

4.12 INDIRECT AND GROWTH-INDUCING EFFECTS

This section includes an analysis of growth-inducing effects and an analysis of indirect effects related to off-site traffic mitigation and off-site pipeline development. Other indirect effects are analyzed in previous sections by issue area (air quality, noise, etc.).

4.12.1 GROWTH-INDUCING EFFECTS

NEPA requires that an EIS analyze “growth-inducing effects” (40 CFR § 1502.16 (b), 40 CFR § 1508.8 (b)). A growth-inducing effect is defined as an effect that fosters economic or population growth, or the construction of additional housing, either directly or indirectly. Direct growth inducement could result, for example, if a project involved the construction of new housing. Indirect growth inducement could result if a project established substantial new permanent employment opportunities (e.g., new commercial, industrial, or governmental enterprises) or if it would remove obstacles to population growth (e.g., expansion of a wastewater treatment plant that could allow more construction in the service area).

POTENTIAL RESIDENTIAL GROWTH

Alternatives A through D would create new jobs and induce some employees to move to Madera County, resulting in a County population increase ranging from 32 to 836. More detailed population increase calculations and potential socioeconomic effects resulting from population increase can be found in **Section 4.7.1**. The potential for this population increase to lead to an increase in residential development in the County is analyzed below.

There are three major areas where residential development is occurring and planned in Madera County: the City of Madera, the City of Chowchilla and the Sierra Nevada foothills (primarily the communities of Oakhurst and Coarsegold) (**Section 4.11.1**). At present, the number of housing units in the County is increasing. There were 1,921 housing unit permits issued in 2004 in Madera County. Through August 2005, 1,654 permits had been issued (**Table 4.12-1**).

The County also has a number of housing projects that are seeking to be permitted. The two largest projects provide for over 32,000 housing units to be developed (**Section 4.11.1**). Both projects are located near the City of Madera, one to the east along State Route 41 and one to the south along SR-99. In addition to planned new housing developments, Madera County currently contains 4,678 existing vacant housing units. Most of these units are located in the unincorporated County, with 621 and 166 units located in the Cities of Madera and Chowchilla, respectively (California Department of Finance, 2005).

Given the flurry of residential development currently occurring and planned for the future and vacant housing units present in the County, the proposed development would not have a significant impact or create demand for new housing developments. Alternatives A through D

are estimated to draw from 10 to 263 new households to the County, depending on the alternative (Section 4.7.1). Alternative A would draw the most new households to the County at 263. Yet, this number of new households would only occupy 0.8% of the proposed 32,500 units planned in the two large housing developments noted above. With each of the remaining alternatives, the impact on the housing market diminishes. Thus, the housing demand generated by the EIS alternatives would be absorbed by available and planned housing developments and no housing growth would occur.

TABLE 4.12-1
DWELLING UNIT PERMITS ISSUED – MADERA COUNTY

Date	2004			2005		
	Single Family Permits	Multi-Family Permits	Total Permits	Single Family Permits	Multi-Family Permits	Total Permits
January	132	6	138	66	9	75
February	80	32	112	102	93	195
March	89	30	119	196	4	200
April	144	0	144	170	19	189
May	155	0	155	198	0	198
June	153	2	155	280	0	280
July	120	0	120	200	2	202
August	122	2	124	234	81	315
September	101	0	101	N/A	N/A	N/A
October	283	119	402	N/A	N/A	N/A
November	209	10	219	N/A	N/A	N/A
December	126	6	132	N/A	N/A	N/A
<i>Total</i>	<i>1,714</i>	<i>207</i>	<i>1,921</i>	<i>1,446</i>	<i>208</i>	<i>1,654</i>

SOURCE: Innovation Group, 2005.

POTENTIAL COMMERCIAL/INDUSTRIAL GROWTH

This section examines potential commercial development, which includes hotel, retail (including restaurant), office, and industrial spaces. The two main areas of commercial development in the County are the incorporated areas of Madera and Chowchilla. Despite the strong residential development underway, commercial development has been lagging in Madera County. This might explain the numerous commercial developments planned in the vicinity of the Madera site (Section 4.11.1)

Hotel Development

It is not expected that visitors to the Alternative A developments would create demand for additional restaurants and hotels, as the casino/hotel resort development itself would be able to serve these needs. Alternative B would not contain a hotel component, but any demands for hotel stays would be accommodated by nearby hotels, including a hotel at the Avenue 18½/SR-99 interchange. Alternative C is a retail development that would not generate demand for hotel stays

and would also include restaurants. Alternative D includes restaurants and would generate a relatively small number of visitors that would utilize existing area lodging facilities.

Retail Development

In all of the alternatives, the proposed development would increase the demand for retail space. For Alternative A, 88 new direct, indirect, and induced jobs would require retail space (**Section 4.7.1, Table 4.7-2**). Fewer jobs would be required for each of the remaining alternatives. These 88 jobs would be created throughout Madera County, including a small number at the Alternative A casino/hotel resort, serving visitors to the Madera site and new residents. A large number of accommodation and food services jobs would be created, but most of these would be directly created at the proposed developments for each EIS alternative.

Alternatives A through C are specifically expected to generate the demand for a combination gas station, fast food restaurant, and a convenience store near the Avenue 17/SR-99 interchange. This demand would be generated by the large number of Madera site visitors utilizing this interchange. This demand would not be absorbed by any of the EIS alternatives, because no gas station development is proposed under any of the alternatives. Finally, while a gas station and fast food restaurants are situated at Avenue 18½, the other main SR-99 access to the Madera site, no such development is currently located in the vicinity of Avenue 17/SR-99.

The City of Chowchilla has very little in terms of existing retail, but there is some development that is in the planning stages. Currently, the City has one shopping center with a grocery store and a pharmacy. To add to this, a local car dealership is moving its operations to a 31-acre parcel in Chowchilla. The development will include not only the dealership but also a village-style shopping center which will feature small stores and pedestrian transportation. The development is in the engineering phase with the dealership to be operational in 18 to 24 months and the retail center to follow.

The City of Madera is experiencing a tremendous amount of pressure to develop retail space due to the increasing amount of residential development in the area. Many of the sites available for retail development, however, do not have the infrastructure to support it. This lack of infrastructure has slowed retail development in the City. Despite these issues, most existing retail development in the County is located in or around the City of Madera.

Currently, one of the targeted areas for development is the Avenue 17 exit off of State Route 99 (SR-99). There are developments planned for three of the four corners at this exit (**Section 4.11.1**). These plans are tentative and have not been officially acted upon, with the exception of one large retail development planned across SR-99 from the Madera site (the “Madera Town Center” development - see **Section 4.11** for a more detailed discussion of cumulative development planned in the vicinity of the Madera site). The demand for a combination gas

station, fast food restaurant, and convenience store is expected to be absorbed by large retail developments at the Avenue 17/SR-99 interchange (and possibly also other planned retail developments in this area, should they be developed), which are expected contain numerous restaurants and at least two gas station/convenience stores.

Visitors to the North Fork site would be served by existing businesses in the nearby community of North Fork. It is not expected that other new businesses would be needed in the market to serve these visitors.

Retail and food and beverage facilities may also be needed in the market to accommodate casino and non-casino employees that become new residents of the area, although these new employees would be expected to reside in residential developments that are being planned independently of the alternatives, and such retail developments would be planned for the communities as a whole. Therefore, with extensive residential housing in the process of being developed in Madera County, the demand for new retail space will continue to increase independent of any of the proposed EIS alternatives. Therefore, no commercial growth would occur due to any of the EIS alternatives, either from visitors to the sites or from new residents.

Office Development

Only a slight increase in the demand for office space as a result of any of the EIS alternatives is expected. Very little of the employment that would be generated would require office space. About 105 jobs (information; finance and insurance; real estate, rental, and leasing; professional, scientific, and technical services; management of companies and enterprises; and other services sectors – see **Table 4.7.2**) would result from Alternative A, and fewer from the other alternatives (**Section 4.7.1**).

The City of Madera has a very low office vacancy rate. The only spaces available are on the lower end of the quality spectrum. There is a new office development under construction that will have six buildings when it is completed. Of the six buildings, four have been occupied.

The City of Chowchilla has little to no office space, filled or available. The City has a few medical offices and other offices. There are no plans for any substantial office development.

What little office spaces is needed by the alternatives would be developed primarily in the incorporated areas of the County, mainly resulting from the service needs of the residential development. For instance, accountants and attorneys that would serve the growing residential population would utilize office space within the County. Again, office developments to serve the needs of currently planned residential development would not be induced by any of the EIS alternatives, because residential development has already occurred or is planned independent of the project alternatives.

Industrial Development

There would be very little demand for additional industrial space in the County as a result of the EIS alternatives. Specifically, 64 new jobs (agriculture, forestry, fishing, and hunting; mining; utilities; construction; manufacturing; wholesale trade; and transportation and warehousing sectors – see **Table 4.7-2**) would be associated with Alternative A (again, fewer from the other alternatives) (**Section 4.7.1**).

Most of the industrial development in Madera County is in and around the City of Madera. **Table 4.12-2** provides a listing of the currently available properties in and around the City of Madera and their sizes. The City of Chowchilla has very little built industrial space.

TABLE 4.12-2
VACANT INDUSTRIAL DEVELOPMENT – CITY OF MADERA

Development	Square Feet
Upright Building	290,000
Regency Building	175,000
County Building	28,000
Airport Industrial Park ¹	120,000
Berry Construction ²	100,000
Total	713,000

NOTES: ¹This building is in the engineering phase.

²Berry Construction is a developer that builds buildings and then sells them. The size of this building is an approximate value representing a typical building they construct.

SOURCE: Innovation Group, 2005.

The additional industrial jobs created can be absorbed by the vacant units in existing industrial spaces in the County or in existing industrial operations. The most likely scenario would be that the developments would generate new jobs at existing industrial locations as opposed to generating new industrial operations. These jobs would be dispersed among all of the current industrial operations in Madera County. Thus, no growth in industrial facilities would occur.

POTENTIAL GROWTH FROM INFRASTRUCTURE/UTILITIES IMPROVEMENTS

Improvements to area roadways and intersections would serve to mitigate the impacts of the project alternatives on area roadway networks, not to increase capacity of roadways to accommodate future unplanned growth. Should the Tribe construct on-site water/wastewater facilities, they would be sized solely to serve the project alternative and off-site connection would not be permitted. Should the Tribe decide to connect to local water and wastewater services, any water/wastewater pipeline extensions would be sized solely to serve the development proposed by the Tribe and no other connections would be permitted. Any other utilities improvements, such

as improvements to electrical facilities, would be minor and tailored specifically for the project alternative. Thus, no growth would be induced by the extension of infrastructure or the expansion of utilities resulting from the project alternatives.

4.12.2 INDIRECT EFFECTS FROM OFF-SITE TRAFFIC MITIGATION

The CEQ Regulations for Implementing NEPA (Section 1508.8) define indirect effects as impacts that are caused by an action that is later in time or farther removed in distance, but is a reasonably foreseeable result of the proposed project. Off-site traffic mitigation will potentially result in indirect effects to a variety of environmental areas, and are addressed below. Specifically, this section analyzes the effects resulting from the construction of traffic mitigation measures, as described in **Section 5.2.7**. These improvements have been identified in response to impacts analyzed in **Sections 4.8** and **4.11**.

IMPROVEMENTS

Intersection improvements recommended under each alternative are listed in **Section 5.2.7**. Mitigation measures for each intersection are identified in their year of need for each alternative. The location of mitigation measures needed in 2008 for each alternative is presented in **Figures 5-1** through **5-7**. The location of mitigation measures needed in 2030 for each alternative is presented in **Figures 5-8** through **5-14**. These figures provide a close-up view of the roadway improvements at each intersection presented **Section 5.2.7**. **Figures 4.12-1** and **4.12-2** show the intersections proposed for improvement in the vicinity of the Madera site, including aerial photographs. **Figures 4.12-3** and **4.12-4** show the intersections proposed for improvement in the vicinity of the North Fork site, including aerial photographs.

ENVIRONMENTAL CONSEQUENCES

The following section identifies the potential indirect environmental effects of construction of the intersection improvements. Because most of the identified improvements are common to all the alternatives and because the nature and scope of effects are similar, the following analysis is provided for all the alternatives.

Land Resources

The construction of roadway improvements would require grading and the introduction of fill material to extend the existing shoulders and road bed. The roadway improvements would not significantly affect the ability to extract minerals. The increase of impervious surfaces and additional earthwork could result in erosion of soils. Local jurisdictions (Caltrans, Madera County, or City of Madera, depending on the location of the improvement) would require the use of stable fill material, engineered embankments, and erosion control features to reduce the potential for slope instability, subsidence and erosion. In accordance with the Federal Clean

Insert Figure 4.12-1, Intersections in the Vicinity of the Madera Site

Insert Figure 4.12-2, Madera Site – Aerial Intersections

Insert Figure 4.12-3, Intersections in the Vicinity of the North Fork Site

Insert Figure 4.12-4, North Fork Site – Aerial Intersections

Water Act, construction of roadway improvements over one acre in area would be required to comply with the NPDES General Construction Permit Program. To comply with the program, a Stormwater Pollution Prevention Plan (SWPPP) would be developed that would include soil erosion and sediment control practices to reduce the amount of exposed soil, prevent runoff from flowing across disturbed areas, slow runoff from the site, and remove sediment from the runoff. With standard construction practices and specifications required by the NPDES permit program, the roadway improvements identified under the project alternatives are expected to result in less than significant indirect effects to land resources.

Water Resources

The development of roadway improvements at the locations identified could affect water resources due to grading and construction activities and an increase in impervious surfaces. Potential effects include an increase of surface runoff and increased erosion that could adversely affect surface water quality due to increases in sediment and roadway pollutants such as grease and oil.

As discussed above, a SWPPP would be developed to comply with the NPDES General Construction Permit Program, which includes soil erosion and sediment control practices. The effects to runoff volumes resulting from the increase in impervious roadways are expected to be minimal due to the limited extent of the improvements in comparison to the existing roadways. Some existing curb and gutters and stormwater drain inlets would be removed and relocated along portions of the roadways to provide space for improvements. Curb and gutters, inlets, and other drainage facilities would be reconstructed to provide adequate facilities to direct stormwater runoff. With incorporation of these drainage features and compliance with the soil erosion and sediment control practices identified in the SWPPP, for construction projects resulting in over one acre of disturbance, effects to water resources would be less than significant.

Air Quality

Development of the roadway improvements would result in short-term construction-related air pollution emissions. The construction phase would produce two types of air contaminants: exhaust emissions from construction equipment and fugitive dust generated as a result of demolition and soil movement. Exhaust emissions from construction activities include those associated with the transport of workers and machinery to the site, as well as those produced on site as the equipment is used. Construction of improvements would be limited in scope and duration. Thus a less than significant indirect effect would result. In addition, mitigation measures are typically required by local jurisdictions to reduce construction emissions, often in conjunction with required California Environmental Quality Act (CEQA) review. These include watering the exposed soil to reduce dust, reducing speeds on all unpaved roads to 15 miles per hour, and maintaining equipment properly.

Long-term effects from roadway improvements could result if the roadway improvements resulted in localized increases in carbon monoxide (CO) concentrations and/or if the improvements contributed to traffic congestion at large intersections. The construction of improvements would not result in adverse changes or redistribution in traffic volumes and vehicle trips. Conversely, it is expected that the improvements would reduce congestion and improve traffic flow. This would reduce emissions from idling vehicles at these intersections and roadway segments. Long-term effects would therefore be less than significant.

Biological Resources

Madera Site

Twenty-five road intersections were analyzed from the National Wetlands Inventory (NWI) Map. Though all intersections are not proposed to be improved for each alternative, the sum total of improvements was analyzed to encompass all alternatives. The Fish and Wildlife Service has no mapped wetlands in the areas of improvement. Construction of the roadway improvements would result in the loss of some existing vegetation and modification of drainage channels. Most of the habitat that exists in the areas of roadway improvements is highly disturbed and currently in commercial and agricultural areas. Due to the degraded condition of the roadside areas, habitat quality is generally low and it is unlikely that expansion of the existing facilities would result in a significant effect to sensitive species.

North Fork Site

Nine intersection improvements would result from mitigation for Alternative D. For this reason, the NWI was reviewed to assess the indirect effects on wetlands mapped by the Fish and Wildlife Service. No wetlands are reported within the areas identified for improvement. Similar to the Madera site, habitat within the areas of improvement is typically ruderal/disturbed and the expansion of existing roadways would result in a less than significant impact to special status species habitat.

General

To address effects to sensitive habitat and species, biological surveys would be required to comply with CEQA for roadway improvement projects. The lead agency under CEQA would be required to mitigate potential impacts to a less than significant level or to issue a finding of fact and statement of overriding considerations if significant impacts could not be mitigated. Thus, less than significant indirect effects to biological resources would result.

Cultural Resources

The construction of the roadway improvements has the potential to disturb or destroy historical features and archaeological resources. Grading roadsides to add traffic lanes or expanding intersections may disturb previously unknown sites. Due to prior grading of the existing

roadways and occasional traffic on roadsides it is likely that resources remaining in these areas are highly disturbed and lack integrity, thus diminishing the significance of the remaining resources.

To address potential impacts to cultural resources, cultural surveys may be required to comply with CEQA. The lead agency under CEQA would be required to mitigate potential impacts to a less than significant level or to issue a finding of fact and statement of overriding considerations if significant impacts could not be mitigated. Mitigation may include the avoidance of resources, the preservation of key historical features, or the removal, documentation, and curation of cultural resources. Therefore, a less than significant indirect effect to cultural resources would result.

Socioeconomic Conditions

Construction of roadway improvements would result in short-term inconveniences and minor delays due to constricted traffic movements and possible temporary detouring of traffic. The intersection improvements are not expected to result in long-term disruption of access to surrounding land uses or to minority or low-income populations.

The realignment and expansion of roadways would result in impacts to surrounding properties. In order to implement some improvements, land acquisition may be required. In most cases no additional property will be required (e.g. intersection signalization) or the amount of additional property required will be minimal. Should land acquisition be required, the owner of the property acquired is entitled to be compensated for the fair market value of the property, as required by the Fifth Amendment of the U.S. Constitution; Article I, Section 19 of the California Constitution; and Sections 1263.010 to 1263.330 of the California Code of Civil Procedure. A potentially significant impact would result should local jurisdictions be left to pay the full cost of such land acquisition. According to mitigation described in **Section 5.2.7**, the Tribe would pay the fair-share cost of traffic mitigation, including the cost of any required land acquisition. Therefore, a less than significant indirect socioeconomic effect would result.

Transportation

Traffic mitigation measures are meant to improve transportation facilities. Impacts to traffic operations would be temporary and necessary consequences of construction in order to facilitate long-term improvements. A less than significant effect would therefore result.

Land Use

As noted, construction of roadway improvements with no or minimal additional property requirements is not expected to cause a long-term disruption of surrounding land uses. Improvements that require land acquisition, such as realignment and expansion of roadways, could convert land from its current use. However, the amount of land required would be a narrow

strip on the end of the property and should not affect the land use for the remaining property. Therefore, a less than significant indirect effect would result.

Agriculture

Construction of roadway improvements that require additional property, such as realignment and expansion of roadways, could permanently convert land from agricultural use. However, the amount of land converted would be small compared with the amount of arable land in Madera County. Therefore, a less than significant indirect effect to agriculture would result.

Public Services

Traffic improvements may require relocation of utilities near existing roadways. These utilities include overhead electricity lines and telecommunication lines. Relocation of these lines could result in a temporary break in service to some homes and businesses in the area. However, because these effects are common when upgrading and maintaining utility services, and because potential service breaks would be temporary, these effects are considered to be less than significant. No significant effects to police, fire, or emergency medical services are expected as access to homes and businesses would be maintained during the construction period.

Other Values

Construction of the proposed improvements could potentially result in noise, hazardous materials, and visual effects. Construction activities would result in short-term increases in the local ambient noise environments. However, because construction activities would be temporary in nature and are expected to occur during normal daytime hours, a less than significant effect would occur.

The accidental release of hazardous materials used during grading and construction activities could pose a hazard to construction employees and the environment. Additionally, equipment used during grading and construction activities could ignite dry grasses and weeds in construction areas. However, these hazards, which are common to construction activities, would be minimized with adherence to standard operating procedures, such as refueling in designated areas, storing hazardous materials in approved containers, and clearing dried vegetation. Such procedures are commonly required by local agencies as part of the CEQA review for roadway improvements. These potential hazards are therefore considered to be less than significant.

Visual effects would occur as the result of modification and expansion of existing roadways. However, because the intersections would conform to modern design standards and are expected to be landscaped to suit the settings, a less than significant effect would occur.

4.12.3 INDIRECT EFFECTS FROM OFF-SITE PIPELINE CONSTRUCTION

This section analyzes the effects resulting from the construction of off-site water and wastewater pipelines, as described in **Section 2.0**, and summarized below.

IMPROVEMENTS

Pipelines for water and wastewater may be constructed to connect either the Madera or North Fork Sites to local water/wastewater facilities. As noted in **Section 2.0**, local water/wastewater hookup is one of the options for water/wastewater service available for the alternatives. Local water hookup would require a looped pipeline system be created to connect to the City's water supply system (**Figure 2-9**). Three possible pipeline alignments could occur for local wastewater hookup, as described in **Section 2.0** and **Appendix I**. A graphic representation of the three pipeline alignment options is contained in **Figure 2-7**. In addition, treated effluent from an on-site wastewater treatment plant (WWTP) could be used to irrigate the City of Madera's golf course located south of Avenue 17, between Road 23 and the municipal airport. Should the Tribe and City of Madera choose to implement this option, approximately one mile of recycled water pipeline would be located along Road 23 (**Figure 2-9**).

Like the Madera site, the North Fork site may need to connect to the County pipelines, which terminate approximately two and a half miles northeast of the North Fork site along Road 228 (Mono Drive), south of Minarets Road (**Figure 2-24**).

ENVIRONMENTAL CONSEQUENCES

The following section identifies the potential indirect environmental effects of the pipelines for the Madera site and North Fork site. Where appropriate, effects to resources are discussed based on the project site location. Where effects to resources would be the same if either project site were developed, the discussion pertains to both project sites.

Land Resources

The construction of off-site pipelines would occur primarily along existing roadways and would require trenching and backfilling/re-paving in order to install the pipelines within the roadway. Therefore, effects to land resources would be similar to those discussed above under off-site roadway improvements, except the effects would be somewhat lessened because the roadways/intersections would not be extended. Instead, disturbances would occur largely within currently disturbed roadways. A less than significant indirect effect to land resources would result.

Water Resources

Effects to water resources would be similar to those discussed above under off-site roadway improvements, except the effects would be lessened because the roadways/intersections would

not be extended. Instead, disturbances would occur largely within currently disturbed roadways. New impervious surfaces and therefore additional pollutant runoff would not occur. Thus, a less than significant indirect effect to water resources would result.

Air Quality

Installation of water and wastewater pipelines would result in short-term construction-related air pollution emissions. The construction phase would produce two types of air contaminants: exhaust emissions from construction equipment and fugitive dust generated as a result of demolition and soil movement. Exhaust emissions from construction activities include those associated with the transport of workers and machinery to the site, as well as those produced on site as the equipment is used. Construction of improvements would be limited in scope and duration. Thus a less than significant indirect effect would result. In addition, mitigation measures are typically required by local jurisdictions to reduce construction emissions, often in conjunction with required California Environmental Quality Act (CEQA) review. These include watering the exposed soil to reduce dust, reducing speeds on all unpaved roads to 15 miles per hour, and maintaining equipment properly.

Biological Resources

Construction of the water and wastewater pipelines has the potential to impact vegetation communities and unidentified waters of the U.S. Therefore, the NWI Map was analyzed to assess potential indirect effects from the construction of the water and wastewater pipeline routes from the Madera and North Fork sites.

Madera Site

The proposed water source connection loop for the Madera site would travel along existing roads (Golden State Blvd.) to a 12-inch main located on Airport Drive, at the Madera Municipal Airport. The NWI maps show no existing wetlands along the route and vegetation communities are rural residential and agriculture.

The wastewater pipeline has three potential routes to the Madera site. All three originate from the City of Madera WWTP, located on Avenue 13 southwest of the site. The Road 23 Option pipeline would travel east along Avenue 13 to head north along Road 23 to terminate at the site. Vegetation communities along the route are all agriculture, rural residential, and disturbed roadside vegetation. Road 23 bisects the Fresno River at Avenue 15, according to the NWI map. Crossing the Fresno River could require a California Department of Fish & Game 1600 permit and USACE Section 404 Permit, however the pipeline is expected to follow the roadway over the River, causing no impacts to biological resources in or on the banks of the River. Note that the potential recycled water pipeline would also follow Road 23 to the golf course approximately one mile south of the Madera site and would not cross the Fresno River. The Airport Drive Option pipeline would head east of the site and travel along the same route as the water source route,

mentioned above, with no impacts to wetlands. Similar to the Airport Drive Option, the SR-99 Option would travel on the west side of SR-99 and bisect Avenue 16 diagonally from Golden State Drive. There are no NWI wetlands mapped along the SR 99 route.

Most of the habitat that exists in the areas of the Madera pipeline alignments is highly disturbed roadsides. Due to the degraded condition of the roadway/roadside areas, habitat quality is generally low and it is unlikely that extending the existing pipeline facilities would result in a significant effect to sensitive species. Due to the temporary disturbance of the pipeline alignment along existing roadways, the degraded condition of existing habitat, and the requirements of CEQA to address impacts to biological resources, the indirect effects of extending existing pipelines would be less than significant.

North Fork Site

The water/wastewater route for the North Fork Site would follow existing roads from the North Fork Rancheria to the WWTP site in the town of North Fork. There are no occurrences of wetlands mapped by the NWI for the proposed route. However, the route has the potential to impact the South Fork of Willow Creek (i.e. stream crossing). Depending on the method, (e.g., directional drill or above-ground installation) the crossing could require a CDFG 1600 Permit and USACE Nationwide Permit. Potential habitat impacts would be less than significant due to the limited resources associated with roadside vegetation communities.

General

To address effects to sensitive habitat and species, biological surveys would be required to comply with CEQA. The lead agency under CEQA would be required to mitigate potential impacts to a less than significant level or to issue a finding of fact and statement of overriding considerations if significant impacts could not be mitigated.

Cultural Resources

The construction pipelines have the potential to disturb or destroy historical features and archaeological resources. Grading roadways/roadsides and trenching to add pipeline may disturb previously unknown sites. Due to prior grading of the existing roadways and occasional traffic on roadsides, it is likely that resources remaining in these areas are highly disturbed and lack integrity, thus diminishing the significance of the remaining resources.

To address potential impacts to cultural resources, cultural surveys may be required to comply with CEQA. The lead agency under CEQA would be required to mitigate potential impacts to a less than significant level or to issue a finding of fact and statement of overriding considerations if significant impacts could not be mitigated. Mitigation may include the avoidance of resources, the preservation of key historical features, or the removal, documentation, and curation of cultural resources. Therefore, a less than significant indirect effect to cultural resources would result.

Socioeconomic Conditions

Effects to socioeconomic conditions from construction of pipelines would be very similar to the effects noted above to construction of roadway improvements. These effects are primarily limited to temporary inconvenience due to construction and would not result in a significant indirect effect to socioeconomic conditions.

Transportation

Construction of the pipelines could occur along roadways, impacting traffic flow. However, since the construction and resulting traffic effects would be temporary, a less than significant effect to transportation would result.

Land Use

Construction of the pipelines would require utility easements which would limit future construction. An easement is a right, privilege or interest limited to a specific purpose which one party has in the land of another. Underground utility easements are typically laid out as corridors of sufficient width to give some latitude in locating the actual utility line, and to permit sufficient room for periodic inspection, repair and maintenance. Underground utility easements typically prohibit the construction of building improvements, but may permit the construction of non-structural improvements, such as paved surface parking or landscaping. The pipelines would be constructed to follow public roads and would not be in an area where a building would normally be built or where an agricultural field would be plowed. Therefore, less than significant indirect impacts to land uses would occur.

Agriculture

As discussed under Land Use, the pipelines would be placed within or in close proximity to public roads. Agricultural fields usually include a buffer between the crops and public thoroughways. The pipelines are not expected to extend past this buffer area, and would therefore not affect agricultural practices. Therefore, no significant indirect impact to agriculture would occur.

Public Services

As with traffic improvements, the extension of water and wastewater lines could result in a temporary break in public services to some homes and businesses in the area. However, because these effects are common when upgrading and maintaining utility services, and because potential service breaks would be temporary, these effects are considered to be less than significant. No significant effects to police, fire, or emergency medical services are expected as access to homes and businesses would be maintained during the construction period.

Other Values

As with off-site traffic improvements, construction of the proposed water and wastewater lines could potentially result in noise and hazardous materials effects. Construction activities would result in short-term increases in the local ambient noise environments. However, because construction activities would be temporary in nature and are expected to occur during normal daytime hours, a less than significant effect would occur.

The accidental release of hazardous materials used during construction activities could pose a hazard to construction employees and the environment. Additionally, equipment used during construction activities could ignite dry grasses and weeds in construction areas. However, these hazards, which are common to construction activities, would be minimized with adherence to standard operating procedures, such as refueling in designated areas, storing hazardous materials in approved containers, and clearing dried vegetation. These potential hazards are therefore considered to be less than significant.

Because the proposed water and wastewater lines would be constructed below ground, visual indirect effects would be less than significant.