4.12 Transportation

This section describes the existing transportation conditions of the project site and vicinity, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures for any significant or potentially significant impacts related to implementation of the of the Santa Cruz Water Rights Project (Proposed Project).

A summary of the comments received during the scoping period for this environmental impact report (EIR) is provided in Table 2-1 in Chapter 2, Introduction, and a complete list of comments is provided in Appendix A. There were no comments related to transportation.

4.12.1 Existing Conditions

4.12.1.1 Study Area

As described in the Project Description, the Proposed Project is located within Santa Cruz County (County), California and involves the water system and areas served of the City of Santa Cruz (City), and the water service area of San Lorenzo Valley Water District (SLVWD), Scotts Valley Water District (SVWD), Soquel Creek Water District (SqCWD), and Central Water District (CWD). The components of the Proposed Project are located within Santa Cruz County and are generally bounded by the unincorporated communities of Aptos and Le Selva Beach on the east, Bonny Doon Road on the west, Boulder Creek on the north, and the Pacific Ocean on the south (see Figure 3-1 in Chapter 3, Project Description). While the project area is much broader, the study area for transportation is focused on the proposed project and programmatic infrastructure component sites where construction and ground disturbance could occur and where new or upgraded facilities would be located (see Figure 3-4 in Chapter 3, Project Description). These sites include the following: aquifer storage and recovery (ASR) sites where known, intertie improvement sites including the City/SVWD intertie site and the City/SqCWD/CWD intertie site, Felton Diversion fish passage improvement site, and the Tait Diversion and Coast Pump Station improvement site. ASR would include new ASR facilities at unidentified locations (referred to as "new ASR facilities" in this EIR) and Beltz ASR facilities at the existing Beltz well facilities (referred to as "Beltz ASR facilities" in this EIR). As there are no definitive sites identified to date for new ASR facilities, site-specific conditions are not available. This section describes key roadway segments, as well as transit, pedestrian, and biking facilities within the vicinity of the project and programmatic infrastructure components.

4.12.1.2 Roadways and Access

Roadway characteristics and roadway classifications for key vicinity roads are described below. Access to proposed project and programmatic infrastructure component sites is also described. All roadways discussed are within the unincorporated County and some roadways segments also pass through incorporated areas of the County and are shown on Figure 3-1 and Figure 3-2, in Chapter 3, Project Description.

State Highway 1, also co-designated within the study area as Cabrillo Highway, is generally a north-south, four-lane divided freeway that follows the coast of California and regionally connects the coastal communities within the County. Within the study area, State Highway 1 is the main thoroughfare for traffic and provides regional access to the proposed Beltz ASR sites and the City/SqCWD/CWD intertie sites. State Highway 1 connects with State Highway 9 and State Highway 17. Since, State Highway 1 is a freeway, there are no parking or bicycle facilities provided and the posted speed limit is 65 miles per hour (mph).

State Highway 9 is generally a north-south, two-lane undivided highway that connects the City with areas of unincorporated Santa Cruz County including the communities of Felton, Ben Lomond, and Boulder Creek. State Highway 9 ends in the City of Saratoga where it connects with State Highway 17. State Highway 9 also connects with State Highway 1 within the City of Santa Cruz, near the proposed Tait Diversion and Coast Pump Station improvement site. State Highway 9 also provides access to the proposed Felton Diversion improvement site. There are no parking or bicycle facilities provided and the posted speed limit ranges between 25 mph to 45 mph.

State Highway 17 is a north-south, four-lane divided freeway that connects the City with areas of unincorporated Santa Cruz County, as well as to Santa Clara County and the San Jose metropolitan area. State Highway 17 ends in the City of San Jose where it connects with Interstate 880 (I-880). State Highway 17 also connects with State Highway 1 within the City. State Highway 17 provides regional access to the proposed City/SVWD intertie site. Since, State Highway 17 is a freeway, there are no parking or bicycle facilities provided and the posted speed limit ranges between 50 mph to 65 mph.

41st Avenue is a north-south roadway that has generally four to six-lanes that are divided, however it narrows to two-lanes and becomes undivided south of Melton Street. It serves as the main connection point between State Highway 1 and the proposed Beltz ASR sites. 41st Avenue extends from Soquel Drive to Cliff Drive, and according to the functional street classification within the County's General Plan Circulation Element, is identified as an Arterial roadway (County of Santa Cruz 2020a). 41st Avenue is also within the jurisdiction of the City of Capitola, from State Highway 1 to Nova Drive. Within the City of Capitola General Plan Mobility Element, 41st Avenue is also designated as an Arterial roadway (City of Capitola 2019). Parking is allowed along some sections, and pedestrian facilities are generally provided on both sides of the roadway. According to the Santa Cruz County Bike Map, Class II painted bicycles lanes are provided on both sides of 41st Avenue (County of Santa Cruz 2016). The posted speed limit ranges between 25 to 35 mph.

38th Avenue is a north-south roadway with two-lanes that are divided and serves as a connection point to Beltz ASR sites located south of State Highway 1. 38th Avenue extends from the Capitola Mall south towards Cliff Drive, and according to the functional street classification within the County's General Plan Circulation Element, is identified as a Collector roadway (County of Santa Cruz 2020a). 38th Avenue is also within the jurisdiction of the City of Capitola, north of Jade Street. Within the City of Capitola General Plan Mobility Element, 38th Avenue is also designated as a Collector roadway (City of Capitola 2019). Parking is allowed along some sections north of Brommer Street, and pedestrian facilities are generally provided on both sides of the roadway. According to the Santa Cruz County Bike Map, Class II painted bicycles lanes are provided on both sides of 38th Avenue north of Brommer Street, and Class III bicycle route markings are provided south of Brommer Street (County of Santa Cruz 2016). The posted speed limit is 25 mph.

30th Avenue is a north-south roadway with two-lanes that are divided and serves as a connection point to the Beltz ASR sites south of State Highway 1. 30th Avenue generally extends from north of Capitola Road towards Cliff Drive, and according to the functional street classification within the County's General Plan Circulation Element, is identified as a Collector roadway (County of Santa Cruz 2020a). Parking and pedestrian facilities are generally provided on both sides of the roadway. According to the Santa Cruz County Bike Map, Class II painted bicycles lanes are provided on both sides of 38th Avenue north of Portola Drive. The posted speed limit is 25 mph.

Soquel Drive is an east-west roadway that has generally 4-lanes that are undivided. It serves as connection point to the Beltz 12 site via Research Park Drive. Soquel Drive extends from Soquel Avenue to Rio Del Mar Boulevard, and according to the functional street classification within the County's General Plan Circulation Element, is identified as an Arterial roadway (County of Santa Cruz 2020a). Parking is allowed along some sections, and

pedestrian facilities are generally provided on both sides of the roadway. According to the Santa Cruz County Bike Map, Class II painted bicycles lanes are provided on both sides of Soquel Drive (County of Santa Cruz 2016). The posted speed limit ranges between 25 to 35 mph.

Freedom Boulevard is generally a north-south roadway that has two to four-lanes undivided and connects State Highway 1/Soquel Drive, with the City of Watsonville. Freedom Boulevard, near State Highway 1 provides access to the proposed City/SqCWD/CWD intertie – Freedom Boulevard pump station and Valencia Drive pump station sites. According to the functional street classification within the County's General Plan Circulation Element, Freedom Boulevard is identified as an Arterial roadway (County of Santa Cruz 2020a). Parking is generally not provided along the roadway, while pedestrian facilities are provided along the eastern portion of the roadway near State Highway 1. According to the Santa Cruz County Bike Map, Class II painted bicycles lanes are provided on both sides of the roadway (County of Santa Cruz 2016). The posted speed limit is 45 mph.

Park Avenue is generally a north-south roadway that has two to four-lanes undivided and connects State Highway 1/Soquel Drive, with other areas of the City of Capitola. Park Avenue, near State Highway 1 provides access to the proposed City/SqCWD/CWD intertie – Park Avenue pipeline site and McGregor Drive pump station site. According to the functional street classification within the City of Capitola General Plan Mobility Element, Park Avenue is identified as an Arterial roadway (City of Capitola 2019). Parking is generally not provided along the roadway, while pedestrian facilities are provided along both sides of the roadway north of State Highway 1, and along the eastern portion south of State Highway 1. According to the Santa Cruz County Bike Map, Class II painted bicycles lanes are provided on both sides of the roadway (County of Santa Cruz 2016). The posted speed limit is 35 mph.

McGregor Drive is generally an east-west two-lane undivided roadway and connects Park Avenue to provide access to the proposed City/SqCWD/CWD intertie – McGregor Drive pump station site. According to the functional street classification within the City of Capitola General Plan Mobility Element, McGregor Drive is identified as a Local roadway (City of Capitola 2019). Parking is not provided along the roadway, and there are no pedestrian facilities. According to the Santa Cruz County Bike Map, Class II painted bicycles lanes are provided on both sides of the roadway (County of Santa Cruz 2016). The posted speed limit is 25 mph.

Porter Street is generally a north-south roadway that has two to four-lanes undivided and connects State Highway 1/ Soquel Drive, with the City of Capitola to the south and unincorporated areas of Santa Cruz County to the north. Porter Street, north of State Highway 1 provides access to the proposed City/SqCWD/CWD intertie – Soquel Village pipeline site. According to the functional street classification within the County's General Plan Circulation Element, Porter Street is identified as an Arterial roadway (County of Santa Cruz 2020a). Parking is generally not provided along the roadway, while pedestrian facilities are provided along both sides of the road. According to the Santa Cruz County Bike Map, Class II painted bicycles lanes are provided on both sides of the roadway (County of Santa Cruz 2016). The posted speed limit is 25 mph.

La Madrona Drive is a north-south, two-lane, undivided roadway that provides a connection between the City of Scotts Valley and City of Santa Cruz. La Madrona Drive is parallel with State Highway 17 and begins from the terminus of El Rancho Drive and connects to Mt. Hermon Road and is the main roadway for the proposed City/SVWD intertie site and pump station. La Madrona Drive, according to the functional street classification within the County's General Plan Circulation Element, is identified as a Collector roadway (County of Santa Cruz 2020a). Parking is generally prohibited, and pedestrian facilities are not provided. According to the Santa Cruz County Bike Map, La Madrona Drive is listed an Alternate Route (County of Santa Cruz 2016). The posted speed limit is 35 mph.

4.12.1.3 Transit

Various portions of the study area are directly served by transit service in the County. The Santa Cruz Metropolitan Transit District (Santa Cruz Metro) provides bus service throughout the study area. There are four transit centers within the study area that provide regional bus service from population centers within the County, as well as from the San Jose metropolitan area. The Metro Center is located in the downtown area of the City of Santa Cruz and provides a connection point between regional locations and local bus routes within the County and serves as the main hub for Santa Cruz Metro. The Capitola Mall Transit Center provides bus service for regional routes to the Capitola Mall, from the City of Santa Cruz, City of Capitola, City of Watsonville, Aptos, Soquel, and other communities within the unincorporated County. The Cavallaro Center is located in the City of Scotts Valley and provides regional connections between the communities of Ben Lomond, Felton, Boulder Creek, downtown Santa Cruz, and the San Jose metropolitan Area. The Watsonville Transit Center is located in downtown Watsonville and provides regional connections by utilizing State Highway 1 for connections to downtown Santa Cruz, Capitola, and the unincorporated communities of Aptos, Soquel, and Freedom (Santa Cruz Metro 2020).

4.12.1.4 Pedestrian and Bicycle Facilities

As stated above, pedestrian facilities are not available along State Highway 1 and State Highway 17. Sidewalks are provided along the western edge of State Highway 9 from State Highway 1 to Vernon Street, after which there are no pedestrian facilities. Freedom Boulevard has sidewalks along the developed parcels near State Highway 1 and possess Class II bicycle lanes on both sides of the roadway (County of Santa Cruz 2016).

4.12.2 Regulatory Framework

4.12.2.1 Federal

There are no federal regulations related to transportation that are directly applicable to the Proposed Project.

4.12.2.2 State

California Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law, which creates a process to change the way that transportation impacts are analyzed under the California Environmental Quality Act (CEQA). SB 743 required the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to level of service (LOS)[1] for evaluating transportation impacts. Under the new transportation guidelines, LOS, or vehicle delay, will no longer be considered an environmental impact under CEQA. The updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018. The newly enacted CEQA Guidelines Section 15064.3 identifies vehicle miles traveled (VMT) as the most appropriate measure of transportation impacts under CEQA and is currently being implemented as of July 1, 2020.

[1] Level of service (LOS) is commonly used as a qualitative description of segment and roadway operations and is based on the capacity and the volume of traffic using the segment or roadway. The Highway Capacity Manual describes the operation of a roadway using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions).

Related legislation, SB 32 (2016) requires California to reduce greenhouse gas emissions 40% below 1990 levels by 2030. The California Air Resources Board has determined that it is not possible to achieve this goal without reducing VMT growth and specifically California needs to reduce per capita VMT across all economic sectors. SB 743 is primarily focused on passenger-cars and the reduction in per capita VMT as it relates to individual trips. The OPR Technical Advisory (OPR 2018) provides guidance and tools to properly carry out the principles within SB 743 and how to evaluate transportation impacts in CEQA. Since the City's adopted guidelines directly utilize the adopted guidance and screening criteria from the OPR Technical advisory, the methodology and thresholds from the OPR Technical Advisory was utilized within this analysis to determine VMT related impacts. See Section 4.12.2.3, Local, for information about the City's SB 743 Implementation Guidelines.

4.12.2.3 Local

County of Santa Cruz

SB 743 Implementation Guidelines

As of October 2020, the County of Santa Cruz has published guidelines for the implementation of SB 743 as it pertains to VMT (County of Santa Cruz 2020b). Similar to what is described in the OPR Technical Advisory document mentioned in Section 4.12.2.2, State, the VMT analysis process is based on the type of land use and can be screened out for a less-than-significant transportation impact based on a variety of factors such as:

- Small Projects:
    - Project trip generation is less than 110 net new trips per day.
    - CEQA transportation analysis is required if the project is inconsistent with the Sustainable Communities Strategy as determined by Santa Cruz County.
- Projects Near High Quality Transit:
    - The project is located within 0.5 miles of an existing major transit stop as defined in California Public Resources Code Section 21064.3: two or more bus lines which maintain a service interval frequency of 15 minutes or less during both the morning and afternoon peak commute periods. Currently there are no existing major transit stops in the unincorporated County.
    - CEQA transportation analysis is required if any of the following are true: the project has a Floor Area Ratio (FAR) of less than 0.75; the project includes more parking for use by residents, customers, or employees of the project than required by Santa Cruz County Code; the project is inconsistent with the Sustainable Communities Strategy as determined by Santa Cruz County; or the project replaces affordable residential units with a smaller number of moderate or high-income residential units.
- Local-Serving Retail:
    - No single store on-site exceeds 50,000 square feet, or the project is local-serving as determined by Santa Cruz County.
    - CEQA transportation analysis is required if the nature of the service is regionally focused as determined by Santa Cruz County.

- Affordable Housing:
    - The project provides a high percentage of affordable housing as determined by Santa Cruz County.
    - CEQA transportation analysis is required if the percentage of affordable housing is determined by Santa Cruz County to not be high.
- Local Essential Service:
    - The project includes land uses such as: day care center, public K-12 school, policy or fire facility, local serving medical/dental office building, or government office (in-person services such as post office, library, and utilities).
    - CEQA transportation analysis is required if the nature of the service is regionally focused as determined by Santa Cruz County.
- Map-Based Screening:
    - The area of development is under the threshold as shown on screening map as allowed by Santa Cruz County.
    - CEQA transportation analysis is required if the project will result in significant population or employment growth that substantially changes regional travel patterns as determined by Santa Cruz County.
- Redevelopment Projects:
    - The project replaces an existing VMT-generating land use and does not result in a net overall increase in VMT.
    - CEQA transportation analysis is required if the project replaces an existing VMT-generating land use and results in a net overall increase in VMT.

If a project is unable to be screened out, and is not within an area where average VMT is below or at the County's VMT threshold level as indicated by the map-based screening figures located within the County's VMT guidelines, then further analysis is required by utilizing the County's "Sketch Planning Tool" or otherwise having a qualified transportation consultant analyze the project's VMT by using the Santa Cruz County Travel Demand Model. The Santa Cruz County Travel Demand Model estimates daily trips based on various trip purposes within each transportation analysis zone (TAZ) as well as local demographics based on employment and population. Finally, transportation demand management (TDM) strategies and VMT reduction based on the land use analyzed are available to reduce VMT to less-than-significant levels.

General Plan

As required by State of California law, the County has adopted a General Plan and Local Coastal Program that work in tandem with each other to create and address goals and policies as related to the transportation system of the County. Within the General Plan, the Circulation Element serves as the key policy statement of the County regarding transportation facilities serving unincorporated areas (County of Santa Cruz 2020a). The Circulation Element contains several policies and programs that fulfill this purpose.

Specific goals identified in the Circulation Element are identified below, some of which are relevant to the Proposed Project. These goals outline the County's objectives to improve the transportation system.

- **Transportation System**: Provide a convenient, safe, and economical transportation system for the movement of people and goods, promoting the wise use of resources, particularly energy and clean air, and the health and comfort of residents.
- **Mode Choice**: Provide the public with choice in transportation modes on a well-integrated system.
- **Limit Increase in Auto Use**: Limit the increase in auto usage to minimize adverse impacts. Increase transit ridership, carpooling, vanpooling, walking and bicycling, etc.
- **Efficiency**: Provide for more efficient use of existing transportation facilities.
- **Regional Goals**: Meet the requirements of regional plans, such as the Congestion Management Program, Air Quality Management Plan and Regional Transportation Plan. Integrate planning for transportation, land use, and air quality goals.
- **Parking**: Manage parking supply to provide reasonably convenient parking for groups such as shoppers, and visitors who are most sensitive to the parking supply levels, while encouraging alternatives to solo commuting and limiting impacts on neighborhoods.
- **Bikeway System**: Develop and implement a comprehensive bikeway system that promotes bicycle travel as a viable transportation mode and meets the recreation and travel needs of the citizens of Santa Cruz County.
- **Safety**: Reduce the number and severity of bicycle accidents.
- **Coordination**: Coordinate transportation improvements in area plans with the General Plan and Local Coastal Program Land Use Plan and regional transportation plans.

The following policy pertains to the County's approach to LOS:

- **3.12.1. Level of Service (LOS) Policy:** In reviewing the traffic impacts of proposed development projects or proposed roadway improvements, LOS C should be considered the objective, but LOS D as the minimum acceptable (where costs, right-of-way requirements, or environmental impacts of maintaining LOS under this policy are excessive, capacity enhancement may be considered infeasible). Review development projects or proposed roadway improvements to the Congestion Management Program network for consistency with Congestion Management Plan goals. Proposed development projects that would cause LOS at an intersection or on an uninterrupted highway segment to fall below D during the weekday peak hour will be required to mitigate their traffic impacts. Proposed development projects that would add traffic at intersections or on highway segments already at LOS E or F shall also be required to mitigate any traffic volume resulting in a 1% increase in the volume/capacity ratio of the sum of all critical movements. Projects shall be denied until additional capacity is provided or where overriding finding of public necessity and or benefit is provided.

Encroachment Permits

For any construction in the public right-of-way, the County requires an encroachment permit. The associated fee and permit process are described in the Santa Cruz County Code, Chapter 9.70, Streets and Roads. As part of the encroachment permit process, if pedestrian, bicycle, or vehicle traffic would be impacted, a traffic control plan must be provided. Several provisions are provided on the encroachment permit application (County of Santa Cruz 2021).

City of Santa Cruz

SB 743 Implementation Guidelines

On June 9, 2020 the City of Santa Cruz City Council enacted Resolution NS-29, which adopts the use of VMT as the new transportation measure of environmental impacts and has published procedures and guidelines for how best to implement SB 743 and VMT analysis for projects occurring within the City (City of Santa Cruz 2020). VMT is analyzed based on the type of land use and then screened for non-significant transportation impacts. The guidelines closely follow the recommendations and procedures as stated in the OPR Technical Advisory document described in Section 4.12.2.2, State. For projects not screened out for non-significant transportation impacts, a VMT analysis utilizing the Santa Cruz County Travel Demand Model is required. The Santa Cruz County Travel Demand Model estimates daily trips based on various trip purposes within each TAZ as well as local demographics based on employment and population. Finally, TDM strategies and VMT reduction based on the land use analyzed are available to reduce VMT to less-than-significant levels.

General Plan

As required by State of California law, the City of Santa Cruz has adopted the General Plan 2030 document as the most recent update to their general plan (City of Santa Cruz 2012). Within the General Plan, the Mobility Element sets forth policies to ease the ability of people and vehicles to move around the City (City of Santa Cruz 2012).

Specific policies identified in the Circulation Element are identified below, some of which are relevant to the Proposed Project. These policies outline the City's objectives to improve the transportation system.

- **M1.6.1** Design parking areas with adequate lighting, safe pedestrian circulation, adequate landscaping, a minimum amount of pavement, and adequate numbers of accessible spaces reserved for the physically disabled.
- **M2.1.1** Encourage diverse local and regional transit options.
- **M2.1.2** Encourage use of alternative modes of transportation.
- **M2.3.1** Design for and accommodate multiple transportation modes.
- **M3.1.1** Seek ways to reduce vehicle trip demand and reduce the number of peak hour vehicle trips.
- **M3.1.2** Encourage high occupant vehicle travel.
- **M3.1.3** Strive to maintain the established "level of service" D or better at signalized intersections.
- **M3.1.4** Accept a lower level of service and higher congestion at major regional intersections if necessary improvements would be prohibitively costly or result in significant, unacceptable environmental impacts.
- **M3.2.1** Maintain the condition of the existing road system.
- **M3.2.2** Ensure safe and efficient arterial operations.
- **M3.2.4** Improve traffic safety and flow. Ways to do this include installing and maintaining traffic signs, pavement markings, and median improvements.
- **M3.3.5** Require new development to be designed to discourage through traffic in adjacent neighborhoods and to encourage bicycle or pedestrian connections.
- **M3.3.7** Develop neighborhood traffic control plans where necessary to minimize traffic impacts on local streets.
- **M4.1.8** Remove or reduce obstructions and sidewalk tripping hazards, ensure accessibility to the physically disabled and elderly, and improve amenities along existing and potential pedestrian paths and walkways.

- **M4.1.9** Require landscaping in the development, replacement, and repair of sidewalks, including the placement of trees on private property and/or in tree wells on sidewalks.
- **M4.2.3** Facilitate bicycling connections to all travel modes.
- **M4.3.1** Promote the development of bike lanes on arterial and collector streets and in proposed and already adopted City plans.
- **M4.5.2** Design driveway access ramps to not interfere with the safe use of sidewalks.

Encroachment Permits

For any construction in the public right-of-way, the City requires an encroachment permit. The associated fee and permit process are described in the City's Municipal Code, Chapter 15.34, Encroachment Permits. Permits for construction in the public right of way require a City-approved traffic control plan showing the intended placement of all necessary signage and traffic control devices used to direct traffic around the site. The traffic control plan should include (City of Santa Cruz 2021):

- Conform to the California Manual on Uniform Traffic Control Devices (see Part 6 - Temporary Traffic Control).
- Be designed by a responsible representative of the permit applicant knowledgeable in the principles of proper temporary traffic control.
- Clearly show the work area.
- Include traffic control provisions to accommodate pedestrian, bicycle, and vehicular traffic that may be affected.
- Show any "no parking" areas needed to accommodate traffic and work in the work zone.
- If construction requires multiple phased traffic control configurations, a traffic control plan for each phase should be submitted.

City of Capitola

As required by State of California law, the City of Capitola possesses a General Plan and Circulation Element (City of Capitola 2019). Within the General Plan, the Mobility Element establishes a policy framework for a balanced transportation system (City of Capitola 2019).

Specific policies identified in the Circulation Element are identified below, some of which are relevant to the Proposed Project. These policies outline the City of Capitola's objectives to improve the transportation system.

- **Policy MO-3.1 Arterial Streets.** Actively discourage diversion of traffic to local streets by maintaining maximum capacity on arterial streets and locating high traffic-generating uses on arterial streets.
- **Policy MO-3.3 Level of Service Standard.** Continue to maintain the established level of service C or better at intersections throughout Capitola, with the exception of the Village area, Bay Avenue, and 41st Avenue.
- **Policy MO-3.4 Reduced Standards.** Accept a lower level of service and higher congestion at major regional intersections if necessary improvements are considered infeasible, as determined by the Public Works Director, or result in significant, unacceptable environmental impacts.
- **Policy MO-4.1 General Design.** Ensure that new and reconfigured roadways and roadway improvements are safe, functional, and attractive.
- **Policy MO-4.2 Standards.** Require streets to be dedicated and improved in accordance with the adopted street standards. Any modifications from these standards shall require approval by the Public Works Director or Planning Commission, as appropriate.

- **Policy MO-4.4 Driveways.** Where appropriate and feasible, combine driveways serving small parcels to permit safer merging.
- **Policy MO-4.5 Parking Access.** Promote efficient ingress and egress to and from parking areas and promote efficient internal circulation between adjacent parking areas to reduce congestion on roadways.
- **Policy MO-7.1 Regional Cooperation.** Support regional efforts to improve the availability, affordability, reliability, and convenience of public transportation service in Capitola.
- **Policy MO-9.1 Sidewalks.** Maintain a complete system of sidewalks to provide for safe, attractive, and convenient pedestrian circulation in Capitola.

Encroachment Permits

For any person, firm or corporation encroaching into the public right-of-way, or water course to do work, store materials, erect or place any structure, the City of Capitola requires an encroachment permit. The associated fee and permit process are described in the City of Capitola Municipal Code, Section 12.56, Privately Installed Improvements on Public Property or Easements. As part of the encroachment permit process, the following are conditions of the permit (City of Capitola 2020):

- Notify the Public Works Department 24 hours prior to the start of work.
- Contractor shall implement traffic control plan.
- Full road closure is not permitted without prior authorization by the City Engineer.
- Restore all damaged curb, gutter, sidewalk, paving per city standard detail.
- Storage of materials in the public roadway is prohibited.
- Keep work site clear of debris and be aware of tracking mud, dirt, gravel into the street, cover all stockpiles and excavation spoils.
- Practice good housekeeping.

City of Scotts Valley

As required by State of California law, the City of Scotts Valley possesses a General Plan and Circulation Element (City of Scotts Valley 1993). The General Plan is currently undergoing a revision and is expected to be updated in the near future. Within the General Plan, the Circulation Element establishes a policy framework for a balanced transportation system (City of Capitola 2019).

Specific objectives and policies as identified in the Circulation Element are identified below, some of which are relevant to the Proposed Project. These policies and objectives outline the City of Scott Valley's goal to create an integrated transportation system.

- **CG-85.** To provide the planning area with an integrated transportation system which serves private motorized vehicles, bicycles, equestrians, pedestrians and other forms of transit.
- **CP-95.** The City shall coordinate its transportation planning effort with appropriate agencies to promote an integrated transportation system which favors public transit and alternatives to the single occupancy vehicle.
- **CO-104.** Minimize the potential adverse effects associated with the development of an integrated transportation system.
- **CG-121.** To provide for a public street and highway system capable of accommodating existing and projected needs of the planning area.

- **CO-122.** Establish a street and highway system which serves the planning area that gives preference to local residents' safety and comfort.
- **CP-123.** The present street and highway system shall be improved and maintained to provide safe and efficient travel between various parts of the planning area and to individual properties.
- **CP-141.** The planning area's street and highway system shall be coordinated with street and highway network in adjacent areas.
- **CP-146**. The City shall identify and improve congested and critical traffic locations.
- **CA-150.** Require that all intersections maintain a Level of Service "C", or better, except as noted in the general plan.
- **CP-155.** On-street truck loading and unloading shall be prohibited on major arterials during peak traffic flow hours and discouraged at all other times.
- **CP-167.** Adequate provision shall be made for pedestrian crossings at appropriate locations.
- **CG-205**. To provide for a safe and efficient bicycle transportation system as a major form of travel or recreation.

Encroachment Permits

For any improvements located in the public right-of-way, the City of Scotts Valley requires an encroachment permit. The associated fee and permit process are described in the City of Scotts Valley Municipal Code, Chapter 12.08, Encroachments. As part of the encroachment permit process, all street improvements must abide by the City of Scotts Valley Standard Details and Specification (City of Scotts Valley 2017), including policies requiring that whenever lane closures or any form of traffic diversions are in place, a 6-foot wide lane for pedestrian and bicycle traffic must be provided. During times of heavy pedestrian traffic (i.e. school children, etc.) the use of a flag person for public safety is necessary. A traffic control plan shall be submitted for review if required by the Public Works Director/City Engineer (City of Scotts Valley 2021).

4.12.3 Impacts and Mitigation Measures

This section contains the evaluation of potential environmental impacts associated with the Proposed Project related to transportation. The section identifies the standards of significance used in evaluating the impacts, describes the methods used in conducting the analysis, and evaluates the Proposed Project's impacts and contribution to significant cumulative impacts, if any are identified.

4.12.3.1 Standards of Significance

The standards of significance used to evaluate the impacts of the Proposed Project related to transportation are based on Section 15064.3 and Appendix G of the CEQA Guidelines, the OPR Technical Advisory document described in Section 4.12.2.2, State, the SB 743 Implementation Guidelines adopted by Santa Cruz County and the SB 743 Implementation Guidelines adopted by the City of Santa Cruz described in Section 4.12.2.3, Local, and the City of Santa Cruz CEQA Guidelines, as listed below. A significant impact would occur if the Proposed Project would:

A. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
B. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).
C. Cause an increase in VMT which is greater than 15% below the regional average VMT.

D. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

E. Result in inadequate emergency access.

4.12.3.2 Analytical Methods

This section evaluates the potential transportation impacts associated with construction and operation of the Proposed Project. The analysis of potential impacts addresses the various project and programmatic components listed in Table 4.12-1, which are described in detail in Chapter 3, Project Description.

Table 4.12-1. Project and Programmatic Components

Proposed Project Components	Project Components	Programmatic Components
WATER RIGHTS MODIFICATIONS		
Place of Use	✓	
Points of Diversion	✓	
Underground Storage and Purpose of Use	✓	
Method of Diversion	✓	
Extension of Time	✓	
Bypass Requirement (Agreed Flows)	✓	
INFRASTRUCTURE COMPONENTS		
Water Supply Augmentation		
Aquifer Storage and Recovery (ASR) New ASR Facilities at Unidentified Locations Beltz ASR Facilities at Existing Beltz Well Facilities	 ✓	✓ ✓
Water Transfers and Exchanges and Intertie Improvements		✓
Surface Water Diversion Improvements		
Felton Diversion Fish Passage Improvements		✓
Tait Diversion and Coast Pump Station Improvements		✓

Within this analysis, both project and programmatic components are evaluated for their impacts in relation to temporary construction impacts and impacts from permanent operations and maintenance. The peak construction phases of the Proposed Project are analyzed for transportation impacts, based on the construction scenario developed in Section 4.2, Air Quality, for each project and programmatic component. The complete construction assumption details located in Appendix E were used to calculate the peak construction phase for the project and programmatic components.

Once Proposed Project construction is complete, operations would entail a minimal increase in on-road vehicle trips associated with routine inspection and maintenance of the new facilities by City staff. As indicated in Chapter 3, Project Description, it is anticipated that up to three new staff would be needed to operate under Proposed Project conditions: one for the Agreed Flows implementation and two for the new ASR facilities maintenance. An additional daily vehicle trip was also included for Beltz ASR maintenance. For long-term operations, it was conservatively estimated that an increase of up to eight daily one-way trips would be generated in support of the project and

programmatic components. Therefore, given this nominal increase in traffic volumes, this section provides a qualitative assessment of operation and maintenance activities associated with the Proposed Project.

Impacts have been evaluated with respect to the standards of significance, as described above. In the event adverse environmental impacts would occur subsequent to consideration of applicable policies and regulations and Proposed Project standard operational and construction practices described in Chapter 3, Project Description, impacts would be potentially significant and mitigation measures would be provided to reduce impacts to less-than-significant levels.

Application of Relevant Standard Practices

The Proposed Project does not include any standard operational or construction practices that are relevant to transportation.

4.12.3.3 Project Impact Analysis

This section provides a detailed evaluation of transportation impacts associated with the Proposed Project.

Impact TRA-1: Conflict with Program, Plan, Ordinance, or Policy Addressing the Circulation System (Significance Standard A). Construction and operation of the Proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. ***(Less than Significant)***

Construction

Water Rights Modifications

Water rights modifications would not directly result in construction of new or upgraded infrastructure and therefore would not directly conflict with policies addressing the circulation system. As such, this project component would result in no direct impacts.

The following analysis evaluates the potential indirect impacts related to conflicts with adopted policies addressing the circulation system as a result of the proposed water rights modifications, that once approved could result in the implementation of the project and programmatic infrastructure components of the Proposed Project.

Infrastructure Components

This section addresses the potential that Beltz ASR facilities, as well as the combined effect of all project and programmatic infrastructure components, could result in plan and policy conflicts addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Beltz ASR Facilities. Construction of the Beltz ASR project component was evaluated for study area and roadway network impacts and for potential conflicts with key policies addressing the circulation system. The Institute of Transportation Engineers' (ITE) Trip Generation, 10th Edition does not contain trip rates for the construction-related activities that would be associated with Beltz ASR. As such, trip generation estimates for construction projects were based on the peak number of workers and trucks that would be required for the proposed construction activities. Construction traffic includes the number of workers and the amount of delivery (vendor) and haul truck traffic that would be generated to and from the site daily and during the AM and PM peak commuting hours. The maximum number of construction-related

trips is expected to occur over a series of construction phases that overlap to occur concurrently. Therefore, the peak construction phase overall was utilized to calculate the estimate trip generation for the Beltz ASR project component.

All Beltz ASR facility locations are within unincorporated Santa Cruz County (Figure 3-4 in Chapter 3, Project Description). However, construction traffic would use roadways immediately adjacent to the Beltz ASR sites, such as 41st Avenue, which is partially within the jurisdiction of the City of Capitola, and Soquel Drive, which is partially within the jurisdiction of the City of Santa Cruz. Construction would begin sequentially for each Beltz ASR facility location; however, construction overlap may occur between several Beltz ASR facilities. Construction could start with Beltz 9 ASR facility in May 2022 and end with Beltz 10 ASR facility in March 2023. The peak construction phase identified is Beltz 8 ASR, which possesses several construction components that will be occur in September 2022 and are listed below in Table 4.12-2. The construction activities would occur primarily between 8:00 a.m. and 5:30 p.m., Monday through Friday; however, some construction activities may occur outside of these hours. Work hours may shift depending on the phase of construction. Construction staging would occur on-site to the extent possible; however, staging could require parking immediately adjacent to the construction sites and could encroach into public roadways. To provide a conservative analysis, all workers were assumed to arrive during the AM peak hour and leave the site during the PM peak hour and all truck trips were averaged for an 8-hour workday to estimate peak hour trips. The number of truck trips were converted using Passenger Car Equivalency (PCE) factors to more accurately account for the effect of trucks on the circulation system. All truck trips were converted to PCE trips using a factor of 2.0 PCE for vendor trucks and 3.0 PCE for haul trucks. The trip generation estimates of the overlapping construction phases that constitute the peak construction phase are shown in Table 4.12-2 below.

Table 4.12-2. Peak Construction Trip Generation Estimates for Beltz Aquifer Storage and Recovery

Vehicle Type	Daily Quantity		Daily Trips [1]	AM Peak Hour			PM Peak Hour		
				In	*Out*	*Total*	*In*	*Out*	*Total*
Beltz 8 ASR Facility [2] – Non-PCE Adjusted Trips									
Injection Line, Backflow, and Meter Install; Electrical Conduit and Control Installation; Storm Drain Line Connection									
Construction Workers	4	workers	8	4	0	4	0	4	4
Vendor trucks	2	trucks	4	2	0	2	0	2	2
Haul trucks	1	trucks	2	1	0	1	0	1	1
Non-PCE Trips			***14***	***7***	***0***	***7***	***0***	***7***	***7***
Beltz 8 ASR Facility [2] – PCE Adjusted Trips									
Injection Line, Backflow, and Meter Install; Electrical Conduit and Control Installation; Storm Drain Line Connection									
Construction Workers	4	workers	8	4	0	4	0	4	4
Vendor trucks	4	trucks	8	4	0	4	0	4	4
Haul trucks	3	trucks	6	3	0	3	0	3	3
PCE Trips			***22***	***11***	***0***	***11***	***0***	***11***	***11***

Notes: ASR = aquifer storage and recovery; PCE = Passenger Car Equivalents.

1 Daily trips represent the number of trips to and from the project component site (i.e., two trips represent one vehicle traveling to the work area and leaving the work area).

2 The construction of several other Beltz ASR facilities may overlap during construction of the Beltz ASR 8 construction components, however the maximum overlap in terms of traffic generated will be identical as is shown above.

As shown in Table 4.12-2, the Beltz ASR project component peak phase of construction activities would generate 14 daily trips, 7 AM peak hour trips (7 inbound and 0 outbound), and 7 PM peak hour trips (0 inbound and 7 outbound). With the application of PCE factors to truck trips, the project component would generate 22 total PCE daily trips, and 11 PCE trips during the AM peak hour (11 inbound and 0 outbound) and 11 PCE trips during the PM peak hour (0 inbound and 11 outbound). Construction related traffic would be temporary and short term.

The transportation analysis of the peak construction overlapping phases of the Beltz ASR project component indicates that the expected number of peak hour and daily trips would not create a measurable impact to any roadway or intersection in the area and would not conflict with County of Santa Cruz's LOS policy (see Section 4.12.2.3, Local). The Beltz ASR project component would not increase roadway capacity, generate a permanent increase in traffic, or change traffic patterns that could cause an impact to the circulation system including transit, roadway, bicycle, and pedestrian facilities and therefore would not conflict with adopted policies addressing the circulation system. As such, construction of this project component of the Proposed Project would result in a less-than-significant impact.

All Infrastructure Components. The construction of the project and programmatic infrastructure components, including Beltz ASR, was evaluated for study area and roadway network impacts and for potential conflicts with key policies addressing the circulation system. The overlapping construction phases were identified for all project and programmatic infrastructure components, including the Beltz ASR project component, since the construction for these components could occur concurrently in the same geographic areas within the study area. Therefore, the peak construction phase for all project and programmatic components were combined to calculate the estimated trip generation. The locations of project and programmatic components would occur within unincorporated Santa Cruz County, the City of Capitola, and the City of Santa Cruz (see Figure 3-4 in Chapter 3, Project Description). Construction traffic would use roadways immediately adjacent to the specific project and programmatic components and would use on-site construction staging and parking; however, staging could require parking immediately adjacent to the constructions sites and could encroach into public roadways.

For the Beltz ASR project component, construction would start with Beltz 9 ASR facility in May 2022 and end with Beltz 10 ASR in March 2023. The construction activities would occur in one shift of approximately 9 hours and 30 minutes between 8:00 a.m. and 5:30 p.m., Monday through Friday. Work hours could shift depending on the phase of construction. Construction for the programmatic infrastructure components would start April 2022 and end December 2028. The construction activities are assumed to occur over a standard 8-hour shift, Monday through Friday. Work hours could shift depending on the phase of construction. To provide a conservative analysis, all workers were assumed to arrive during the AM peak hour and leave the site during the PM peak hour and all truck trips were averaged for an 8-hour workday to estimate peak hour trips. The number of truck trips were converted using PCE factors to more accurately account for the effect of trucks on the circulation system. All truck trips were converted to PCE trips using a factor of 2.0 PCE for vendor trucks and 3.0 PCE for haul trucks. The trip generation estimates of the overlapping construction phases that constitute the peak construction phase are shown in Table 4.12-3 below. It should be noted that not all components and construction phases are shown in the table; only overlapping construction phases that constitute the peak construction phase are shown.

Table 4.12-3. Peak Construction Trip Generation Estimates for Project and Programmatic Infrastructure Components

Vehicle Type	Daily Quantity		Daily Trips[1]	AM Peak Hour			PM Peak Hour		
				In	*Out*	*Total*	*In*	*Out*	*Total*
Beltz 8 ASR Facility – Non-PCE Adjusted Trips									
Tank Construction									
Construction Workers	4	workers	8	4	0	4	0	4	4
Vendor trucks	1	trucks	2	1	0	1	0	1	1
Haul trucks	0	trucks	0	0	0	0	0	0	0
Total Beltz 8 ASR Non-PCE Trips			***10***	***5***	***0***	***5***	***0***	***5***	***5***
Beltz 8 ASR Facility – PCE Adjusted Trips									
Tank Construction									
Construction Workers	4	workers	8	4	0	4	0	4	4
Vendor trucks	2	trucks	4	2	0	2	0	2	2
Haul trucks	0	trucks	0	0	0	0	0	0	0
Total Beltz 8 ASR PCE-Trips			***12***	***6***	***0***	***6***	***0***	***6***	***6***
City/SqCWD/CWD Intertie (Non-PCE Adjusted Trips)									
Pipeline Installation									
Construction Workers	4	workers	8	4	0	4	0	4	4
Vendor trucks	2	trucks	4	2	0	2	0	2	2
Haul trucks	2	trucks	4	2	0	2	0	2	2
Pipeline Installation Non-PCE Trips			*16*	*8*	*0*	*8*	*0*	*8*	*8*
Paving									
Construction Workers	4	workers	8	4	0	4	0	4	4
Vendor trucks	2	trucks	4	2	0	2	0	2	2
Haul trucks	0	trucks	0	0	0	0	0	0	0
Paving Non-PCE Trips			*12*	*6*	*0*	*6*	*0*	*6*	*6*
Architectural Coating									
Construction Workers	2	workers	4	2	0	2	0	2	2
Vendor trucks	2	trucks	4	2	0	2	0	2	2
Haul trucks	0	trucks	0	0	0	0	0	0	0
Architectural Coating Non-PCE Trips			*8*	*4*	*0*	*4*	*0*	*4*	*4*
Total Intertie Non-PCE Trips			***36***	***18***	***0***	***18***	***0***	***18***	***18***
City/SqCWD/CWD Intertie (PCE-Adjusted Trips)									
Pipeline Installation									
Construction Workers	4	workers	8	4	0	4	0	4	4
Vendor trucks	4	trucks	8	4	0	4	0	4	4
Haul trucks	6	trucks	12	6	0	6	0	6	6
Pipeline PCE Trips			*28*	*14*	*0*	*14*	*0*	*14*	*14*

Table 4.12-3. Peak Construction Trip Generation Estimates for Project and Programmatic Infrastructure Components (continued)

Vehicle Type	Daily Quantity		Daily Trips[1]	AM Peak Hour			PM Peak Hour		
				In	*Out*	*Total*	*In*	*Out*	*Total*
Paving									
Construction Workers	4	workers	8	4	0	4	0	4	4
Vendor trucks	4	trucks	8	4	0	4	0	4	4
Haul trucks	0	trucks	0	0	0	0	0	0	0
Paving PCE Trips			16	8	0	8	0	8	8
Architectural Coating									
Construction Workers	2	workers	4	2	0	2	0	2	2
Vendor trucks	4	trucks	8	4	0	4	0	4	4
Haul trucks	0	trucks	0	0	0	0	0	0	0
Architectural Coating PCE Trips			12	6	0	6	0	6	6
Total Intertie PCE Trips			**56**	**28**	**0**	**28**	**0**	**28**	**28**
Total Combined Non-PCE Trips			**46**	**23**	**0**	**23**	**0**	**23**	**23**
Total Combined PCE Trips			**68**	**34**	**0**	**34**	**0**	**34**	**34**

Notes: CWD = Central Water District; PCE = Passenger Car Equivalents; SqCWD = Soquel Creek Water District.

[1] Daily trips represent the number of trips to and from the project and programmatic sites (i.e., two trips represent one vehicle traveling to the work area and leaving the work area).

As shown in Table 4.12-3, with the program components in addition to the Beltz ASR project component peak phase of construction activities would generate 46 daily trips, 23 AM peak hour trips (23 inbound and 0 outbound), and 23 PM peak hour trips (0 inbound and 23 outbound). With the application of PCE factors to truck trips, the project would generate 68 total PCE daily trips, and 34 PCE trips during the AM peak hour (34 inbound and 0 outbound) and 34 PCE trips during the PM peak hour (0 inbound and 34 outbound). Construction related traffic would be temporary and short term.

The transportation analysis of the peak construction overlapping phases of the project and programmatic components indicates that the expected number of peak hour and daily trips would not create a measurable impact to any roadway or intersection in the area and would not conflict with applicable local agency LOS policies (see Section 4.12.2.3, Local). The project and program infrastructure components would not increase roadway capacity, generate a permanent increase in traffic, or change traffic patterns that could cause an impact to the circulation system including transit, roadway, bicycle, and pedestrian facilities and therefore would not conflict with adopted policies addressing the circulation system. As such, construction of the project and programmatic components of the Proposed Project would result in a less-than-significant impact.

Operation

Once Proposed Project infrastructure construction is complete, operations would entail a minimal increase in on-road vehicle trips associated with routine inspection and maintenance of the new and upgraded facilities by City staff. As indicated in Section 4.12.3.2, Analytical Methods, it is anticipated that up to three new staff would be needed, one for the Agreed Flows implementation and two for the new ASR facilities maintenance. An additional daily vehicle trip was also included for Beltz ASR maintenance. For long-term operation of the Proposed Project, it

was conservatively estimated that an increase of up to eight daily one-way trips would be generated in support of the project and programmatic components. Due to the nominal increase in trips generated during operations and maintenance, the roadway operations in the area would not substantially differ from existing conditions. Therefore, operation of the Proposed Project would not conflict with adopted policies, plans, or programs addressing the circulation system including transit, roadway, bicycle, and pedestrian facilities. As such, operation of the project and programmatic components of the Proposed Project would result in a less-than-significant impact.

Mitigation Measures

As described above, the Proposed Project would not result in significant impacts related to conflicts with adopted policies addressing the circulation system, and therefore, no mitigation measures are required.

Impact TRA-2: Vehicle Miles Traveled (Significance Standards B and C). Construction and operation of the Proposed Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) or cause an increase in VMT which is greater than 15% below the regional average VMT. ***(Less than Significant)***

Water Rights Modifications

The water right modifications of the Proposed Project would not directly result in construction or operation of new facilities and therefore would not directly generate new VMT or conflict with or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b). Therefore, this project component would have no direct impacts.

The following analysis evaluates the potential indirect impacts related to increased VMT as a result of the proposed water rights modifications, that once approved could result in the implementation of the project and programmatic infrastructure components of the Proposed Project.

Infrastructure Components

CEQA Guidelines Section 15064.3(b) focuses on VMT for determining the significance of transportation impacts. It is further divided into four subdivisions: (1) land use projects, (2) transportation projects, (3) qualitative analysis, and (4) methodology. The project and programmatic infrastructure components of the Proposed Project would be categorized under (3), qualitative analysis, as this Subdivision (b)(3) recognizes that lead agencies may not be able to quantitatively estimate VMT for every project type. In these situations, lead agencies are directed to evaluate factors such as the availability of transit, proximity to other destinations, and other factors that may affect the amount of driving required by the project. Additionally, Subdivision (b)(3) indicates that a qualitative analysis of construction traffic is often appropriate. A qualitative analysis of VMT is provided in this analysis as the Proposed Project consists of project and programmatic infrastructure components that would generate temporary construction-related traffic and nominal operational-related traffic, as described in Impact TRA-1.

Furthermore, OPR's Technical Advisory provides several "screening thresholds" that may be applied to identify land use projects that should be expected to cause a less-than-significant impact without detailed study; specifically, the "screening threshold for small projects" states that projects that generate fewer than 110 daily trips generally may be assumed to cause a less-than-significant impact (OPR 2018). As of October 2020, the County of Santa Cruz has published guidelines for the implementation of SB 743, along with screening criteria that uses the guidance published within the OPR technical advisory as a reference point. Specifically, the guidance excludes from further analysis "small projects" that generate fewer than 100 net new trips per day. The City of Santa Cruz also has

developed implementation guidelines for SB 743, including the same screening criteria that excludes "small projects" that generate less than 110 trips per day from further analysis, which matches the recommended guidance within the OPR Technical Advisory. As shown in Table 4.12-3 in Impact TRA-1, during the peak overlapping construction phases, the project and programmatic infrastructure components would result in approximately 68 total PCE daily trips within the study area and roadway network, which includes approximately 12 total PCE daily trips for Beltz ASR. Once construction is completed, VMT would return to pre-project conditions with the implementation of the project and programmatic infrastructure components. Therefore, as the project and programmatic infrastructure components would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) or cause an increase in VMT which is greater than 15% below the regional average VMT, impacts would be less than significant.

Mitigation Measures

As described above, the Proposed Project would not result in significant impacts related to increased VMT, and therefore, no mitigation measures are required.

Impact TRA-3: Geometric Design Hazards (Significance Standard D). Construction and operation of the Proposed Project would not substantially increase hazards due to a geometric design feature or incompatible use. ***(Less than Significant)***

Water Rights Modifications

The water right modifications of the Proposed Project would not directly result in construction or operation of new facilities and therefore would not result in direct impacts associated with hazardous design features or incompatible land uses. Therefore, this project component would have no direct impacts.

The following analysis evaluates the potential indirect impacts related to hazardous design features or incompatible land uses as a result of the proposed water rights modifications, that once approved could result in the implementation of the project and programmatic infrastructure components of the Proposed Project.

Infrastructure Components

The construction of the project and programmatic infrastructure components of the Proposed Project would result in a temporary increase in local traffic as a result of construction-related workforce traffic, material deliveries, and construction activities, as described in Impact TRA-1. The primary off-site impacts from the movement of construction trucks would include short-term and intermittent effects on traffic operations because of slower movements and larger turning radii of delivery and haul trucks compared to passenger vehicles. All construction traffic and parking would occur on-site or within the areas immediately adjacent to the project and programmatic infrastructure component sites (as shown in Figure 3-4 and Figures 3-4a through 3-4i, in Chapter 3, Project Description). The intertie pipeline components would use public roadways for pipeline installation, intermittent staging and parking. Any roadway blockages for larger construction trucks would be temporary, would occur with flagging and safe maneuvers, and would be under the provisions of a traffic control plan or other encroachment permit requirements, as described in Impact TRA-4 and therefore would not create hazardous roadway conditions.

Once operational, the project and programmatic infrastructure components would generate nominal traffic and vehicle trips associated with routine operations and maintenance of each facility, as described in Impact TRA-1, and therefore would not create hazardous roadway conditions. As such, no sharp curves, dangerous intersections, or incompatible uses would be introduced during construction and operation of the project and programmatic

infrastructure components of the Proposed Project. Therefore, the project and programmatic infrastructure components would have less-than-significant impacts.

Mitigation Measures

As described above, the Proposed Project would not result in significant impacts related to hazardous design features or incompatible land uses, and therefore, no mitigation measures are required.

Impact TRA-4: Emergency Access (Significance Standard E). Construction of the Proposed Project would not result in inadequate emergency access. ***(Less than Significant)***

Water Rights Modifications

The water right modifications of the Proposed Project would not directly result in construction or operation of new facilities and therefore would not result in direct impacts associated with inadequate emergency access. Therefore, this project component would have no direct impacts.

The following analysis evaluates the potential indirect impacts related to inadequate emergency access as a result of the proposed water rights modifications, that once approved could result in the implementation of the project and programmatic infrastructure components of the Proposed Project.

Infrastructure Components

The project and programmatic infrastructure components of the Proposed Project would be sited at multiple locations within unincorporated Santa Cruz County, the City of Santa Cruz, the City of Capitola and the City of Scotts Valley. All construction traffic that would be generated as a result of the project and programmatic infrastructure components would be temporary, as indicated in Impact TRA-1. Construction and staging areas would be located to not block any egress or ingress points for the sites. The project and programmatic infrastructure sites and areas of construction would be accessible to emergency responders and associated vehicles during construction and operation of the Proposed Project.

Construction of some of the proposed project and programmatic infrastructure components could require partial road closures or access limitations in public roadways on a temporary and periodic basis during the construction period. Where construction would take place in public roadways, encroachment permits would need to be obtained in most cases from the applicable local agency for work done within the public right-of-way, as described in Section 4.12.2.3, Local. The issuance of encroachment permits requires submission of traffic control plans in Santa Cruz County and the cities of Santa Cruz and Capitola. While the City of Scotts Valley specifies the need for a traffic control plan only if required by the Public Works Director/City Engineer, other requirements of encroachment permits include conducting all street improvements in accordance with the City of Scotts Valley Standard Details and Specification, which include policies for addressing lane closures or any form of traffic diversions. Implementation of these plans and requirements would ensure that access for emergency vehicles would be maintained during construction.

Therefore, the construction of the project and program infrastructure components as part of the Proposed Project would comply with all applicable local requirements and would not result in inadequate emergency access. Similarly, the Proposed Project would have limited operational traffic and vehicle trips associated with routine

maintenance of facilities, as described in Impact TRA-1. Therefore, impacts associated with inadequate emergency access would be less than significant.

Mitigation Measures

As described above, the Proposed Project would not result in significant impacts related to inadequate emergency access, and therefore, no mitigation measures are required.

4.12.3.4 Cumulative Impacts Analysis

This section provides an evaluation of cumulative transportation impacts associated with the Proposed Project and past, present, and reasonably foreseeable future projects, as identified in Table 4.0-2 in Section 4.0, Introduction to Analyses, and as relevant to this topic. The geographic area for the analysis of cumulative impacts related to transportation consists of the proposed project and programmatic infrastructure component sites and areas along various public roadways that would support haul truck, vendor truck, and worker vehicle access to the component sites.

As the water rights modifications of the Proposed Project would have no direct transportation impacts, as described in Impacts TRA-1 through TRA-4, this project component would not have the potential to directly contribute to cumulative transportation impacts and therefore is not further evaluated.

Impact TRA-5: Cumulative Transportation Impacts (Significance Standards A, B, C, D, and E). Construction and operation of the Proposed Project, in combination with past, present, and reasonably foreseeable future development, would not result in a significant cumulative impact related to transportation. ***(Less than Significant)***

Conflicts with Plans and Policies

The construction of the proposed project and programmatic infrastructure components would occur over several phases, beginning in 2022 and ending in 2028. As shown in Table 4.0-2, a number of cumulative projects are located at or near the infrastructure component sites and could be under construction during this same period of time. Table 4.0-2 displays the estimated construction schedule for cumulative projects, where known. Construction of the project and program infrastructure components in combination with other cumulative projects would not be expected to conflict with adopted policies addressing the circulation system given the temporary nature of construction, the limited amount of vehicle trips expected to be generated in the study area from the Proposed Project (see Impact TRA-1) and cumulative projects, and the regulations and controls on construction activities (see Impacts TRA-3 and TRA-4). Therefore, cumulative impacts related to such conflicts during construction would be less than significant.

Operation of the proposed project and programmatic infrastructure components, along with cumulative projects (see Table 4.0-2) could potentially result in conflicts with adopted policies, plans, or programs addressing the circulation system including transit, roadway, bicycle, and pedestrian facilities related to one or more of the cumulative projects, which would be considered a potentially significant cumulative impact. However, the Proposed Project's contribution to this impact would not be cumulatively considerable. As indicated in Impact TRA-1, due to the nominal increase in trips generated during operations and maintenance, the roadway operations in the area would not substantially differ from existing conditions and therefore, operation of the Proposed Project would not conflict with adopted policies, plans, or programs addressing the circulation system including transit, roadway,

bicycle, and pedestrian facilities. As such, the Proposed Project would have a less-than-significant cumulative impact related to conflicts with adopted policies, plans, or programs addressing the circulation system.

Vehicle Miles Traveled

According to OPR's Technical Advisory, a project that falls below the screening threshold (see Impact TRA-2) aligns with long-term environmental goals and relevant plans and would have no cumulative impact distinct from the project impact (OPR 2018). Due to the number of cumulative projects occurring within the region, as well as the wide variety of cumulative projects that have the potential to generate VMT, it is possible that one or more of the cumulative projects identified in Table 4.0-2 could be determined to have a significant cumulative VMT impact, based on comparison to the 2040 Future Year model scenario used by the City and County in their respective VMT guidelines, described in Section 4.12.2.3, Local, and in Impact TRA-2. While that is true, the University of California, Santa Cruz (UCSC) 2021 Long Range Development Plan (LRDP) Draft EIR reported that the 2021 LRDP would not result in a significant cumulative VMT impact (UCSC 2021). Regardless, as described under Impact TRA-2, the project and programmatic components of the Proposed Project, would generate fewer than 110 daily vehicle trips during the peak construction overlapping phase and once construction is completed, VMT would return to pre-project conditions with the implementation of the project and programmatic infrastructure components. Therefore, the Proposed Project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) and cumulative impacts related to VMT would be less than significant.

Geometric Design Hazards and Emergency Access

Cumulative projects located at or near the infrastructure component sites could be under construction during the same period of time. Table 4.0-2 displays the estimated construction schedule for cumulative projects, where known. Construction of the project and program infrastructure components in combination with other cumulative projects would not be expected to create hazardous roadway conditions or inadequate emergency access given the temporary nature of construction and the implementation of traffic control plans and/or other requirements of encroachment permits, as described in Impacts TRA-3 and TRA-4. As such, cumulative impacts related to emergency access and roadway hazards would be less than significant.

4.12.4 References

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