alternative). The expansion and construction of the WRPs would also result in significant unavoidable odors impacts and significant unavoidable cumulative water quality and fisheries impacts. However, many of the facility expansion/construction activities which would generate these impacts would occur regardless of whether or not the River Islands project is developed since they also support other planned development in the City.

The Environmental Constraints (50% Development) Alternative would result in the same utility impacts described above, although to a lesser degree due to the 50% population reduction associated with this alternative. With 50% of the RID Area remaining undeveloped under this alternative, it could be possible to store and dispose of all project generated recycled water on-site. This would eliminate the projects contribution to significant unavoidable water quality and fisheries impacts resulting from WRP expansion/construction. Because the Environmental Constraints (50% Development) Alternative would result in a reduction in utility demand, and could potentially avoid contributing to a significant

unavoidable impact, overall utility impacts associated with this alternative are considered less than for the proposed project. [*Less*]

Recreation

The proposed project would create parks and other recreational opportunities/facilities in excess of anticipated demand; therefore, it would have a beneficial impact on recreation in Lathrop considering that there is a deficit of park acreage in the City relative to General Plan standards. Although the Environmental Constraints (50% Development) Alternative would have reduced development of parks and other recreational opportunities/facilities relative to the proposed project, project elements generating demand for these facilities would be reduced by the same amount. Therefore, the availability of parks and other recreational facilities would also exceed anticipated demand, but the net excess acreage would be less. Therefore, this beneficial impact would be less under this alternative.

Some recreational boating opportunities (water skiing, wake boarding) would be limited in Old River and the San Joaquin River as a result of the proposed project due to the creation of no wake zones/speed restricted areas to protect project docks. However, the increased boater access provided by project boat launch facilities and the creation of the Central Lake and deepening and widening of Paradise Cut reduce this impact to less-than-significant levels. Under the Environmental Constraints (50% Development) Alternative the extent of speed restricted areas would be reduced because there would be fewer external docks. However, increases in boater access would also be less because there would be fewer boat launch facilities and the Central Lake would be half the size. Therefore, this impact is considered similar for the two development scenarios.

Because the Environmental Constraints (50% Development) Alternative would result in less overall improvements related to a beneficial impact, and would have similar affects relative to a less-than-significant impact, overall recreation impacts are considered slightly greater under this alternative relative to the proposed project. [*Greater*]

Agricultural Resources

The proposed project would result in the conversion of all agricultural land in RID Area to other uses, generating significant impacts from the loss of 3,620 net acres of important farmland and up to 1,770 acres of Williamson Act cancellations. Mitigation would be provided through participation in the SJMSCP, which would result in agricultural land being preserved elsewhere in the County, and allowing agricultural production to continue on Williamson Act lands as long as possible prior to development. However, these mitigation measures would not be sufficient to reduce the impacts to less-than-significant levels. Therefore, these impacts are considered significant and unavoidable. An additional impact resulting from potential conflicts between agricultural operations and nearby development is considered less than significant after mitigation.

Because the Environmental Constraints (50% Development) Alternative would reduce development in the RID Area by 50%, it is assumed for this analysis that losses of important farmland and acres of Williamson Act cancellations would be cut in half under this alternative. The loss of 1,810 acres of

important farmland and up to 885 acres of Williamson Act cancellations would still be considered significant impacts. Implementation of available mitigation measures would not reduce these impacts to less-than-significant levels. Therefore, although development is substantially reduced under this alternative, significant unavoidable impacts related to losses of important farmland and Williamson Act cancellations would still occur.

Because agricultural operations would continue in the RID Area under the Environmental Constraints (50% Development) Alternative potential conflicts between agricultural operations and nearby project development would be greater under this alternative. However, this impact would continue to be reduced to less-than-significant levels with mitigation.

Although agricultural resources impact conclusions do not change under the Environmental Constraints (50% Development) Alternative (two significant unavoidable impacts and one less-than-significant impact), impacts are still considered less than for the proposed project because the overall acreage of agricultural land conversion is less. [Less]

Terrestrial Biology

Both the proposed project and the Environmental Constraints (50% Development) Alternative would develop large portions of the RID Area with urban uses, resulting in significant and potentially significant impacts on sensitive and special-status plant, invertebrate, and animal species, and waters of the United States. However, these impacts would be reduced under the Environmental Constraints (50% Development) Alternative through retention of half the site in its existing uses. Under this alternative 50% of the existing agricultural land in the RID Area would be retained, allowing continued use by Swainson's hawk and other species which are associated with this habitat. Portions of the waters of the U.S. associated with the central drainage canal and the entire 2.5-acre pond in the RID area would also not be developed, minimizing impacts to wetlands and special-status wildlife species that could utilize this habitat (e.g. western pond turtle). Not permitting housing within the I-5 65 dBA noise contour would result in reduced human disturbance in a stand of riparian habitat along the San Joaquin River near I-5.

Because the lowering of the bench near the Paradise Weir and the construction of the cross levee would occur under both development scenarios, impacts to riparian brush rabbit would be the same. It is assumed that the Lathrop Landing backbay would be constructed under both development scenarios; therefore, potential impacts resulting from conflicts with the SJMSCP designated wildlife corridor along the San Joaquin River would be the same for the proposed project and the Environmental Constraints (50% Development) Alternative. Under this alternative overall habitat restoration and enhancement activities would be reduced by 50%, so any beneficial effects associated with this activity would be reduced.

Significant and potentially significant biological resources impacts for both the proposed project and the Environmental Constraints (50% Development) Alternative would be reduced to less-than-significant levels through participation in the SJMSCP and other mitigation. Although no impact conclusions would change under this alternative, impacts are still considered less due to the reduction in habitat loss and disturbance. [Less]

Fisheries

All project flood control elements are the same for both the Environmental Constraints (50% Development) Alternative and the proposed project (e.g. widening of Paradise Cut, levee improvements). Therefore, impacts related to habitat modification in Paradise Cut and potential diversions of chinook salmon smolts into Paradise Cut would be the same for both scenarios. Impacts would also be the same related to utility crossings (e.g., directional boring under the San Joaquin River) and the potential for introduction of exotic fish species to the Delta. All these impacts are considered less than significant, or less than significant after mitigation.

The Environmental Constraints (50% Development) Alternative includes 50% fewer docks/berths along the San Joaquin River, Old River, and Paradise Cut (461 rather than 921). Therefore, construction of in-water features would be less under this alternative. Potential reductions in the sizes of project bridges (e.g. numbers of lanes), dependant on traffic demand, would also minimize the construction of in-water features. Impacts related to potential degradation of water quality during construction of these facilities would therefore be reduced as well as potential fisheries habitat modifications. Because the overall soil disturbance in the RID Area would be reduced and there would be fewer backbays under this alternative, impacts related to releases of construction sediment and sediment releases during levee breaching would also be less. However, these impacts are considered less than significant, or less than significant after mitigation under the proposed project, and these impact conclusions would not change under this alternative.

Implementation of the Environmental Constraints (50% Development) Alternative would result in the central lake, and associated stormwater treatment elements (water treatment wetlands, parks, paseos) being reduced in size by 50%. However, the level of development and impervious surface would also be reduced by 50%. Therefore, the stormwater treatment effectiveness of the central lake and associated parks, paseos, and treatment wetlands would remain the same and the overall management strategy for the lake (pumping water in and out of the Delta to maintain water levels) would not be altered. Under both this alternative and the proposed project the water pumped out of the central lake would be of higher quality than existing agricultural runoff, and both intakes and outflows would occur at times when impacts to Delta fisheries would be less than under existing conditions. The only difference would be that overall pumping volumes of diversions and discharges would be less under the Environmental Constraints (50% Development) Alternative. Under both development scenarios fisheries impacts associated with stormwater management and management of the central lake would be less than significant or beneficial. However, because 50% of the RID Area would remain in agricultural production under this alternative, beneficial affects, such as reduced entrainment in project pumps and improved quality of discharges to the Delta, would be less since the existing diversion and discharge conditions would continue in these agricultural area.

Because the central lake would be reduced in size by 50% under the Environmental Constraints (50% Development) Alternative the beneficial effect of creation of fish habitat in the internal lake would be reduced. Indirect fisheries impacts related to water consumption is considered less than significant under the proposed project. This impact would be less under the Environmental Constraints (50% Development) Alternative because of the reduced population and associated reduced demand for domestic water. Degradation of water quality and fish habitat during maintenance dredging of backbays is considered a less-than-significant impact after mitigation under the proposed project. This impact would be less under the Environmental Constraints (50% Development) Alternative because of the

reduced number of backbays. However, the same mitigation measures would be required for both development scenarios.

All fisheries impacts identified for the proposed project are considered less than significant either before or after mitigation. Therefore, the Environmental Constraints (50% Development) Alternative would not avoid any significant impacts. Implementation of this alternative would result in some fisheries impacts being reduced, but would also result in some beneficial effects being lessened. Comparing both beneficial and adverse affects, fisheries impacts under these two development scenarios are considered similar. [*Similar*]

Cultural Resources

Under the proposed project ground disturbance and development of new structures would occur resulting in significant and potentially significant impacts related to the alteration of the visual context surrounding a listed California Historic Landmark (the UPRR bridge) and other historic structures, disturbance of a recorded archeological site, and the potential disturbance of undiscovered/unrecorded subsurface archeological sites and human remains. These impacts would be reduced to less-than-significant levels after mitigation.

Not permitting sensitive receptors within the I-5 65-dBA noise contour under the Environmental Constraints (50% Development) Alternative would result in reduced impacts related to the alteration of the visual context surrounding the historic UPRR bridge because houses on highground corridors would no longer be constructed behind the bridge and would no longer alter the visual context of this feature. However, the Golden Valley Parkway Bridge would still be visible, and more distant project features might still be seen behind the bridge; although these facilities may also be reduced in size/number due to the overall reduced development associated with this alternative. The reduced size of the Employment Center might also minimize impacts associated with altering the visual context of the historic off-site grain silos.

The only potentially significant archeological site identified in the RID Area would either not be disturbed further (i.e. continued agricultural operations) under this alternative, or would be capped with an appropriate land use to preserve sub-surface cultural resources that may be present. Although it is unknown whether significant cultural resources occur at the site, a conservative approach is taken under this alternative of preserving sub-surface conditions in their current state without further testing or investigations. Because the recorded archeological site would be capped as part of this alternative, potential impacts associated with disturbance during investigations and testing would not occur. The potential for disturbance of unrecorded subsurface archeological sites would also be reduced under this alternative since the area of excavations to support development in the RID Area would be reduced by half.

No significant cultural resource impacts were identified for the proposed project after mitigation, so this alternative would not reduce or avoid any significant cultural resource impacts of the proposed project. However, overall cultural resources impacts would still be reduced under the Environmental Constraints (50% Development) Alternative for the reasons described above. [*Less*]

Aesthetic Resources

Under the Environmental Constraints (50% Development) Alternative there would be less alteration of the views of the project site from surrounding lands and for recreational boaters because there would be less development overall. In particular, not permitting sensitive receptors within the I-5 65 dBA noise contour under this alternative would result in reduced impacts related to the alteration of the visual context surrounding the historic UPRR bridge and views of the project site from the I-5/1-205/SR-120 merge segment since houses on highground corridors in this area would no longer be constructed. The reduced size of the Employment Center would minimize impacts associated with general views of the project site from the I-5/1-205/SR-120 merge segment and could also reduce the alteration of the visual context of the historic off-site grain silos (depending on where development is placed). Because there would be less overall development, impacts on nighttime views would also be reduced. Potential impacts resulting from conflicts between the UDC and the WLSP regarding the design and function of walls separating residential neighborhoods and arterial roads would be the same for the Environmental Constraints (50% Development) Alternative and the proposed project.

No significant aesthetic resource impacts were identified for the proposed project after mitigation, so this alternative would not reduce or avoid any significant aesthetic resource impacts of the proposed project. However, overall aesthetic resources impacts would still be reduced under the Environmental Constraints (50% Development) Alternative for the reasons described above. [*Less*]

Impact Summary

The Environmental Constraints (50% Development) Alternative would result in greater impacts than the proposed project in one issue areas, less impacts in eleven, and similar impacts in three. Significant unavoidable impacts related to traffic, air quality, noise, and agricultural resources associated with the proposed project would also occur under this alternative. Although this alternative includes substantially less development than the proposed project, these significant unavoidable impacts would still occur.

8.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The State CEQA Guidelines require identification of an “environmentally superior alternative other than the no project alternative” from among the proposed project and the alternatives evaluated.

Table 8-3 identifies whether each of the three alternatives would have “greater,” “less,” or “similar” impacts as the proposed project for each of the 16 environmental issues evaluated in this EIR. The No Project (No Development) Alternative would have greater impacts than the proposed project in four issue areas, less impacts in eleven, and similar impacts in one. The No Project (WLSP) Alternative would have greater impacts than the proposed project in eight issue areas, less impacts in four, and similar impacts in four. The Environmental Constraints (50% Development) Alternative would have greater impacts than the proposed project in one issue areas, less impacts in twelve, and similar impacts in three.

Based solely on the listing of lesser and greater impacts as identified in Table 8-3, the Environmental Constraints (50% Development) Alternative would appear to be the environmentally superior alternative. However, the proposed project would result in significant unavoidable adverse impacts in five areas: (1) traffic (temporary impacts on I-205); (2) air quality (mobile TAC emissions and long-term regional emissions); (3) noise (exterior noise levels at some sensitive receptors); (4) farmland conversion; (5) cumulative impacts (traffic, air quality, noise, odors).

By comparison, the Environmental Constraints (50% Development) Alternative would reduce but not avoid any of the significant unavoidable impacts of the proposed project, while the No Project (No Development) Alternative would avoid all of the significant unavoidable impacts (with the exception of the significant cumulative impacts which would occur regardless of implementation of the proposed project). For this reason, the No Project (No Development) Alternative is identified as the environmentally superior Alternative.

However, as mentioned above, CEQA does not permit the identification of the No Project Alternative as the environmentally superior alternative. Therefore, given that the Environmental Constraints (50% Development) Alternative would have the highest ratio of less to greater impacts among the alternatives and has lesser impacts than the proposed project, it is identified as the environmentally superior alternative.

Environmental Issues	Alternatives		
	No Project (No Development)	No Project (WLSP)	Environmental Constraints
Land Use	Similar	Less	Similar
Population, Employment, and Housing	Less	Less	Less
Traffic	Less	Greater	Less
Air Quality	Less	Greater	Less
Noise	Less	Similar	Less
Geology, Soils, and Mineral Resources	Greater	Similar	Less
Hydrology and Water Quality	Greater	Greater	Similar
Hazardous Materials and Public Health	Less	Similar	Less
Public Services	Less	Greater	Less
Public Utilities	Less	Greater	Less
Recreation	Greater	Less	Greater
Agricultural Resources	Less	Similar	Less
Terrestrial Biology	Less	Greater	Less
Fisheries	Greater	Greater	Similar
Cultural Resources	Less	Less	Less
Aesthetic Resources	Less	Greater	Less
Totals			
Greater impact	4	8	1
Less impact	11	4	12
Similar impact	1	4	3
Source: EDAW 2002			

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10 REPORT PREPARATION AND ORGANIZATIONS AND PERSONS CONSULTED

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