3.14: TRANSPORTATION AND TRAFFIC

Introduction

This section examines the potential effects the project would have on local transportation, which is mainly focused on surface streets, county road, and highway circulation. The analysis focuses on effects during construction when local roads and highways would be most affected by the project. Effects on local streets, roads, and highways during project operations are also described. This section addresses the adequacy of traffic minimization measures included as part of the proposed project and whether the potential impacts associated with traffic and congestion conform to local planning guidelines.

Environmental Setting

For this environmental review, local roadways were evaluated using level of service (LOS) criteria. LOS ratings primarily address the roadway's existing traffic volume compared to the roadway's full capacity. LOS "A" represents free-flow conditions and indicates that only 60% or less of the roadway traffic capacity is being utilized. LOS "F" represents congested conditions and indicates that the roadway is operating at more than 100% of its designed traffic capacity. Based on traffic surveys conducted both as part of this environmental review and by the Butte County Department of Public Works, local roadways in the study area are rated at LOS "A". No local roadways in the study area have substantial traffic congestion. Roadway and intersections are rated at varying levels of service (LOS) as outlined in Table 3.14-1.

Table 3.14-1: Roadway and Intersection Criteria

	Description	V/C or ICU[1]
LOS A	LOS "A" conditions are characterized by free flow operations. Vehicles are unimpeded in their ability to maneuver within the traffic stream, and stopped delay at intersections is minimal.	0-0.6
LOS B	LOS "B" conditions are characterized by travel speeds which are within 70% of free flow operational speeds. Vehicles are slightly restricted in their ability to maneuver within the traffic stream, and stopped delay at intersections is not bothersome to most drivers.	0.61-.07
LOS C	LOS "C" conditions are characterized as stable operations. The ability to maneuver and change lanes is somewhat restricted, and travel speeds may drop to 50% of free flow speeds. Some queuing typically occurs at signalized intersections, however all vehicles clear the intersection on all or nearly all cycles.	0.71-0.8
LOS D	LOS "D" conditions are characterized by high-density traffic flows. Travel speeds may range as low as 40% of free flow operational speeds. Vehicles are restricted in their ability to maneuver within the traffic stream, and one or more vehicles may not clear the intersection within a single signal cycle on a regular basis.	0.81-0.9
LOS E	LOS "E" conditions are characterized as operations at or near capacity. There is little or no freedom to maneuver within traffic stream. Comfort and convenience levels are low, and driver frustration is generally high. Operations at this level are generally unstable, with even minor disturbances or disruptions resulting in the breakdown of operations and substantially increased delays. The failure of vehicles to clear an intersection in a single cycle is a regular occurrence.	0.91-1.00
LOS F	LOS "F" conditions represent forced breakdown flow. The traffic volume approaching location exceeds the capacity of the system at that location. Intersections often become the focal point for roadway system failure. Operations are characterized by extensive queues and long delays. Some or all vehicles fail to clear the intersection during every signal cycle.	>1.00

[1]V/C stands for Volume/Capacity ratio, ICU stands for Intersection Capacity Utilization

SOURCE: Highway Research Board, "Highway Capacity Manual," Special Report 87, 1965

REGIONAL SETTING

Several state highways and local roads provide access to the project area. Old Highway 99 and Interstate 5 traverse the project area in the north-south direction. Access to the Delevan Interconnect Facility and western project pipeline section is available off I-5 at Delevan and Delevan Road. Access to the Remote Facility Site, Well Pad Site, and Storage Loop Pipeline would be primarily through Sutter County off new State Route 99 at Live Oak along Pennington Road and North Butte Road to the Remote Facility Site. Traffic to the Well Pad Site travels north on West Butte Road, west on North Butte Road through Sutter County, then north into Butte County on Wild Goose Club Road.

LOCAL SETTING

Butte & Sutter County

Several state highways and local roads provide access to the project study area in Butte County. East of the Sacramento River, the primary access to the project is via State Route 99 through Gridley and the Gridley-Colusa Highway (referred to as the Gridley Road in this report). Access to the Well Pad Site is from the south via the Sutter County North Butte Road and the private road to and through the Wild Goose Club area. Private access through the Wild Goose Club has been secured in the storage lease agreement. This is the sole access route to the Well Pad Site through the Wild Goose Club. Typically, this private road experiences low levels of traffic. Operations staff currently utilizes this access road several times per week to check the Well Pad Site. An on-site habitat manager is the only other frequent user of this road. Club member use of the access road occurs typically only during the duck-hunting season.

In Butte County, Gridley Road, Pennington Road and West Liberty Road have a "Level A" LOS as Percent of Capacity rating. Table 3.14-1 provides descriptions of the LOS Roadway and Intersection Criteria. The other roads in the project study area also have relatively low traffic volumes. The most recent traffic counts (obtained during the summer of 1995 from the Butte County Department of Public Works) showed the following average daily traffic volumes:

Gridley Road	750 cars
Pennington Road at Gridley Road	270 cars
Pennington Road at Sutter County line	460 cars
West Liberty Road	30 cars

These counts were obtained prior to implementation of the initial WGSI project development and would be slightly higher now that the project is operational. Principal users of West Liberty Road are workers and delivery vehicles driving to the Remote Facility Site, farmers accessing their fields, the caretaker at the duck club located at the end of the road, and fishermen using the road to access the 833 Canal.

The two Sutter County roads to be used during construction are North Butte Road and West Butte Road. North Butte is a gravel road west of its intersection with West Butte, and paved east of this intersection. West Butte Road is paved along its entire length. Traffic counts conducted in 1999 for these two roads indicated average daily traffic volumes of 369 cars on North Butte west of Almond Orchard Road and 244 cars on West Butte Road north of Pass Road. Both roads have a "Level A" LOS (Sutter County Department of Public Works 1999).

Colusa County

Within Colusa County, access to the Delevan Interconnect Facility and the Line 400/Line 401 Connection Pipeline route would be via existing paved, gravel, and dirt private and public roads.

The project study area roadways within Colusa County have a "Level A" LOS. Traffic counts have not been conducted on these roads because the population and traffic volumes in this area are low.

There are no roadway crossings or Princeton Ferry service across the Sacramento River in the project vicinity between Colusa and Butte City. The 1989 Colusa County Transportation Plan recommends that a bridge be built about three miles south of Princeton at the extension of Gridley Road. Although the bridge is recommended in the Transportation Plan, feasibility studies have never been conducted and it is not anticipated that the bridge would be built in the near future.

The preferred pipeline route would parallel Gridley Road from the Butte/Colusa County border for 3 miles along a proposed Scenic County Road. In addition to the county roads, the Line 400/Line 401 Connection Pipeline also crosses a state highway and an interstate highway. State Route 45, also a proposed scenic route, parallels the west side of the Sacramento River. Interstate 5 runs along the west side of the project study area adjacent to the community of Delevan. The Union Pacific Railroad tracks run parallel to the east side County Road 99, which serves as the frontage road for Interstate 5.

Regulatory Setting

The following state, regional, and local plans and policies seek to preserve the level of service quality for traffic in the project area.

FEDERAL SETTING

No federal regulations apply to potential impacts on transportation and traffic in the project area.

STATE/REGIONAL SETTING

California Department of Transportation

The State Department of Transportation (DOT, Caltrans) is the primary State agency responsible for improving and maintaining roads for the State of California. In areas with designated State Routes (SR), the State has responsibility to administer and maintain these roads while the local county is responsible for local roads. Local jurisdictions work with the DOT to designate transportation network requirements and critical areas in need of improvement.

The proposed project study area is within Caltrans District 3, which includes Butte, Colusa and Sutter Counties. The District is responsible for planning, designing, constructing, and maintaining 1450 miles of State Highways in 11 Sacramento Valley and northern Sierra counties, including Interstates 5 and 80, U.S. 50, and Highway 99. District 3 transportation partners within the project area include Sacramento Area Council of Governments (SACOG) and Butte County Association of Governments (BCAG).

LOCAL SETTING

Butte County General Plan

Butte County regulates traffic primarily through implementation of the objectives and policies contained in the Butte County Circulation Element (Butte County 1981). The following policies are applicable to the proposed project.

> **1.1.5.** Construction of additional gas and petroleum products pipelines and electrical transmission lines shall occur along existing utility corridors.
>
> **3.1.2.** The effects of noise from County roads, highways, and airports shall be mitigated to comply with all noise control policies in the General Plan.
>
> **4.1.2.** Rural arterial road and highway traffic capacity levels should be planned to provide a level of service "B", and be considered to be providing acceptable service at level of service "C" when fiscal, environmental, or site constraints are prohibitive.
>
> **5.1.1.** All road systems, both public and private, shall provide for the safe evacuation of residents and adequate access for fire and other emergency services by providing at least two means of emergency access to an interconnected collector system.

Colusa County General Plan

Colusa County regulates traffic through the objectives and policies contained in the Colusa County General Plan Transportation Element (Colusa County 1989). Caltrans has determined the minimum acceptable LOS on all state highways in Colusa County. LOS ”B” is considered the lowest acceptable condition on Interstate 5, LOS “C” is the lowest acceptable condition on Highway 20, and LOS “D” is the lowest acceptable condition on Highways I 6 and 45. The following policies from the Colusa County Circulation Element of the General Plan (1989) are applicable to the proposed project.

> **CIRC-39.** Any proposed pipeline or transmission line within the county shall be aligned so that interference with agriculture is minimized.
>
> **CIRC-49.** Any earthmoving or road reconstruction project should be followed by seeding and vegetation, which restores a natural appearance.
>
> **CIRC-55.** Permitted roadside commercial uses should have an approved public access plan. The plan should address public safety and ease of access to the site.

Sutter County General Plan

Sutter County regulates traffic through the object and policies contained in the Sutter County General Plan Transportation and Circulation Element (Sutter County 1996). Sutter County has proposed improvements to several state, urban, and rural roads in the County based upon proposed land uses and 1995 Sacramento Area Council of Governments (SACOG) regional population and employment forecasts for 2015. Future roadway improvements may vary as new land uses and transportation facilities are developed.

Regional travel north-south through Sutter County is limited to State Routes 70, 99 and 113. East-west travel is confined to State Route 20. A system of County roads with varying

capacities interconnects this regional system. Sutter County has identified LOS "D" as the minimum acceptable standard. There are no roadways within Sutter County that are operating beyond capacity. The following policies from the Sutter County Transportation and Circulation Element of the General Plan are applicable to the proposed project.

> **2.A-4.** The County shall strive to develop and manage its roadway system to maintain a minimum Level of Service D (LOS D).
>
> **2.A-5.** The County's level of service standards for the state highway system shall be those standards adopted in the Bi-County Congestion Management Plan.
>
> **2.A-6.** The County shall require all new development projects to analyze their contribution to increased traffic and to implement improvements necessary to address the increase.
>
> **2.A-7.** The County shall assess fees on new development sufficient to cover the costs of the project's impact on the local and regional transportation system (See Implementation Program 3.4)
>
> **2.A-9.** The County shall maintain ongoing coordination with the Bi-County Transportation Commission, Caltrans, SACOG and other jurisdictions to address local and regional transportation issues.

The Bi-County Congestion Management Plan has not been updated for approximately five years. Sutter County relies on the SACOG to provide guidance for transportation planning (Barrett 2002). SACOG recently published the *Adopted Regional Transportation Improvement Program (RTIP)* in December 2001. Along with the Sutter County General Plan, the RTIP provides the source for LOS standards in the county.

The major objective of these policies is to avoid traffic congestion from new project developments, to avoid interference with agricultural operations due to construction traffic, and to ensure safety on roads during new project construction. These objectives can be accomplished through implementation of the following measures proposed by WGSI as conditions of the project.

- Utilizing existing utility corridors for new pipeline installation when feasible
- Establishing a plan for safe evacuation of personnel during project construction and operations
- Preparing a Transportation Management Plan for new development projects that includes payment of fees to the County and/or road repair, and other restoration of roads due to project impacts
- Coordinating with all state and local jurisdictions for project construction and operation traffic impacts
- Complying with any regional and local plans governing transportation

Environmental Analysis

AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

The following are areas of potential environmental concern that may be associated with implementation of the proposed project:

- Substantially increase traffic in relation to the existing traffic load and capacity of the street system;
- Substantially exceed, either individually or cumulatively, a level of service standard established by the appropriate county's traffic congestion management agency for any designated roads or highways; or
- Create inadequate emergency access, parking capacity, entry and crossing of a ROW.

THRESHOLD OF SIGNIFICANCE

The significance criteria used to determine if the project would cause a significant impact on the environment are:

- **Degradation of Current Traffic Load and Capacity.** Project-related actions are considered to have a significant impact on the traffic capacity of the area if they would alter the traffic patterns or conditions in a way that results in a significant adverse impact on the current quality of the system. A significant impact would result from degradation of a bridge or road within the project area. In addition, if vegetation or landscaping of the existing roads is disturbed due to project construction equipment, this would be considered a potentially significant impact on traffic.
- **Exceedance of LOS Standards.** If project operations would increase the existing County LOS levels or the minimum standard proposed in a County General Plan, a significant impact would result.
- **Inadequate Emergency Access or Disturbance to Entries and Crossings.** Conflict of traffic access in agricultural, residential, or commercial areas within the project area would be considered a significant impact if traffic adversely affects movement into and out of these areas or creates a problem with emergency vehicles.

IMPACT DISCUSSION

Potential transportation impacts fall into two categories: traffic impacts associated with construction, and physical impacts to existing roads and bridges from the weight and volume of construction and operation vehicles.

Impact 3.14-1: Potential for Temporary Disruption in Circulation from Project Construction

Additional traffic on local roadways during construction of the proposed project components would inconvenience residences, businesses, and adjacent agricultural operations. Although the extent of public roads affected by construction of the proposed pipeline alignment is limited, the potential remains for construction traffic and construction activities within and adjacent to road rights-of-way to disrupt routine agricultural operations. This impact would be significant because it conflicts with County policies. Implementation of Mitigation Measure 3.14-1 would reduce this impact to a less than significant level.

Light grading and graveling may be required to prepare unpaved County roads for construction usage. However, heavy traffic on these roads may result in washboard or

other surface impacts. Paved roads in rural areas typically do not have sufficient road base and asphalt to sustain heavy construction traffic, and potholes may result. An uneven road surface would have a tendency to slow traffic flow.

Well Pad Site. The Well Pad Site is accessed from the south via a private gravel road through the Wild Goose Club site. A new access road and bridge were installed across the Cherokee Canal just south of the Wild Goose Club compound as part of the initial project development.

All heavy equipment associated with construction and well drilling at the Well Pad Site would be brought in from the south through an access arrangement with the Wild Goose Club. This private gravel road is one-way from the County road (North Butte Road). Construction traffic would be closely monitored and coordinated, especially when dump trucks deliver the fill material for the pad. To facilitate traffic coordination, a staging, turning, and parking area for the dump trucks would be established on the northwest corner of the intersection of North Butte Road and the Wild Goose Club access road. This area and the county road right-of-way were used during initial project development as truck turning and staging areas.

The primary haul routes on public roads for imported fill would be either North Butte Road or West Butte Road. As was done during initial project development, the condition of these roads would be reviewed by WGSI with staff from Sutter County Public Works prior to and following construction. The County would be reimbursed for road repairs necessitated by damage from construction traffic and hauling.

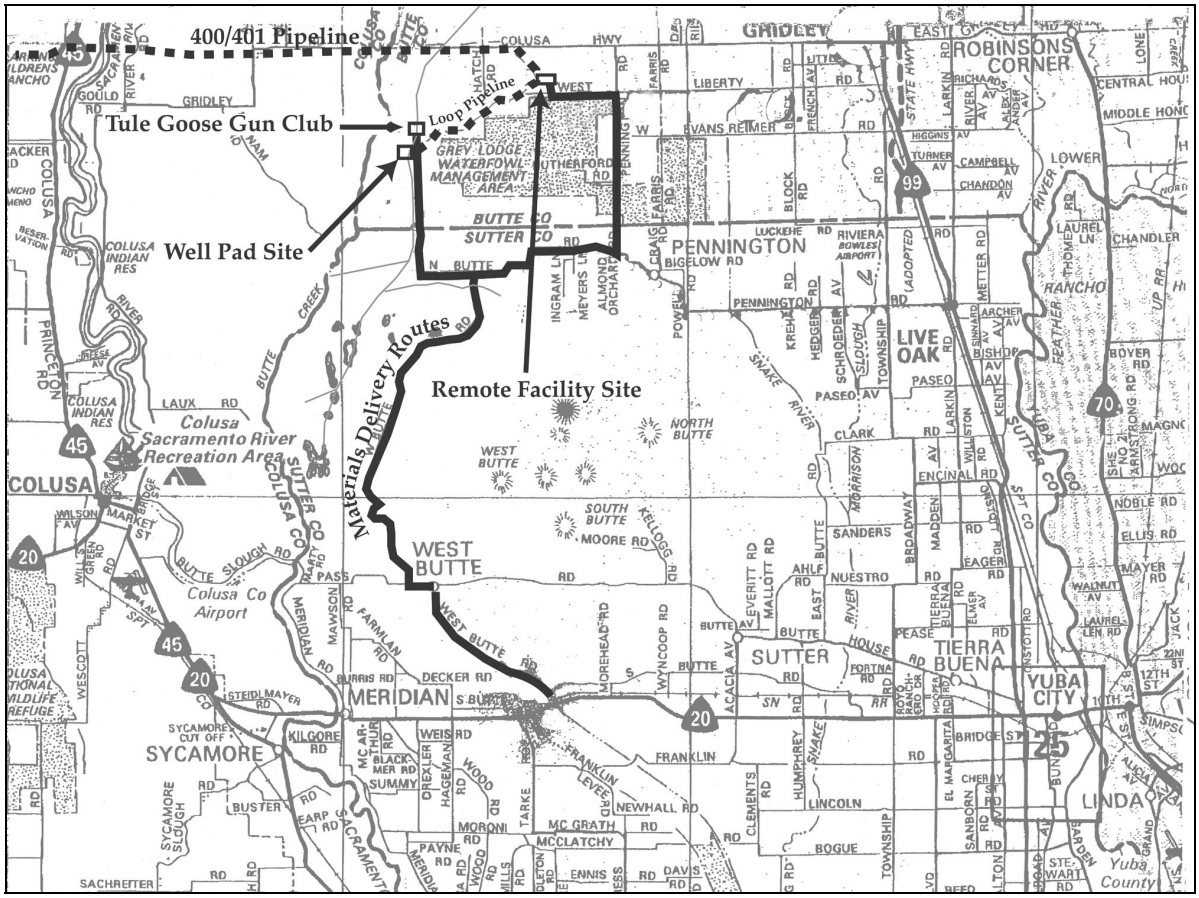
Storage Loop Pipeline. Existing paved, graveled, and dirt public and private roads in the agricultural areas would be used to gain access to the pipeline ROW. The existing farm roads in the area were sufficiently wide to accommodate construction equipment during initial project development, and no additional construction for access roads is anticipated. Only light grading or gravelling and culvert repair or replacement may be required to prepare these roads for the anticipated construction usage. Once the ROW is cleared, most pipeline construction equipment and vehicles would use the ROW to travel along the pipeline.

The pipeline route crosses the 833 Canal twice, but the bridges across the canal can only support light truck weights. Consequently, four separate construction access routes would be needed for this pipeline. For the easternmost segment from the Remote Facility Site to the first crossing of the 833 Canal, access would be along farm roads and the ROW from the end of West Liberty Road. For the segment along the north side of the 833 Canal between the two bores, access would be along farm roads from the end of Hatch Road or from Gridley Road through the Pipers Patch Club. Since the farm access road for this pipeline segment runs along the top of the levee, placement of temporary fill to form a ramp on the levee face may be required to allow construction equipment to safely access the ROW below. This fill would be removed following construction and the levee face would be returned to its preconstruction configuration and appearance.

Construction access to the westernmost pipeline segment on the Tule Goose Club would use existing access roads through the Gray Lodge as was done during initial project development. An alternate access route for heavy vehicles to this last pipeline segment may be from the south, through the Wild Goose Club, along the east side of the Cherokee Canal past the Sprig Meadows Duck Club to the ROW. This route would only be used if

the route through the Gray Lodge or along the pipeline ROW were somehow blocked by construction activities or otherwise unusable. Access from the Well Pad Site to the pipeline ROW for light vehicles would be north along the Cherokee Canal Road, crossing the bridge into the Tule Goose clubhouse, then crossing the bridge over the 833 Canal to the ROW. Access to the Well Pad Site for the last section of pipeline would be via the Wild Goose Club as described above (Figure 3.14-1).

Figure 3.14-1: Construction Access to the Well Pad Site and Remote Facility Site



SOURCE: MHA 2002

Remote Facility Site. Heavy equipment for the construction at the Remote Facility Site would be brought in on West Liberty Road via Gridley Road and Pennington Road. The existing bridge on West Liberty Road was upgraded during initial project development to handle standard maximum-weight loads. Material delivery from Sutter County would use West Butte Road, North Butte Road and Pennington Road. As was done during initial project development, the condition of these roads would be reviewed with Butte and Sutter County Public Works Department staff prior to construction and then following construction. The counties would be reimbursed for road repairs necessitated by damage from construction traffic and hauling.

Line 400/401 Connection Pipeline and Delevan Interconnect Facility. Existing paved, graveled, and dirt public and private roads in the agricultural areas would be used to gain access to the pipeline ROW. The existing farm roads in the area are sufficiently wide to accommodate large farm tractors and harvesters and no additional access roads for construction equipment are anticipated. Light grading or gravelling and culvert repair or replacement may be required to prepare these roads for the anticipated construction usage. Once the ROW is cleared, most pipeline construction equipment and vehicles would use the ROW to travel along the pipeline. There are several major canals and ditches that would be crossed by the pipeline. The availability and adequacy of bridges has not yet been field verified. At the levee on the east side of the Sacramento River, the existing access roads up and over the levee are relatively steep and narrow. Subject to approval by the State Reclamation Board, temporary fill may be placed on the face of the levee to form a ramp to allow construction equipment to safely cross over the levee. This fill would be removed following construction and the levee face would be returned to its preconstruction configuration and appearance.

Once all necessary access rights have been obtained and the pipeline construction contract awarded, WGSI and the contractor would review the route and jointly prepare a construction access plan for this project component. The access plan would identify specific routes to the ROW from public roads, equipment refueling sites, truck turnaround areas, and water truck filling areas on both public and private roads. Construction staging areas other than those described above that better suit the contractors' needs may also be identified at this time. Any required supplemental environmental surveys would be conducted of access routes and staging areas, and the results included in the plan. This access plan would be a component of the Transportation Management Plan, which would be submitted for lead agency review and approval.

The proposed Line 400/401 Connection Pipeline would cross several county roads, one state highway, and Interstate 5. State Route 45 and I-5 would be bored, so no physical impacts to these roads would result from pipeline installation. Generally, paved county roads would be bored and un-paved roads would be trenched. Trenching may potentially impact road base and surface integrity. Adherence to encroachment permit design standards for backfill, road base replacement, compaction and surface restoration would ensure no significant impacts result from the trenched crossings.

The Delevan Interconnect Facility would be located on the existing private paved road to the Delevan Compressor Station. Access to this private road is via graveled Delevan Road from Glenn County to the north, or from the east via the end of Dirks Road in Colusa County.

> **WGSI Measure 3.14-1.** Develop and Implement a Transportation Management Plan. WGSI will prepare and implement a comprehensive Transportation Management Plan. The Plan objectives are to minimize transportation-related effects and inconveniences to local residents and farm operations, and to establish a procedure to restore and/or maintain existing access roads to at least preconstruction conditions. The Plan will identify applicable agency requirements, prescribe responsibilities and coordination by and between the agencies, WGSI and the construction contractor, and outline performance requirements for the use of public and private construction access roads and for traffic management. Key implementation measures of the plan include:
>
> - Coordinate the timing and route selection for movement of heavy equipment and truck traffic on county roads with the Butte, Sutter, and Colusa County

Road Departments (Public Works) to minimize traffic and physical road impacts.

- Conduct a preconstruction assessment of access roads and repair any damage to county roads and bridges or private roads caused by project construction activities and traffic.
- Coordinate construction activities with county officials, landowners, and lessees to minimize disruption to local traffic, farming activities and movement of agricultural equipment.
- Obtain Encroachment Permits from Butte and Colusa Counties for the pipeline construction activities in or crossing county-maintained roads and restore the sub-base, base, and surface at trenched crossings to pre-project conditions or better.
- Provide traffic control at trenched county road crossings as required by Encroachment Permits.
- Provide breaks in spoil piles, trench, or pipe strings to accommodate agricultural field access during construction.
- Obtain and encroachment permit from Caltrans for crossings of the State Route 45 and Interstate 5 which will address specific boring techniques and pipeline design requirements.

As a result of the implementation of these measures and close coordination with Caltrans and the Butte, Sutter, and Colusa County Road Departments, potential construction traffic and road impacts on the lightly traveled county roads and agricultural roads in the project study area would be less than significant. No further mitigation is required.

Impact 3.14-2: Temporary Increase in Traffic in the Project Area During Construction

The primary traffic flow to and from the project study area would result from daily construction worker commute trips. During the peak construction worker employment period, approximately 204 workers would be present, spread throughout the project study area along the two pipelines, at the Delevan Interconnect Facility, at the Well Pad Site and at the Remote Facility Site. Workers are expected to commute to these worksites from the various communities listed in Table 3.12-2 in the Population and Housing Section. Since these communities are located in all directions from the project study area, commute traffic concentration in any one route would be minimal. Trips to the various staging areas may be noticeable for the short term of the construction activity, but because local roads in the project study area have extremely low traffic volumes, no alteration of the LOS is expected from construction related traffic. This impact would be less than significant

Secondary traffic flow to and from the project study area would be generated by trucks delivering pipe and other equipment and supplies to the Line 400 Interconnect Site, the Remote Facility Site, and the Well Pad Site. As many as 25 daily truck trips are anticipated for material delivery and removal at both the Delevan Interconnect Facility and the Remote Facility Site.

As a worst-case scenario if workers did not car-pool, combined construction employee traffic volumes with delivery and haul truck trips, project construction would entail 229 vehicle trips per day. This traffic would have a negligible effect on traffic volumes on

Highway 99 or I-5. Construction-related traffic would, however, represent a large increase in traffic volumes on local roadways during peak commute hours (approximately 100 trips per morning and afternoon peak periods). As discussed above, local roadways in the project area have extremely low volumes, and generally operate at LOS A. No alteration of LOS is expected from construction-related traffic.

Well Pad Site. The greatest concentration of material delivery traffic during construction would be to the Well Pad Site if the imported fill alternative is implemented. Approximately 23,000 cubic yards of imported fill material would be needed to elevate the Well Pad expansion area. During initial project development, a limited amount of fill material was imported from the West Butte gravel operation located on West Butte Road, approximately 19 miles south of the Well Pad Site. Assuming the West Butte gravel operation would be the source of fill for the Well Pad Site, approximately 66 daily round trips (132 vehicle trips) by dump trucks would be necessary to provide the required fill during the four-week pad construction period. The project-generated truck traffic would represent a 54 percent short-term increase in traffic volumes on West Butte Road, which would be noticeable to local residents. Since this short-term increase in traffic volume would not affect the existing LOS, this impact would be less than significant.

During construction and well drilling at the Well Pad Site, all heavy equipment would be brought in from the south through an access arrangement with the Wild Goose Club. In addition to serving the Wild Goose Club, the access road from North Butte Road also serves two other hunting clubs. This private road is essentially one-way with only a few locations wide enough to allow a turnout, potentially resulting in minor delays for the visitors to the hunting clubs during the short-term of the construction activity. This potential impact would be less than significant.

Level of Significance Without Mitigation. This impact would be considered less than significant.

Mitigation Measures. None required.

Impact 3.14-3: Potential for Interference with Emergency Response Routes and Accesses

Construction would take place in areas of low population and low traffic volumes. Access to all residences near project construction would be maintained except when closures are coordinated with the owner/tenants. Road closures for construction would be as authorized by encroachment permits, and coordinated with local Emergency Service Providers by the issuing agency. Construction-related activities within and adjacent to public road rights-of-way and increased truck and vehicle traffic along project access routes could temporarily increase response times for emergency response providers along affected roadways. The potential for such disruptions to emergency response routes is significant. Implementation of Mitigation Measure 3.14-1 would reduce this impact to a less than significant level.

Line 400/401 Connection Pipeline. Construction activities in the vicinity of the two private airstrips along the Line 400/401 Connection Pipeline route would be coordinated with the users/owners of those strips to ensure that the construction activities do not represent a hazard to the use of the strip.

There are several major canals and ditches crossed by the Line 400/401 Connection Pipeline route, but the availability and adequacy of the bridges are not currently known. Once all the necessary access rights have been obtained, the pipeline route would be reviewed and a construction access plan would be prepared.

The Union Pacific Railroad tracks adjacent to Old Highway 99 would be crossed with a directional bore, so rail traffic would not be affected. The Sacramento River is the only waterway in the project study area of sufficient size to support waterborne traffic. Pipeline installation by directional drilling under the river would avoid impacts to boat traffic. The project would not affect commercial air traffic.

Public Road Crossings. Subject to the terms of road encroachment permits, pipeline construction activities at road crossings would employ appropriate signage and traffic control. Steel plates would be installed over the trench if it must be left open overnight in areas where traffic might be expected. Construction traffic crossing public roads along the ROW would be controlled as required by the circumstances or applicable encroachment permits. Adherence to permit conditions would ensure there are no potentially significant impacts from pipeline construction across public roads. The crossings of I-5, SR 45, and all paved county roads would be by bores so traffic flow would not be affected.

> **WGSI Measure 3.14-2.** Develop and Implement a Transportation Management Plan. Implementation of Mitigation Measure 3.14-1, as described above, would reduce the potential for interference with emergency response and access routes to a less than significant level.

Level of Significance Without Mitigation. The above measure is proposed by WGSI as conditions of the project. With the incorporation of the described measure, this impact is less than significant and no further mitigation is required for this impact.

Mitigation Measures. None required.

Impact 3.14-4: Potential for Increase in Traffic During Project Operation

During the operational phase of the proposed project, a staff of approximately eight local employees would operate and maintain the facilities and pipeline. All project staff are stationed at the Remote Facility Site. The project Applicant currently anticipates that up to 8 full-time employees would be onsite during the day shift, 7 days per week. The present complement of four operations and maintenance staff would be supplemented with up to four additional staff at full project expansion. Evening and weekend call-out duties rotate among the staff. Since the project would eventually require only up to four additional permanent employees there would be an insignificant increase in worker commute traffic during project operations.

Project personnel conducting operations and maintenance activities at several of the project components use existing wetland management and farm access roads. WGSI currently must maintain or assist in the maintenance of these roads to keep them usable during the time of year when they are needed, as well as passable for the types of equipment to be used for the anticipated maintenance or operations activity. In addition, maintenance of the entrance roads into the Remote Facility Site and around its perimeter may be required. Maintenance consists of periodic grading to smooth the surface and remove ruts, then topping with additional gravel as needed. Major maintenance may occasionally be required where winter storm damage or general road deterioration has

occurred. In such cases, additional engineered road base fill and/or rock material may be imported to stabilize the sub-base and return the road to its original shape and elevation. Periodic cleaning of drainage culverts may also be required, involving mechanical removal of accumulated vegetation and silt around the inlet and outlet and within the culvert. Where culverts or other drainage structures have been damaged beyond repair, they may be removed and replaced by excavating across the road.

The potential for impacts to roads from operations and maintenance activities is significant as roads will sustain periodic damage that would require repair. Implementation of Mitigation Measure 3.14-2 would reduce this impact to a less than significant level.

Level of Significance Without Mitigation. This impact would be significant without mitigation. Implementation of this mitigation measure would reduce the impact to less than significant.

Mitigation Measures. The following describes the mitigation measure proposed for this impact.

> **Mitigation Measures 3.14-1.** Develop an Operations Road Maintenance Plan.
>
> WGSI shall prepare and implement a Road Maintenance Plan for use during operations and maintenance activities. The Plan objectives are to minimize road impacts due to project operation, and to establish a procedure to maintain existing access roads to a specified condition. The Plan will outline performance requirements for the road condition, prescribe responsibilities and coordination with adjacent property owners/tenants, identify a road maintenance schedule, and determine types of repairs necessary on an ongoing basis.