*This section was prepared by RMC Water and Environment.*

# 3B.15 TRAFFIC AND TRANSPORTATION – WATER

## 3B.15.1 AFFECTED ENVIRONMENT

This discussion places an emphasis on describing the affected environment for locations where physical environmental impacts would occur as a result of the construction and operation of the Off-site Water Facilities. In this context, the discussion is focused to portions of Zone 4 of the overall "Water" Study Area.

### ROADWAY NETWORK

Affected roadways within Zone 4 of the "Water" Study Area fall under the jurisdiction of Sacramento County or the City of Rancho Cordova. These roadways are illustrated in Exhibit 2-26 in Chapter 2, "Alternatives." A brief description of key roadways in Zone 4 of the "Water" vicinity is provided below.

- **Sunrise Boulevard** is a major north-south secondary (arterial) road that connects Grant Line Road to the City of Roseville. It has two lanes between Grant Line Road and Douglas Road, four lanes between Douglas Road and White Rock Road, and six lanes north of White Rock Road.

- **White Rock Road** extends from International Drive to El Dorado County and is a two-lane roadway east of Sunrise Boulevard. In the vicinity of Zone 4 of the "Water" Study Area, the Circulation Element in the City of Rancho Cordova General Plan designates this roadway as a six-lane expressway. The widening of White Rock Road from Sunrise Boulevard to the future Silva Valley interchange in El Dorado Hills is a fully funded project.

- **Folsom Boulevard** is a four-lane secondary (arterial) road that extends from the City of Sacramento, through the City of Rancho Cordova and Sacramento County, into the City of Folsom. It is a four-lane roadway within the vicinity of Zone 4 of the "Water" Study Area.

- **Douglas Road** is a two-lane roadway that extends from Mather Boulevard in the Mather Reuse Area to Grant Line Road. The Circulation Element of the City of Rancho Cordova's General Plan designates this roadway as a six-lane major road.

- **Excelsior Road** is a two-lane roadway that extends Grant Line Road north to Mather Road through central Sacramento County.

- **Eagles Nest Road** is a two-lane roadway that extends Grant Line Road north to Douglas Road through central Sacramento County. Eagles Nest Road parallels Excelsior Road to the east. A portion of this roadway is currently unimproved (unpaved).

- **Mather Boulevard** is a two-lane roadway that extends to the northern terminus of Excelsior Road north to Mather Field Road.

- **Grant Line Road** is a two-lane roadway that extends from SR 99 to White Rock Road through the southeastern portion of Sacramento County. The County and City of Rancho Cordova General Plans designate this roadway as a six-lane expressway. This roadway is currently the preferred alignment for the East County Connector.

- **Jackson Highway**, also known as SR 16, is a two-lane highway that extends from Folsom Boulevard east of Howe Avenue into Amador County. In the vicinity of the Off-site Water Facilities Study Area, the Circulation Element of the City of Rancho Cordova General Plan designates this roadway as a six-lane expressway.

- **Prairie City Road** is a rural, two-lane road south of U.S. 50 to its terminus at White Rock Road.

- **Gerber Road** is an east-west, 2-lane, rural roadway in the southern portion of Zone 4 of the "Water" Study Area.

- **Ivan Way** is a north-south, residential collector roadway within the North Douglas Community.

### Planned Roadways

- **Rancho Cordova Parkway (Planned).** This roadway would run north-south and provide connectivity between White Rock Road and a new interchange on U.S. 50. The planned roadway cross-section would include six vehicle travel lanes, bicycle lanes, a landscaped median and landscape corridors with sidewalks on both sides. This roadway would serve as the primary north-south connector for the City of Rancho Cordova east of Sunrise Boulevard and would be constructed in conjunction with the planned Westborough Specific Plan area.

- **Easton Valley Parkway (Planned).** This roadway is proposed to run east-west and begin at the intersection with the planned Rancho Cordova Parkway. The planned roadway cross-section would include up to six vehicle travel lanes, bicycle lanes, a landscaped median, and landscape corridors with sidewalks on both sides. This roadway would provide parallel capacity for U.S. 50, intersect with a future extension of Hazel Avenue, continue through the planned Easton Place and Glenborough developments, and may ultimately extend across Prairie City Road into the Folsom SPA.

## LEVEL OF SERVICE

Level of Service (LOS) is a general measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. The LOS grades are defined in the Highway Capacity Manual (HCM) as follows:

- LOS A represents free-flow travel with an excellent level of comfort and convenience and the freedom to maneuver.

- LOS B has stable operating conditions, but the presence of other road users causes a noticeable, though slight, reduction in comfort, convenience, and maneuvering freedom.

- LOS C has stable operating conditions, but the operation of individual users is significantly affected by the interaction with others in the traffic stream.

- LOS D represents high-density, but stable flow. Users experience severe restriction in speed and freedom to maneuver, with poor levels of comfort and convenience.

- LOS E represents operating conditions at or near capacity. Speeds are reduced to a low but relatively uniform value. Freedom to maneuver is difficult with users experiencing frustration and poor comfort and convenience. Unstable operation is frequent, and minor disturbances in traffic flow can cause breakdown conditions.

- LOS F is used to define forced or breakdown conditions. This condition exists wherever the volume of traffic exceeds the capacity of the roadway. Long queues can form behind these bottleneck points with queued traffic traveling in a stop-and-go fashion.

## Existing Roadway Conditions

The City conducted a review of several recently prepared EIRs (City of Rancho Cordova 2006 and Sacramento County 2008b) for development projects within Zone 4 of the "Water" Study Area, both certified and in public draft form, to establish a baseline for existing roadway operations. Roadways considered as part of this analysis and their current average daily trips (ADT) and LOS are provided in Table 3B.15-1.

**Table 3B.15-1**
**Level of Service for Roadways in Zone 4 of the "Water" Study Area**

| Roadway Segment | Average Daily Trips | Level of Service (Peak Hour) |
|---|---|---|
| Sunrise Boulevard (White Rock Road to Douglas Road) | 24,600 | B |
| Sunrise Boulevard (Florin Road to Grant Line Road) | 7,300 | D |
| Grant Line Road (White Rock Road to Douglas Road) | 9,600 | D |
| Grant Line Road (Douglas Road to SR 16) | 7,300 | D |
| Grant Line Road (SR 16 to Sunrise Boulevard) | 5,600 | C |
| Folsom Boulevard (Hazel Avenue to Sunrise Boulevard) | 13,300 | A |
| Prairie City Road (U.S. 50 to White Rock Road) | 5,800 | A |
| Douglas Road (Grant Line Road to Sunrise Boulevard) | 2,300 | A |
| Douglas Road (Mather to Sunrise Boulevard) | 5,000 | A |
| White Rock Road (Sunrise Boulevard to Grant Line Road) | 13,900 | B |
| White Rock Road (Grant Line Road to Prairie City Road) | 10,300 | E |
| White Rock Road (Grant Line Road to Scott Road) | 7,600 | D |
| Excelsior Road (segment not specified) | 3,908 | A |
| Eagles Nest Road (segment not specified) | NA | NA |
| Florin Road (east of Bradshaw Road) | 3,050 | B |
| Gerber Road (east of Bradshaw Road) | 7,349 | C |

Note: NA = not applicable
Source: Sacramento County 2008b, City of Rancho Cordova 2006

## BIKEWAYS

The 2010 Sacramento City/County Bikeway Master Plan (Sacramento County 1992) identifies existing and planned bicycle routes through Zone 4 of the "Water" Study Area. The only existing facility in the Zone 4 is an off-street multiuse path along the FSC west of Sunrise Boulevard, connecting Hazel Avenue north of U.S. 50 with Grant Line Road. In addition to this facility, on-street bike lanes are planned on Sunrise Boulevard, Grant Line Road, Jackson Highway (SR 16) (just past Grant Line Road), Kiefer Boulevard west of Sunrise Boulevard, Douglas Road west of Sunrise Boulevard, Excelsior Road, and White Rock Road. The City/County Bikeway Master Plan also contains design, safety, and traffic control standards for use in constructing and upgrading facilities. The County is currently in the process of updating their Bikeway Master Plan.

### RAIL SERVICE

Rail service in eastern Sacramento County is limited to freight service. There is no direct rail passenger service.

### TRANSIT SYSTEM

Light-rail transit service is provided from downtown Sacramento along the U.S. 50 corridor to the Hazel Avenue light-rail station. Light rail then extends eastward to the City of Folsom. Another light-rail station is being proposed as part of the Westborough Specific Plan area and would be located between the Sunrise Boulevard station and the Hazel Avenue station.

### EMERGENCY VEHICLE ACCESS

The Sacramento Metropolitan Fire District operates five fire stations within Zone 4 of the "Water" Study Area. The fire stations include Stations 50, 55, 58, 61, and 66, which are located at 8880 Gerber Road, 7776 Excelsior Road, 7520 Sloughhouse Road, 10595 Folsom Boulevard, and 3180 Kilgore Road, respectively.

## 3B.15.2 REGULATORY FRAMEWORK

### FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

There are no Federal plans, policies, regulations, or laws related to traffic and transportation that apply to the Off-site Water Facility Alternatives under consideration. Federal regulations that apply to traffic and transportation are administered by Caltrans and local jurisdictions.

### STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Caltrans prepares a Transportation Concept Report for each of its facilities in Zone 4 of the "Water" Study Area. A Transportation Concept Report is a long-term planning document that each Caltrans district prepares for every state highway or portion thereof in its jurisdiction. This document usually represents the first step in Caltrans' long-range corridor planning process. The purpose of a Transportation Concept Report is to determine how a highway will be developed and managed so that it delivers the targeted LOS and quality of operations that are feasible to attain over a 20-year period. These are indicated in the "route concept." In addition to the 20-year route concept level, the Transportation Concept Report includes an "ultimate concept," which is the ultimate goal for the route beyond the 20-year planning horizon. Ultimate concepts must be used cautiously, however, because unforeseen changes in land use and other variables make forecasting beyond 20 years difficult.

SR 16 crosses the southern portion of Zone 4 of the "Water" Study Area and has a route concept level of LOS E. The ultimate concept for SR 16 is a four-lane facility with continuous left-turn lanes (Caltrans 2004a).

### REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND LAWS

The following local and regional plans, policies, regulations, and laws related to transportation and alternative transportation are relevant to the Off-site Water Facilities alternatives, and are described in detail in Section 3A.15, "Traffic and Transportation – Land:"

- Metropolitan Transportation Plan for 2035 (MTP 2035)
- City of Folsom General Plan
- Sacramento County General Plan
- City of Rancho Cordova General Plan

### Sacramento County

According to the Policy CI-22 of the Sacramento County General Plan, the County applies the following LOS standards for planning roads within unincorporated areas:

1. Rural collectors: LOS D
2. Urban area roads: LOS E

### City of Rancho Cordova Capital Improvement Program

The City of Rancho Cordova has been operating under a 5-year Capital Improvement Program (CIP) (2005–2010) that includes several roadway facilities in Zone 4 of the "Water" Study Area, including improvements to Douglas Road, Kiefer Boulevard, Sunrise Boulevard, and SR 16. Funding sources associated with the current CIP include development fees, financing districts, Measure A sales taxes[1], and state and Federal funding sources.

## 3B.15.3 Environmental Consequences and Mitigation Measures

### Thresholds of Significance

The thresholds for determining the significance of impacts for this analysis are based on the environmental checklist in Appendix G of the State CEQA Guidelines. These thresholds also encompass the factors taken into account under NEPA to determine the significance of an action in terms of its context and the intensity of its impacts. For the purposes of this analysis, to determine whether traffic and transportation impacts are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);
- exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;
- result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- result in inadequate emergency access;
- result in inadequate parking capacity; or
- conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

### Analysis Methodology

The operations of roadway facilities are described in terms of LOS. LOS is a qualitative description of traffic flow based on factors such as speed, travel time, delay, freedom to maneuver, volume, and capacity. Six levels are

[1] Measure A is a half-cent sales tax that was approved by voters to implement transportation improvements in the Sacramento region. Some Measure A funding has been identified to fund specific roadway improvements in the project study area.

defined, from LOS A, as the best operating conditions, to LOS F, or the worst operating conditions, as described in the setting discussion. LOS E represents "at-capacity" operations. When volumes exceed capacity, stop-and-go conditions result and operations are designated as LOS F.

Because the Off-site Water Facility Alternatives under consideration would cause traffic impacts on roadways that are under state, County, and City of Rancho Cordova jurisdictions, this analysis considers a combination of policies and guidelines. The City of Rancho Cordova identifies LOS D as its minimum standard for intersection operations. The County identifies LOS E as the minimum acceptable standard for intersection operations in the project vicinity. For state-controlled facilities, thresholds presented in the State's Route Concept Report were applied (e.g., the concept service level for SR 16 is LOS E).

Program-level impacts for the Off-site Water Facility Alternatives and mitigation measures are presented together in the section below. Operational impacts to the roadway network were assessed in relation to the total number of daily vehicle trips generated by the WTP, which as provided in Chapter 2, "Alternatives," could be up to 40 daily vehicle trips and that access would occur from White Rock Road. These operational trips are included in the overall traffic analysis provided in Section 3A.15, "Traffic and Transportation – Land," which provides an analysis of overall build-out of Folsom SPA and was considered appropriate given that the Off-site Water Facility Alternatives would only be constructed in conjunction with the approval Folsom South of 50 Specific Plan. However, since the Off-site Water Facilities would need to be constructed and operational in advance of the occupancy of any commercial or residential structures within the Folsom SPA, this analysis considers the addition of this vehicles trips prior to any build-out within the SPA.

## ISSUES NOT DISCUSSED FURTHER IN THIS EIR/EIS

**Safety Hazards from Change in Air Traffic Patterns**—The Off-site Water Facility Alternatives would not include the construction of any structural facilities within a runway hazard or overflight zone. Likewise, the Off-site Water Facility Alternatives would not include the expansion of airport facilities or increase air traffic. In this context, the Off-site Water Facility Alternatives would not require a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. No impact would occur. Therefore, this issue area is not discussed further.

**Alternative Forms of Transportation**—The Off-site Water Facility Alternatives would not involve new land development that would place new demands on alternative forms of transportation. For this reason, the Off-site Water Facility Alternatives would not include any actions that would conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks). Issues related to potential temporary conflicts between Off-site Water Facility Alternatives construction and existing bicycle or pedestrian trails are addressed in Section 3B.12, "Parks and Recreation – Water." No impact would occur. Therefore, this issue area is not discussed further.

**Parking Capacity**—Construction worker parking would be available at designated staging areas and along local roadways where sufficient space along the roadway shoulder is available. As provided in Chapter 2, "Alternatives," the Off-site Water Facility Alternatives would not involve the construction of new commercial or residential uses and, therefore, no new increased demand for parking would directly result in response to the Off-site Water Facility Alternatives. Sufficient employee parking would be provided on-site at the WTP, if constructed. Based on these considerations, the Off-site Water Facility Alternatives is not expected to result in inadequate parking capacity and no impact would occur. Therefore, this issue area is not discussed further.

## IMPACT ANALYSIS

Impacts that would occur under each of the Off-site Water Facility Alternatives are identified as follows:

NCP (No USACE Permit Alternative)

PA (Proposed Off-site Water Facility Alternative)

1 (Off-site Water Facility Alternative 1 – Raw Water Conveyance – Gerber/Grant Line Road Alignment and White Rock WTP)

1A (Off-site Water Facility Alternative 1A Raw Water Conveyance – Gerber/Grant Line Road Alignment Variation and White Rock WTP)

2 (Off-site Water Facility Alternative 2 Treated Water Conveyance – Douglas Road Alignment and Vineyard SWTP)

2A (Off-site Water Facility Alternative 2A Treated Water Conveyance – Excelsior Road Alignment Variation and Vineyard SWTP)

2B (Off-site Water Facility Alternative 2B Treated Water Conveyance – North Douglas Tanks Variation and Vineyard SWTP)

3 (Off-site Water Facility Alternative 3 Raw Water Conveyance – Excelsior Road Alignment and White Rock WTP)

3A (Off-site Water Facility Alternative 3A Raw Water Conveyance – Excelsior Road Alignment Variation and White Rock WTP)

4 (Off-site Water Facility Alternative 4 Raw Water Conveyance – Easton Valley Parkway Alignment and Folsom Boulevard WTP)

4A (Off-site Water Facility Alternative 4A Raw Water Conveyance – Easton Valley Parkway Alignment Variation and Folsom Boulevard WTP).

The impacts for each alternative are compared relative to the PA at the end of each impact conclusion (i.e., similar, greater, lesser).

IMPACT 3B.15-1 Temporary and Short-Term Reduction in Roadway Capacity during Construction. *Off-site Water Facility Alternatives construction could result in temporary reductions in roadway capacities, which could be substantial in relation to existing volume-to-capacity ratios on local roadways and congestion at intersections.*

### NCP, PA, 1, and 1A

Under these alternatives, construction-generated traffic would be temporary, approximately 36 months in duration, and therefore would not result in any long-term degradation in operating conditions or LOS on any roadways within the Zone 4 of the "Water" Study Area. The primary impacts from Off-site Water Facilities construction vehicle traffic would include temporary, short-term, and intermittent reductions of roadway capacities associated with the movement of construction equipment. Lane blockage caused by construction traffic would be temporary and limited to within the immediate vicinity of pipeline construction.

Pipeline construction would affect the roadway network in two ways. Construction would either cross a roadway or it would run parallel to a roadway within the public right-of-way. As proposed, these Off-site Facility Alternatives pipeline would run parallel to or longitudinally within the public road right-of-way and, as a result, portions of the roadway that would normally be used for traffic circulation or parking would be temporarily unavailable. This displacement could block two travel lanes, one travel lane and the adjacent shoulder/parking area, or just the shoulder/parking area, depending upon the pipeline's lateral placement within the road right-of-

way. It is estimated that lane blockages would last for durations varying between a few days for perpendicular encroachments to 2–3 weeks for parallel or longitudinal encroachments at any given segment of Grant Line Road, Gerber Road, and White Rock Roads. These **direct** and **indirect** impacts are considered **potentially significant**. ***[Similar]***

In addition to the above impacts, the use of large trucks to transport equipment and material to and from the Off-site Water Facilities work site could affect road conditions on the access routes by increasing the rate of road wear. The degree to which this impact would occur depends on the design (pavement type and thickness) and the existing condition of the road. Major arterials and collectors are designed to accommodate a mix of vehicle types, including heavy trucks. The potential impacts are expected to be negligible on those roads. However, lower-capacity roadways could be significantly impacted by construction equipment within the roadway. Therefore, this **direct** impact is considered **significant**. ***[Similar]***

Mitigation Measure 3B.15-1a: Prepare Traffic Control Plan.

Prior to construction, the City shall prepare a Traffic Control Plan for roadways and intersections affected by Off-site Water Facilities-related construction. The Traffic Control Plan shall designate haul routes and comply with requirements in the encroachment permits issued by the City of Rancho Cordova, Sacramento County, and Caltrans. The Traffic Control Plan to be prepared by the construction contractor(s) shall, at minimum, include the following measures:

- Maintaining the maximum amount of travel lane capacity during non-construction periods, possible, and advanced notice to drivers through the provision of construction signage.
- Maintaining alternate one-way traffic flow past the lay down area and site access when feasible.
- Heavy trucks and other construction transport vehicles shall avoid the busiest commute hours (7 a.m. to 8 a.m. and 5 p.m. to 6 p.m. on weekdays).
- The City shall provide a minimum 72-hour advance notice of access restrictions for residents, businesses, and local emergency response agencies. This shall include the identification of alternative routes and detours to enable for the avoidance of the immediate construction zone.
- The City, in cooperation with its contractor(s), shall provide a phone number and community contact for inquiries about the schedule of the Off-site Water Facilities throughout the construction period. This information will be posted in a local newspaper, via the City's web site, or at City Hall and will be updated on a monthly basis.
- To the extent practical depending the alignment of the selected Off-site Water Facility Alternative, the City shall maximize opportunities for coordinated construction and installation of the conveyance pipeline with other planned roadway improvement projects.

**Implementation:** City of Folsom Utilities Department

**Timing:** Prior to and during construction of all Off-site Water Facilities

**Enforcement:**

1. For structural improvements that would be located within the City of Folsom: City of Folsom Neighborhood Services Department and City of Folsom Community Development Department.
2. For structural improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department.

3. For structural improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department.

Mitigation Measure 3B.15-1b: Assess Pre-Off-site Water Facilities Roadway Conditions.

Prior to construction, the City's construction contractor(s) shall be responsible for assessing current road conditions for Off-site Water Facilities-related haul routes including the local access roads and develop post construction road restoration requirements. As part of the encroachment permitting process, an agreement shall be entered into with applicable jurisdictions prior to construction that details post construction road restoration requirements. Staff with the City of Rancho Cordova and Sacramento County shall review the post construction restoration standards for each of the affected roadways. The City shall perform roadway repairs or rehabilitation as necessary such that post construction requirements are met.

**Implementation:** City of Folsom Utilities Department

**Timing:** Prior to and during construction of all Off-site Water Facilities

**Enforcement:**

1. For structural improvements that would be located within the City of Folsom: City of Folsom Neighborhood Services Department and City of Folsom Community Development Department.

2. For structural improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department.

3. For structural improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department.

2, 2A, and 2B

Traffic-related impacts to roadways would be similar under Alternatives 2 and 2A to those described for Off-site Water Facility Alternative 1. Under Off-site Water Facility Alternatives 2 and 2A, these impacts would be shifted to Vineyard Road, Eagles Nest Road, Douglas Road, and White Rock Road. Under Off-site Water Facility Alternative 2A, the alignment would be shifted from Eagles Nest Road (Off-site Water Facility Alternative 2) to Excelsior Road which has a higher ADT. Under Off-site Water Facility Alternative 2B, the shortened alignment would only impact Ivan Way, Douglas Road, and White Rock Road. Nevertheless, these alternatives could result in similar roadway construction impacts as identified for the Proposed Off-site Water Facility Alternative, and the **direct** and **indirect** impacts would be considered **potentially significant**. ***[Similar]***

Mitigation Measure: Implement Mitigation Measures 3B.15-1a and 3B.15-1b.

3 and 3A

Traffic-related impacts to roadways would be similar under Alternatives 3 and 3A to those described for Off-site Water Facility Alternative 1. Under Alternatives 3 and 3A, these impacts would be shifted to Vineyard Road, Eagles Nest Road, Douglas Road, and White Rock Road. Under Alternative 3A, the alignment would be shifted from Eagles Nest Road (Off-site Water Facility Alternative 3) to Excelsior Road which has a higher ADT. These alternatives could result in similar roadway construction impact as identified for the Proposed Off-site Water Facility Alternative, and **direct** and **indirect** impacts would be considered **potentially significant**. ***[Similar]***

Mitigation Measure: Implement Mitigation Measures 3B.15-1a and 3B.15-1b.

4 and 4A

Traffic-related impacts to roadways would be similar under Off-site Water Facility Alternatives 4 and 4A to those described for Off-site Water Facility Alternative 1. Under Off-site Water Facility Alternatives 4 and 4A, these impacts would be shifted to Vineyard Road, Eagles Nest Road, Douglas Road, White Rock Road, and potentially, Sunrise Boulevard. Under Off-site Water Facility Alternative 4A, the alignment would be shifted from Eagles Nest Road (Off-site Water Facility Alternative 2) to Excelsior Road which has a higher ADT. These alternatives could result in similar roadway construction impact as identified for the Proposed Off-site Water Facility Alternative, and **direct** and **indirect** impacts would be considered **potentially significant**. ***[Similar]***

Mitigation Measure: Implement Mitigation Measures 3B.15-1a and 3B.15-1b.

Implementation of Mitigation Measures 3B.15-1a and 3B.15-1b would ensure that temporary and short-term impacts to traffic and roadway LOS would be reduced to a **less-than-significant** level by ensuring the continued movement of traffic during construction, minimizing disruption to adjacent residences and bike access, and providing sufficient notification to the affected population of alternate travel routes.

IMPACT 3B.15-2 Exceedance of Established Level of Service Standards for Local Roadways. *The implementation of Off-site Water Facility Alternatives could cause traffic conditions to exceed, either individually or cumulatively, a level of service standard established by the County congestion management agency for designated roads or highways.*

NCP, PA, 1, 1A, 2, 2A, 2B, 3, 3A, 4, and 4A

During construction, traffic would be generated from two sources: truck trips to and from the work site, and construction work crews and supervisor staff commuting to and from the work site. Based on a maximum of three construction crews, the maximum number of crew members accessing portions of Zone 4 of the "Water" Study Area at any one time would be up to 66 individuals or up to 66 additional vehicle trips per day for both the morning and evening peak hours. In addition, during peak excavation and earthwork activities, the Off-site Water Facility Alternatives could generate up to 20 round-trip truck trips per day. However, average daily earthwork truck trips would be less and range from about 1 to 4 round trips per day during much of construction and could be scheduled to avoid the peak traffic hours. Additional trips to or from the construction site would occur during project initiation with the delivery of various equipment to the site such as excavators, tracked excavators, wheel loaders, concrete pump trucks, graders, backhoes and other equipment (see Chapter 2, "Alternatives"). All construction-generated fill and excavated spoils would be used as fill material for the WTP site or transported to the Kiefer Landfill for disposal. For this reason, it is reasonable to conclude that no transportation of fill to areas outside of Zone 4 of the "Water" Study Area would occur in conjunction with the Off-site Water Facility Alternatives.

If all the construction-related equipment and the construction crews accessed or exited the site during the evening peak-hour the maximum number of vehicles would be up to 86 at any one time. In recognizing the poor operating conditions on portions of local roadways during the peak traffic hours (e.g., Sunrise Boulevard), the addition of project-related construction traffic could temporarily lead to further degradation in traffic movements. **Potentially significant direct** and **indirect** transportation impacts associated with the Off-site Water Facilities would occur. ***[Similar]***

As provided in Chapter 2, "Alternatives," the operation of the WTP under any of the alternatives are expected to require up to 10 employees, on average, each of which could produce 4 daily vehicle trips for a total of 40 daily trips or less. Given that these trips would be dispersed throughout the day and the roadway network, they would not be expected to not result in any long-term degradation in operating conditions or LOS on any local roadways

or intersections. For these reasons, long-term, **direct** and **indirect** traffic-related impacts associated with the Off-site Water Facility Alternative are considered **less than significant**. ***[Similar]***

Mitigation Measure: Implement Mitigation Measure 3B.15-1a.

Implementation of Mitigation Measure 3B.15.1a would ensure that temporary and short-term impacts to roadway and intersection LOS would be reduced to a **less-than-significant** level by ensuring the continued movement of traffic past the construction zone and provision of alternative routes. Because of the low volume of daily trips generated by the combined operation of the Off-site Water Facility Alternatives, a **less than significant**, long-term operational impact is expected.

IMPACT 3B.15-3 Increased Traffic Hazards on Local Roadways. *Implementation of the Off-site Water Facility Alternatives could substantially increase hazards on local roadways due to the presence of incompatible uses, such as construction equipment.*

NCP, PA, 1, 1A, 2, 2A, 2B, 3, 3A, 4, and 4A

Haul trucks and heavy equipment used during the construction of the Off-site Water Facilities would interact with vehicle movements on existing roadways. The creation of a construction work zone on high-volume or high-speed roadways would increase the potential for traffic safety hazards because of the need to safely transition traffic into the travel lane(s) adjacent to the work zone. Because of the temporary disruption to traffic flow, the removal of lanes, the presence of construction equipment in the public right-of-way, and the localized increase in traffic congestion, drivers would be presented with unexpected driving conditions and obstacles. This could potentially result in an increased occurrence of automobile or haul truck accidents and would be considered a **potentially significant direct** impact. **No indirect** impacts would occur. ***[Similar]***

Mitigation Measure: Implement Mitigation Measure 3B.15-1a.

Implementation of Mitigation Measure 3B.15.1a would ensure that construction-related hazards on local roadways would be reduced to a **less-than-significant** level by ensuring proper notification to drivers of construction zones. All roadway-related improvements (e.g., pipelines) would be located sub-surface and would not contribute to any significant roadway design hazards and no long-term impacts are anticipated.

IMPACT 3B.15-4 Possible Inadequate Emergency Vehicle Access. *Construction of the Off-site Water Facilities could result in disruptions to emergency access.*

NCP, PA, 1, 1A, 2, 2A, 2B, 3, 3A, 4, and 4A

Access to driveways and to cross-streets along the pipeline construction route would be temporarily blocked due to trenching and paving operations during construction of the Off-site Water Facilities. This could be disruptive, particularly with respect to agricultural operations as well as for movement of emergency vehicles through the Off-site Water Facilities Study Area. Vehicle access would be restored at the end of each work day through the use of steel trench plates or trench backfilling. Emergency vehicle access to the residences in the immediate vicinity of the Off-site Water Facilities would have a minimal potential for being impeded for a few minutes. Construction-related vehicles would yield to emergency vehicles, as necessary. Based on these considerations, the **direct** impact is considered **less than significant**. **No indirect** impacts would result. ***[Similar]***

Mitigation Measure: No mitigation measures are required.

## 3B.15.4 RESIDUAL SIGNIFICANT IMPACTS

Through the implementation of Mitigation Measure 3B.15-1, potentially significant traffic impacts resulting from the construction of the Off-site Water Facility Alternatives would be reduced to a less-than-significant level through proper construction sequencing, maintenance of two-way traffic, where possible, during construction, and measures to avoid the creation of traffic hazards. Based on these findings, the Off-site Water Facility Alternatives would not result in any residual significant and unavoidable impacts to traffic.