5.0 CUMULATIVE IMPACTS SUMMARY

This section summarizes the cumulative impacts associated with the Martis Valley Community Plan Update that are identified in environmental issue areas in Section 4.0. Cumulative impacts are the result of combining the potential effects of the project with other planned developments, as well as foreseeable development projects. The following discussion considers the cumulative impacts of the relevant environmental issue areas.

5.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) contain an assessment of the cumulative impacts that could be associated with the proposed project. According to CEQA Guidelines Section 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (as defined by Section 15130). As defined in CEQA Guidelines Section 15355, a cumulative impact consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. A cumulative impact occurs from:

> *…the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

In addition, Section 15130(b) identifies that the following three elements are necessary for an adequate cumulative analysis:

1) Either:

   (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or,

   (B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

2) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and

3) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

This EIR utilizes both the "list" and the "general plan" approach in the cumulative analysis.

5.2 CUMULATIVE SETTING

A general description of the cumulative setting is provided in Section 4.0 (Introduction to the Environmental Analysis and Assumptions Used) as well as in **Table 3.0-1** and **Figure 3.0-4**. In addition, each environmental issue area evaluated in the Draft EIR identifies its own cumulative setting.

5.3 CUMULATIVE IMPACT ANALYSIS

Identified below is a compilation of the cumulative impacts that would result from the implementation of the project and future development in the vicinity. As described above, cumulative impacts are two or more effects that, when combined, are considerable or compound other environmental effects. Each cumulative impact is determined to have one of the following levels of significance: less than significant, significant, or significant and unavoidable. The specific cumulative impacts for each environmental issue area are identified in Section 4.0.

SECTION 4.1 LAND USE

Impact 4.1.4 Consistency with Relevant Planning Documents

PP The Proposed Land Use Diagram would potentially conflict with land use planning documents relevant to the Plan area. This is a **less than significant** impact.

AA The proposed Existing Martis Valley General Plan Land Use Map Alternative would potentially conflict with land use planning documents relevant to the Plan area. This is a **less than significant** impact.

AB The proposed Alternative 1 Land Use Map would potentially conflict with land use planning documents relevant to the Plan area. This is a **less than significant** impact.

AC The proposed Alternative 2 Land Use Map would potentially conflict with land use planning documents relevant to the Plan area. This is a **less than significant** impact.

Impact 4.1.5 Cumulative Land Use Conflicts

PP Development under the Proposed Land Use Diagram would result in substantial change in land use in the Plan area. This is a **cumulative significant** impact.

AA Development under the Existing Martis Valley Community Plan Land Use Map Alternative would result in substantial change in land use in the Plan area. This is a **cumulative significant** impact.

AB Development under the Alternative 1 Land Use Map would result in substantial change in land use in the Plan area. This is a **cumulative significant** impact.

AC Development under the Alternative 2 Land Use Map would result in substantial change in land use in the Plan area. This is a **cumulative significant** impact.

Impact 4.1.6 Cumulative Loss of Timber/Forest Resources

PP Development under the Proposed Land Use Diagram could result in the loss of forestland. However, given the amount, location, and use of impacted forestland under the Proposed Land Use Diagram, this is a **cumulative significant** impact.

AA Development under the Existing Martis Valley General Plan Land Use Map Alternative does not change the impact to forest or timberland. This is a **cumulative significant** impact.

AB The Alternative 1 Land Use Map would reduce the allowed development of forestland and timber resources. This is a **cumulative significant** impact.

AC The Alternative 2 Land Use Map would allow development that could result in the loss of forestland. However, given the location, use, and no net loss of impacted forestland under this alternative, this is a **cumulative significant** impact.

SECTION 4.2 POPULATION/HOUSING/EMPLOYMENT

Impact 4.2.3 Cumulative Housing Impacts

PP Cumulative development under the Proposed Land Use Diagram could potentially exceed the holding capacity of Martis Valley as well as result in housing impacts. This is considered a **cumulative significant** impact.

AA Cumulative development under the No Project Alternative could potentially exceed the holding capacity of Martis Valley as well as result in housing impacts. This is considered a **cumulative significant** impact.

AB Cumulative development under the Alternative 1 Land Use Map could potentially exceed the holding capacity of Martis Valley as well as result in housing impacts. This is considered a **cumulative significant** impact.

AC Cumulative development under the Alternative 2 Land Use Map could potentially exceed the holding capacity of Martis Valley as well as result in housing impacts. This is considered a **cumulative significant** impact.

SECTION 4.3 HUMAN HEALTH/RISK OF UPSET

Impact 4.3.5 Cumulative Hazard Impacts

PP Development under the Proposed Land Use Diagram could result in site-specific hazards for area residents. This is considered a **less than significant** cumulative impact.

AA Development under the existing Martis Valley Community Plan Land Use Map could result in site-specific hazards for area residents. This is considered a **less than significant** cumulative impact.

AB Development under the Alternative 1 Land Use Map could result in site-specific hazards for area residents. This is considered a **less than significant** cumulative impact.

AC Development under the Alternative 2 Land Use Map could result in site-specific hazards for area residents. This is considered a **less than significant** cumulative impact.

SECTION 4.4 TRANSPORTATION AND CIRCULATION

Impact 4.4.7 Cumulative Impacts to Area Intersections and Roadways

PP Depending upon the roadway network and analysis period, intersection and roadway Level of Service (LOS) standards are forecast to be exceeded under full development of the Proposed Land Use Diagram and other regional development under year 2021 conditions for area roadway facilities in the Town of Truckee and Placer County. Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a **cumulative significant** impact.

AA Depending upon the roadway network and analysis period, intersection and roadway Level of Service (LOS) standards are forecast to be exceeded under full development of the Existing Martis Valley General Plan Land Use Map and other regional development under year 2021 conditions for area roadway facilities in the Town of Truckee and Placer County. Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a **cumulative significant** impact.

AB Depending upon the roadway network and analysis period, intersection and roadway Level of Service (LOS) standards are forecast to be exceeded under full development of the Alternative 1 Land Use Map and other regional development under year 2021 conditions for area roadway facilities in the Town of Truckee and Placer County. Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a **cumulative significant** impact.

AC Depending upon the roadway network and analysis period, intersection and roadway Level of Service (LOS) standards are forecast to be exceeded under full development of the Alternative 2 Land Use Map and other regional development under year 2021 conditions for area roadway facilities in the Town of Truckee and Placer County. Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a **cumulative significant** impact.

Impact 4.4.8 Cumulative Impacts to Regional Highway Facilities

PP Full development of the Proposed Land Use Diagram and other regional development is expected to add to year 2021 traffic volumes along Interstate 80 and State Route 89 (north of Interstate 80). While State Route 89 (north of Interstate 80) is anticipated to operate properly, Interstate 80 is expected to operate deficiently. This would be a **cumulative significant** impact.

AA Full development of the Existing Martis Valley General Plan Land Use Map and other regional development is expected to add to year 2021 traffic volumes along Interstate 80 and State Route 89 (north of Interstate 80). While State Route 89 (north of Interstate 80) is anticipated to operate properly, Interstate 80 is expected to operate deficiently.

This would be a **cumulative significant** impact.

AB Full development of the Alternative 1 Land Use Map and other regional development is expected to add to year 2021 traffic volumes along Interstate 80 and State Route 89 (north of Interstate 80). While State Route 89 (north of Interstate 80) is anticipated to operate properly, Interstate 80 is expected to operate deficiently. This would be a **cumulative significant** impact.

AC Full development of the Alternative 2 Land Use Map and other regional development is expected to add to year 2021 traffic volumes along Interstate 80 and State Route 89 (north of Interstate 80). While State Route 89 (north of Interstate 80) is anticipated to operate properly, Interstate 80 is expected to operate deficiently. This would be a **cumulative significant** impact.

Impact 4.4.9 Cumulative Roadway Hazards Because of Design or Incompatible Uses

PP Implementation of the Proposed Land Use Diagram is not expected to contribute to significant traffic hazards. This is considered a **less than significant** impact.

AA Implementation of the Existing Martis Valley General Plan Land Use Map is not expected to contribute to significant traffic hazards. This is considered a **less than significant** impact.

AB Implementation of the Alternative 1 Land Use Map is not expected to contribute to significant traffic hazards. This is considered a **less than significant** impact.

AC Implementation of the Alternative 2 Land Use Map is not expected to contribute to significant traffic hazards. This is considered a **less than significant** impact.

Impact 4.4.10 Cumulative Conflicts with Transit, Pedestrian and Bicycle Uses

PP Implementation of the Proposed Land Use Diagram is not expected to contribute to conflicts with transit. This is considered a **less than significant** impact.

AA Implementation of the Existing Martis Valley General Plan Land Use Map is not expected to contribute to conflicts with transit, pedestrian and bicycle uses. This is considered a **less than significant** impact.

AB Implementation of the Alternative 1 Land Use Map is not expected to contribute to conflicts with transit, pedestrian and bicycle uses. This is considered a **less than significant** impact.

AC Implementation of the Alternative 2 Land Use Map is not expected to contribute to conflicts with transit, pedestrian and bicycle uses. This is considered a **less than significant** impact.

SECTION 4.5 NOISE

Impact 4.5.5 Cumulative Traffic Noise Impacts

PP Anticipated transportation noise increases associated with subsequent development under the Proposed Land Use Diagram in year 2021 would contribute to elevated noise levels that would be in excess of applicable noise standards. This would be a **cumulative significant** impact.

AA Anticipated transportation noise increases associated with subsequent development under the Existing Martis Valley General Plan Land Use Map in year 2021 would contribute to elevated noise levels that would be in excess of applicable noise standards. This would be a **cumulative significant** impact.

AB Anticipated transportation noise increases associated with subsequent development under the Alternative 1 Land Use Map in year 2021 would contribute to elevated noise levels that would be in excess of applicable noise standards. This would be a **cumulative significant** impact.

AC Anticipated transportation noise increases associated with subsequent development under the Alternative 2 Land Use Map in year 2021 would contribute to elevated noise levels that would be in excess of applicable noise standards. This would be a **cumulative significant** impact.

SECTION 4.6 AIR QUALITY

Impact 4.6.5 Cumulative Air Quality Impacts

PP Anticipated development and operational effects associated with subsequent development under the Proposed Land Use Diagram in would contribute local and regional air pollution emissions. This would be a **cumulative significant** impact.

AA Anticipated development and operational effects associated with subsequent development under the Existing Martis Valley General Plan Land Use Map would contribute local and regional air pollution emissions. This would be a **cumulative significant** impact.

AB Anticipated development and operational effects associated with subsequent development under the Alternative 1 Land Use Map in would contribute local and regional air pollution emissions. This would be a **cumulative significant** impact.

AC Anticipated development and operational effects associated with subsequent development under the Alternative 2 Land Use Map in would contribute local and regional air pollution emissions. This would be a **cumulative significant** impact.

SECTION 4.7 HYDROLOGY AND WATER QUALITY

Impact 4.7.7 Cumulative Water Quality Impacts

PP Construction activities and operation of land uses under the Proposed Land Use Diagram would contribute to water quality impacts from development of other projects in the region. This would be a **cumulative significant** impact.

AA Construction activities and operation of land uses under the Existing Martis Valley General Plan Land Use Map would contribute to water quality impacts from development of other projects in the region. This would be a **cumulative significant** impact.

AB Construction activities and operation of land uses under the Alternative 1 Land Use Map would contribute to water quality impacts from development of other projects in the region. This would be a **cumulative significant** impact.

AC Construction activities and operation of land uses under the Alternative 2 Land Use Map would contribute to water quality impacts from development of other projects in the region. This would be a **cumulative significant** impact.

Impact 4.7.8 Cumulative Groundwater Recharge Area Impacts

PP Implementation of the Proposed Land Use Diagram would not contribute to a substantial loss of groundwater recharge area. This would be a **less than significant** impact.

AA Implementation of the Existing Martis Valley General Plan Land Use Map would not contribute to a substantial loss of groundwater recharge area. This would be a **less than significant** impact.

AB Implementation of the Alternative 1 Land Use Map would not contribute to a substantial loss of groundwater recharge area. This would be a **less than significant** impact.

AC Implementation of the Alternative 1 Land Use Map would not contribute to a substantial loss of groundwater recharge area. This would be a **less than significant** impact.

Impact 4.7.9 Cumulative Groundwater Usage Impacts

PP Implementation of land uses under the Proposed Land Use Diagram would contribute to further increases in groundwater usage in Martis Valley, which could adversely impact groundwater resources. This would be a **cumulative significant** impact.

AA Implementation of land uses under the Existing Martis Valley General Plan Land Use Map would contribute to further increases in groundwater usage in Martis Valley, which could adversely impact groundwater resources. This would be a **cumulative significant** impact.

AB Implementation of land uses under the Alternative 1 Land Use Map would contribute to further increases in groundwater usage in Martis Valley, which could adversely impact groundwater resources. This would be a **cumulative significant** impact.

AC Implementation of land uses under the Alternative 2 Land Use Map would contribute to further increases in groundwater usage in Martis Valley, which could adversely impact groundwater resources. This would be a **cumulative significant** impact.

Impact 4.7.10 Cumulative Flood Hazards

PP Implementation of the Proposed Land Use Diagram would increase impervious surfaces and alter drainage conditions and rates in the Plan area, which could contribute to regional flooding impacts. However, implementation of proposed Community Plan policies and implementation programs would mitigate the Community Plan's contribution and would make this a **less than significant** impact.

AA Implementation of the Existing Martis Valley General Plan Land Use Map would increase impervious surfaces and alter drainage conditions and rates in the Plan area, which could contribute to regional flooding impacts. However, implementation of proposed Community Plan policies and implementation programs would mitigate the Community Plan's contribution and would make this a **less than significant** impact.

AB Implementation of the Alternative 1 Land Use Map would increase impervious surfaces and alter drainage conditions and rates in the Plan area, which could contribute to regional flooding impacts. However, implementation of proposed Community Plan policies and implementation programs would mitigate the Community Plan's contribution and would make this a **less than significant** impact.

AC Implementation of the Alternative 2 Land Use Map would increase impervious surfaces and alter drainage conditions and rates in the Plan area, which could contribute to regional flooding impacts. However, implementation of proposed Community Plan policies and implementation programs would mitigate the Community Plan's contribution and would make this a **less than significant** impact.

SECTION 4.8 GEOLOGY AND SOILS

Impact 4.8.5 Cumulative Geologic Impacts

PP Development under the Proposed Land Use Diagram could result in site-specific geologic hazards for area residents. This is considered a **less than significant** cumulative impact.

AA Development under the existing Martis Valley Community Plan Land Use Map could result in site-specific geologic hazards for area residents. This is considered a **less than significant** cumulative impact.

AB Development under the Alternative 1 Land Use Map could result in site-specific geologic hazards for area residents. This is considered a **less than significant** cumulative impact.

AC Development under the Alternative 2 Land Use Map could result in site-specific geologic hazards for area residents. This is considered a **less than significant** cumulative impact.

SECTION 4.9 BIOLOGICAL RESOURCES

Impact 4.9.12 Loss of Special-Status Species and their Habitat, Interference with Wildlife Movement, and Fragmentation of Habitat

PP Implementation of the Proposed Land Use Diagram would contribute to the loss of habitat and forage lands, habitat degradation due to encroaching urbanization, direct and indirect impacts to sensitive species, habitat fragmentation, obstruction of movement corridors, and conflicts between wildlife and human activity. This would be a **cumulative significant** impact.

AA Implementation of the Existing Martis Valley General Plan Land Use Map would contribute to the loss of habitat and forage lands, habitat degradation due to encroaching urbanization, direct and indirect impacts to sensitive species, habitat fragmentation, obstruction of movement corridors, and conflicts between wildlife and human activity. This would be a **cumulative significant** impact.

AB Implementation of the Alternative 1 Land Use Map would contribute to the loss of habitat and forage lands, habitat degradation due to encroaching urbanization, direct and indirect impacts to sensitive species, habitat fragmentation, obstruction of movement corridors, and conflicts between wildlife and human activity. This would be a **cumulative significant** impact.

AC Implementation of the Alternative 2 Land Use Map would contribute to the loss of habitat and forage lands, habitat degradation due to encroaching urbanization, direct and indirect impacts to sensitive species, habitat fragmentation, obstruction of movement corridors, and conflicts between wildlife and human activity. This would be a **cumulative significant** impact.

SECTION 4.10 CULTURAL AND PALEONTOLOGICAL RESOURCES

Impact 4.10.3 Cumulative Impacts to Prehistoric and Historic Resources in the Martis Valley Area

PP Implementation of the Proposed Land Use Diagram in combination with proposed and planned development in the Martis Valley area could contribute to the disturbance of known and undiscovered prehistoric and historic resources in the Martis Valley area. This would be a **cumulative significant** impact.

AA Implementation of the existing Martis Valley General Plan Land Use Map in combination with proposed and planned development in the Martis Valley area could contribute to the disturbance of known and undiscovered prehistoric and historic resources in the Martis Valley area. This would be a **cumulative significant** impact.

AB Implementation of the Alternative 1 Land Use Map in combination with proposed and planned development in the Martis Valley area could contribute to the disturbance of known and undiscovered prehistoric and historic resources in the Martis Valley area. This would be a **cumulative significant** impact.

AC Implementation of the Alternative 2 Land Use Map in combination with proposed and planned development in the Martis Valley area could contribute to the disturbance of

known and undiscovered prehistoric and historic resources in the Martis Valley area. This would be a **cumulative significant** impact.

Impact 4.10.4 Cumulative Impacts to Paleontological Resource Impacts in the Martis Valley Area

PP Implementation of the Proposed Land Use Diagram in combination with proposed and planned development in the Martis Valley area could contribute to the loss of paleontological resources in the Martis Valley area. This would be a **cumulative significant** impact.

AA Implementation of the existing Martis Valley General Plan Land Use Map in combination with proposed and planned development in the Martis Valley area could contribute to the loss of paleontological resources in the Martis Valley area. This would be a **cumulative significant** impact.

AB Implementation of the Alternative 1 Land Use Map in combination with proposed and planned development in the Martis Valley area could contribute to the loss of paleontological resources in the Martis Valley area. This would be a **cumulative significant** impact.

AC Implementation of the Alternative 2 Land Use Map in combination with proposed and planned development in the Martis Valley area could contribute to the loss of paleontological resources in the Martis Valley area. This would be a **cumulative significant** impact.

SECTION 4.11 PUBLIC SERVICES

Impact 4.11.1.3 Cumulative Fire Protection and Emergency Medical Services

PP Implementation of the Proposed Land Use Diagram would result in residential uses outside of local fire district service areas. This would place future residents at risk of a loss resulting from a structural fire and contribute to cumulative fire protection and emergency service demands in the Plan area. This would be a **cumulative significant** impact.

AA Implementation of Alternative AA would result in residential uses outside of local fire district service areas. This would place future residents at risk of a loss resulting from a structural fire and contribute to cumulative fire protection and emergency service demands in the Plan area. This would be a **cumulative significant** impact.

AB Implementation of Alternative AB would result in residential uses outside of local fire district service areas. This would place future residents at risk of a loss resulting from a structural fire and contribute to cumulative fire protection and emergency service demands in the Plan area. This would be a **cumulative significant** impact.

AC Implementation of Alternative AC would result in residential uses outside of local fire district service areas. This would place future residents at risk of a loss resulting from a structural fire and contribute to cumulative fire protection and emergency service demands in the Plan area. This would be a **cumulative significant** impact.

Impact 4.11.1.4 Cumulative Wildland Fire Hazard

PP Development under the Proposed Land Use Diagram would locate additional residences within wildland fire hazard zones under cumulative conditions. Proposed policies and implementation programs in the proposed Community Plan would mitigate potential impacts to **less than significant**.

AA Development under the Existing Martis Valley General Plan Land Use Map would locate additional residences within wildland fire hazard zones under cumulative conditions. Proposed policies and implementation programs in the proposed Community Plan would mitigate potential impacts to **less than significant**.

AB Development under the Alternative 1 Land Use Map would locate additional residences within wildland fire hazard zones under cumulative conditions. Proposed policies and implementation programs in the proposed Community Plan would mitigate potential impacts to **less than significant**.

AC Development under the Alternative 2 Land Use Map would locate additional residences within wildland fire hazard zones under cumulative conditions. Proposed policies and implementation programs in the proposed Community Plan would mitigate potential impacts to **less than significant**.

Impact 4.11.2.2 Cumulative Law Enforcement Services

PP Under cumulative conditions, implementation of the Proposed Land Use Diagram would result in an increased demand for sheriff/police protection in the region. This would be considered a **less than significant** impact.

AA Under cumulative conditions, implementation of the Existing Martis Valley General Plan Land Use Map would result in an increased demand for sheriff/police protection in the region. This would be considered a **less than significant** impact.

AB Under cumulative conditions, implementation of the Alternative 1 Land Use Map would result in an increased demand for sheriff/police protection in the region. This would be considered a **less than significant** impact.

AC Under cumulative conditions, implementation of the Alternative 2 Land Use Map would result in an increased demand for sheriff/police protection in the region. This would be considered a **less than significant** impact.

Impact 4.11.3.2 Cumulative Impacts on School Services

PP Implementation of the Proposed Land Use Diagram would contribute to a cumulative increase in student enrollment at the Tahoe Truckee Unified School District's schools. Additional development associated with this alternative would impact TTUSD's school facilities and would require additional schools to serve the student population under cumulative conditions. The cumulative impacts on schools services would be **less than significant.**

AA Implementation of the Existing Martis Valley General Plan Land Use Map would contribute to a cumulative increase in student enrollment at the Tahoe Truckee Unified School District's schools. Additional development associated with this alternative would

impact TTUSD's school facilities and would require additional schools to serve the student population under cumulative conditions. The cumulative impacts on schools services would be **less than significant.**

AB Implementation of the Alternative 1 Land Use Map would contribute to a cumulative increase in student enrollment at the Tahoe Truckee Unified School District's schools. Additional development associated with this alternative would impact TTUSD's current school facilities and would require additional schools to serve the student population under cumulative conditions. The cumulative impacts on schools services would be **less than significant.**

AC Implementation of the Alternative 2 Land Use Map would contribute to a cumulative increase in student enrollment at the Tahoe Truckee Unified School District's schools. Additional development associated with this alternative would impact TTUSD's current school facilities and would require additional schools to serve the student population under cumulative conditions. The cumulative impacts on schools services would be **less than significant.**

Impact 4.11.4.2 Cumulative Impacts on Water Facilities and Distribution Systems

PP Under cumulative conditions, implementation of the Proposed Land Use Diagram would not increase the demand for water facilities and distribution systems outside of the Plan area, including new systems, supplies, and infrastructure. This would be a **less than significant** impact.

AA Under cumulative conditions, implementation of the Existing Martis Valley General Plan Land Use Map would not increase the demand for water facilities and distribution systems outside of the Plan area, including new systems, supplies, and infrastructure. This would be a **less than significant** impact.

AB Under cumulative conditions, implementation of the Alternative 1 Land Use Map would not increase the demand for water facilities and distribution systems outside of the Plan area, including new systems, supplies, and infrastructure. This would be a **less than significant** impact.

AC Under cumulative conditions, implementation of the Alternative 2 Land Use Map would not increase the demand for water facilities and distribution systems outside of the Plan area, including new systems, supplies, and infrastructure. This would be a **less than significant** impact.

Impact 4.11.5.2 Cumulative Wastewater Service

PP Under cumulative conditions, implementation of the Proposed Land Use Diagram would require additional capacity in the WRP and the extension of sewer trunk lines to serve additional residents, businesses, and recreational uses within the Plan area. This would be a **less than significant** impact.

AA Under cumulative conditions, implementation of the Existing Martis Valley General Plan Land Use Map would require additional capacity in the WRP and the extension of sewer trunk lines to serve additional residents, businesses, and recreational uses within the Plan area. This would be a **less than significant** impact.

AB Under cumulative conditions, implementation of Alternative 1 Land Use Map would require additional capacity in the WRP and the extension of sewer trunk lines to serve additional residents, businesses, and recreational uses within the Plan area. This would be a **less than significant** impact.

AC Under cumulative conditions, implementation of Alternative 2 Land Use Map would require additional capacity in the WRP and the extension of sewer trunk lines to serve additional residents, businesses, and recreational uses within the Plan area. This would be a **less than significant** impact.

Impact 4.11.6.2 Cumulative Solid Waste Disposal

PP Under cumulative conditions, the Proposed Land Use Diagram would require solid waste disposal services. However, the solid waste provider, Tahoe-Truckee Sierra Disposal (TTSD), is capable of accommodating buildout of the Plan area. The Proposed Land Use Diagram would result in **less than significant** impacts on solid waste disposal services.

AA Under cumulative conditions, the Existing Martis Valley General Plan Land Use Map would require solid waste disposal services. However, the solid waste provider, Tahoe-Truckee Sierra Disposal (TTSD), is capable of accommodating buildout of the Plan area. Alternative AA would result in **less than significant** impacts on solid waste disposal services.

AB Under cumulative conditions, Alternative 1 Land Use Map would require solid waste disposal services. However, the solid waste provider, Tahoe-Truckee Sierra Disposal (TTSD), is capable of accommodating buildout of the Plan area. Alternative AB would result in **less than significant** impacts on solid waste disposal services.

AC Under cumulative conditions, Alternative 2 Land Use Map would require solid waste disposal services. However, the solid waste provider, Tahoe-Truckee Sierra Disposal (TTSD), is capable of accommodating buildout of the Plan area. Alternative AC would result in **less than significant** impacts on solid waste disposal services.

Impact 4.11.7.6 Cumulative Availability of Electrical Energy

PP Under cumulative conditions, development associated with the Proposed Land Use Diagram would increase the demand for electricity. However, it would have a **less than significant** impact on electrical supplies.

AA Under cumulative conditions, development associated with the Existing Martis Valley General Plan Land Use Map would increase the demand for electricity. However, it would have a **less than significant** impact on electrical supplies.

AB Under cumulative conditions, development associated with Alternative 1 Land Use Map would increase the demand for electricity. However, it would have a **less than significant** impact on electrical supplies.

AC Under cumulative conditions, development associated with Alternative 2 Land Use Map would increase the demand for electricity. However, it would have a **less than significant** impact on electrical supplies.

Impact 4.11.7.8 Cumulative Demand for Natural Gas

PP Under cumulative conditions, development associated with the Proposed Land Use Diagram would increase the demand for natural gas. However, it would have a **less than significant** impact on natural gas supplies.

AA Under cumulative conditions, development associated with the Existing Martis Valley General Plan Land Use Map would increase the demand for natural gas. However, it would have a **less than significant** impact on natural gas supplies.

AB Under cumulative conditions, development associated with Alternative 1 Land Use Map would increase the demand for natural gas. However, it would have a **less than significant** impact on natural gas supplies.

AC Under cumulative conditions, development associated with Alternative 2 Land Use Map would increase the demand for natural gas. However, it would have a **less than significant** impact on natural gas supplies.

Impact 4.11.8.2 Cumulative Impact on Parks and Recreational Facilities

PP Under cumulative conditions, implementation of the Proposed Land Use Diagram would increase the demand for parks and recreation facilities. This would be a **cumulative significant** impact.

AA Under cumulative conditions, implementation of the Existing Martis Valley General Plan Land Use Map would increase the demand for parks and recreation facilities. This would be a **cumulative significant** impact.

AB Under cumulative conditions, implementation of the Alternative 1 Land Use Map would increase the demand for parks and recreation facilities. This would be a **cumulative significant** impact.

AC Under cumulative conditions, implementation of the Alternative 2 Land Use Map would increase the demand for parks and recreation facilities. This would be a **cumulative significant** impact.

Impact 4.11.9.2 Cumulative Road Maintenance and Snow Removal

PP Under cumulative conditions, implementation of the Proposed Land Use Diagram would require additional roadways within the plan area, thus requiring roadway maintenance and snow removal services. This would be a **less than significant** impact.

AA Under cumulative conditions, implementation of the Existing Martis Valley General Plan Land Use Map would require additional roadways within the plan area, thus requiring roadway maintenance and snow removal services. This would be a **less than significant** impact.

AB Under cumulative conditions, implementation of Alternative 1 Land Use Map would require additional roadways within the plan area, thus requiring roadway maintenance and snow removal services. This would be a **less than significant** impact.

AC Under cumulative conditions, implementation of Alternative 2 Land Use Map would require additional roadways within the plan area, thus requiring roadway maintenance and snow removal services. This would be a **less than significant** impact.

SECTION 4.12 VISUAL RESOURCES/LIGHT AND GLARE

Impact 4.12.5 Cumulative Visual Impacts

PP Under cumulative conditions, implementation of the Proposed Land Use Diagram could result in visual impacts, including alteration of viewsheds, increased daytime glare and nighttime lighting. This would be a **cumulative significant** impact.

AA Under cumulative conditions, implementation of the Existing Martis Valley General Plan Land Use Map could result in visual impacts, including alteration of viewsheds, increased daytime glare and nighttime lighting. This would be a **cumulative significant** impact.

AB Under cumulative conditions, implementation of the Alternative 1 Land Use Map could result in visual impacts, including alteration of viewsheds, increased daytime glare and nighttime lighting. This would be a **cumulative significant** impact.

AC Under cumulative conditions, implementation of the Alternative 2 Land Use Map could result in visual impacts, including alteration of viewsheds, increased daytime glare and nighttime lighting. This would be a **cumulative significant** impact.