5.0 GROWTH-INDUCING AND CUMULATIVE IMPACTS

This section discusses ways that the Project could foster economic or population growth or increase the need for new housing construction. This section also traces any chain of cause and effect arising from project-related economic or social changes that could result in physical changes to the environment. Also, it identifies the Project's potential cumulative impacts, including the Project's temporary construction and long-term operational impacts. In addition, this section identifies additional impacts from Projects planned, or in the process, in the general vicinity that, combined with impacts from the Project, could result in a significant environmental impact.

Section 4.0, Environmental Analysis, provides a description of DPR's program and area-specific analytical methodology that is applied to each resource category. DPR has determined that the Project's growth-inducing impacts (population, housing and employment) are the same from both a programmatic and area-specific perspective. Therefore, the impact analysis for growth-inducing impacts does not distinguish between programmatic and area-specific evaluations. However, some Program Actions (e.g., complete removal and replacement of surface materials) could have a potentially significant cumulative impact on one or more resource category. Thus, the Cumulative Impacts section, Section 5.2, provides a discussion of the both programmatic and area-specific impacts.

5.1 GROWTH-INDUCING IMPACTS (POPULATION, HOUSING, AND EMPLOYMENT)

CEQA requires a discussion of the ways that a proposed project could induce growth either locally or regionally. The CEQA Guidelines (14 CCR) § 15126.2 (d) consider a project to be growth-inducing if it fosters economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Per the Guidelines, new employees from commercial and industrial development and new populations from residential development represent direct forms of growth. The expansion of urban services into a previously unserved or under-served area, the creation or extension of transportation links, or the removal of major obstacles to growth are examples of projects that are growth-inducing. Growth-inducing projects could have a secondary effect of expanding the size of local markets and attracting additional economic activity to the area (14 CCR § 15126.2 (d)).

Typically, the growth-inducing potential of a project would be considered significant if it fosters growth or a concentration of population above what is assumed in local and regional land use plans, or in projections made by regional planning authorities. Significant growth impacts also could occur if the project provides infrastructure or

service capacity to accommodate growth levels beyond those permitted by local or regional plans and policies (14 CCR § 15126.2 (d)).

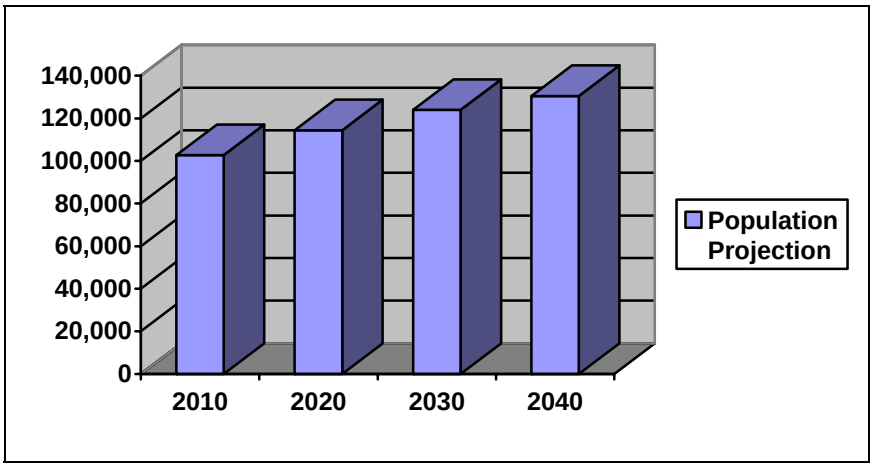
5.1.1 EXISTING CONDITIONS

The Park is located within the Planning Sphere of Influence of the City of Grass Valley, Nevada County. Land uses on the properties bordering the Park include limited commercial, industrial, open space and residential (DPR 2009).

The population of Grass Valley has fluctuated based on a variety of circumstances, including, but not limited to, economic conditions due to gold mining, migration of people away from large cities, and economic recession conditions (Quad Knopf 1998). The population for Nevada County in 2006 was 99,584 people, with 13,031 people living in Grass Valley (DOF 2007a). The population estimates for 2008 predict that 99,186 people live in Nevada County, of which 12,929 are living in Grass Valley (DOF 2008). These estimates indicate a 1 percent decrease in the population of both Grass Valley and Nevada County between 2006 and 2008.

According to the 2007 Population Projection by Race/Ethnicity, Gender, Age Report, the population for Nevada County would increase to 136,113 people by 2050, an increase of 73 percent from the 2006 population (DOF 2007b). The projected population increase is provided in Table 5.0-1, Proposed Population Increase in Nevada County.

TABLE 5.0-1
PROPOSED POPULATION INCREASE IN NEVADA COUNTY



Housing within the boundaries of the Park is limited to six single-family residential units and two mobile home pads that are available for DPR personnel and their families. The

permanent population at the Park is relatively static (approximately eight to 12 full-time residents). These numbers are based on DPR staffing requirements. Based on Program Actions, no significant growth in the number of DPR staff is anticipated.

5.1.2 REGULATORY FRAMEWORK

There are no applicable federal, state or local regulations regarding population, housing and employment.

5.1.3 THRESHOLDS OF SIGNIFICANCE

The Project would be considered to have a potentially significant adverse environmental impact to population and housing if it would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere; and/or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

5.1.4 EFFECTS CONSIDERED TO BE LESS THAN SIGNIFICANT

5.1.4.1 Induce Substantial Population Growth in an Area

The Project (see Section 2.0, Project Description) would not induce substantial population growth, either directly or indirectly. The Project does not include the construction of new houses or the commencement of new businesses. The total workforce necessary to implement the Project is expected to be approximately 70 workers. It is anticipated that the majority of these 70 workers would come from the existing labor pool of the Nevada County area. However, some of the construction personnel could commute to the Park and stay at existing local hotels during the Project. Adequate hotels and inns exist in the vicinity the Park to accommodate projected out-of-town personnel. Over the long term, the Project would have no impact on population growth, as no significant long-term growth employment would result from the Project. This increase in local employment, while economically beneficial, would not be of a sufficient magnitude to result in a substantial increase in local population that is not otherwise accounted for in regional planning documents. Further, the potential increase in traffic necessary to import clean fill, construction crews, equipment and materials or export waste material would not require extensive road improvements. Further, the existing infrastructure located within, and adjacent to, the Park would be sufficient to meet the infrastructure needs of the active water treatment facility.

5.1.4.2 Displace Substantial Numbers of Existing Housing Units

No impacts would occur to existing off-site housing because Program Actions would primarily be implemented within the Park's boundaries. As discussed above in Section 5.1.1, there are eight residential sites (four of which are occupied) located at the Park in Remediation Area 9. Project Actions would not result in the displacement of existing housing.

5.1.4.3 Displace Substantial Numbers of People

The Project would not displace a substantial number of people, thereby necessitating construction of replacement housing. Program Actions would primarily be implemented within the Park's boundaries; therefore, no impact would occur to off-site displacement of people. Any displacement of residents in Remediation Area 9 would be temporary in nature and would not require the construction of additional housing at the Park.

5.1.5 FINDINGS

The Project, both from a programmatic and area-specific perspective, would have a less than significant impact on population growth (either directly or indirectly). Any increase in the workforce would not reach a level that would result in a substantial increase in local population not otherwise accounted for in regional planning documents. Implementation of Program Actions (programmatically and at each Remediation Area) would have a less than significant impact on the displacement of a substantial numbers of housing or people. Therefore, construction of replacement housing would not be required at, or in the vicinity of, the Park.

5.2 CUMULATIVE IMPACTS

5.2.1 CUMULATIVE ANALYSIS OVERVIEW

CEQA Guidelines require that all EIRs contain an analysis of cumulative impacts that a project might contribute. An EIR must discuss the "cumulative impact" of a project when its incremental effect will be cumulatively considerable. Section 15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (14 CCR § 15355). A cumulative impact "consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts" (14 CCR § 15130(a)(1)). The discussion of cumulative impacts "shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone" (14 CCR § 15130(b)). By requiring an evaluation of cumulative impacts, CEQA

attempts to minimize the possibility that an EIR will overlook large-scale environmental impacts by only focusing on the effects of a single project.

Further, the Guidelines state "[l]ead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used" (14 CCR § 15130(b)(1)(B)(3)). The cumulative impacts analysis "shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects" (Section 15130(b)(5)). With some projects, "the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis" (14 CCR § 15130(c)).

The Guidelines (14 CCR § 15130(a)(3)) also states that an EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund its fair share of a mitigation measure(s) designed to alleviate the cumulative impact.

CEQA requires that one of two methods of establishing this future baseline be used:

- 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
- 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 (14 CCR, § 15130 (b)).

This section evaluates the reasonably foreseeable potential cumulative effects of this Project, with other existing activities in the area and other planned projects.

Criteria for evaluating the significance of adverse effects are identified for each environmental issue. These criteria, which are based on resource sensitivity, quality, and quantity, are also applicable to cumulative impacts. The timing and duration of each activity is also an important consideration for evaluating the potential cumulative effects of activities that occur only for a limited period. In those cases, a cumulative effect may occur only when two or more of the activities are occurring simultaneously. These effects are then evaluated for their impact in combination with other activities in the area for cumulative impact.

The projects that comprise the cumulative impact scenario do not include projects that are completed. Projects that are completed are included as part of the existing conditions for individual issue areas and are analyzed with respect to each issue area in Section 4.0. Overall, with the application of the Standard and Specific Project Requirements and implementation of mitigation measures for the Project, cumulative impacts would be less than significant except for impacts to Cultural Resources and Noise.

5.2.2 DEFINITION OF GEOGRAPHIC SCOPE OF CUMULATIVE IMPACTS ANALYSIS

Cumulative analyses included in this Draft PEIR are assessed based on an understanding of projected growth or specific projects within a defined geographical area. The extent of the area evaluated varies depending on which environmental issue is being evaluated. The geographic area of each cumulative effect is provided in Section 5.2.3, below.

The Park is located in the City of Grass Valley and Nevada County. The County and City Planning Departments were contacted for other projects for which applications have been filed, or which have been recently approved, but not yet constructed through August 14, 2008. In addition, Nevada County Transportation Commission and Caltrans were contacted regarding any projects within Nevada County. CEQA establishes that the environment for which the Project is evaluated is established at the time of issuance of the NOP (14 CCR § 15130(b)), which was issued August 14, 2008.

Table 5.2-1, Cumulative Projects, provides a tabular description of the cumulative projects that were evaluated in this section.

TABLE 5.2-1
CUMULATIVE PROJECTS

Project Name (Description)	Address / Location	Approx. Distance from Proposed Project Sites
PROJECTS LOCATED AT THE PROJECT SITE – EMPIRE MINE STATE HISTORIC PARK		
Empire Mine Underground Tour/Adit Project (Based on General Plan Amendment and accompanying EIR approved in 1996)	Same as Park	Located within Park
Empire Mine Starr Garage Conversion (Converting the Starr Garage into an ADA compliant restroom facility)	Same as Park	Located within Park
Empire Mine Bourn Cottage Modification (Making minor modifications to the Bourn Cottage access to be more user friendly)	Same as Park	Located within Park
Empire Mine Visitor Center (Install a drop ceiling and insulation in the Visitor Center to reduce heating and AC costs)	Same as Park	Located within Park
Empire Mine Installation of Interpretive Signs (Installing directional informational signs throughout the Park)	Same as Park	Located within Park
Osborne Hill Trail Network Project (Remediation of Osborne Hill Trails Network)	Same as Park	Located within Park
CITY OF GRASS VALLEY - RESIDENTIAL APPROVED PROJECTS (BUILDING PERMITS ISSUED)		
Habitat for Humanity (5 housing units)	307 ¾ North Church St.	~1.7 miles
Cuva Duplex (4 housing units)	305 N. School St.	~1.7 miles
Habitat for Humanity (6 housing units)	543 Ivy St.	~2.0 miles
CITY OF GRASS VALLEY - RESIDENTIAL APPROVED PROJECTS (NOT BUILT)		
Whiting Street/Victoria Gardens (Permit issued for 67 housing units)	624 Whiting St.	~1.5 miles
Pack/Puckett (Permit issued for 11 housing units)	Town Talk Rd.	~3.6 miles

Project Name (Description)	Address / Location	Approx. Distance from Proposed Project Sites
Makiah Woods Jay Cuccia (51 housing units)	639 Brunswick Rd.	~3.7 miles
Robert Cecil (4 housing units)	Marshall St.	~1.6 miles
Sierra Terrace Phil Zeiter (36 housing units)	130W. Berryhill Dr.	~1.9 miles
Joel Jordan (3 housing units)	890 Doris Dr.	~2.3 miles
Iron Horse II (62 housing units)	475, 485, 465, 495, & 505 Bennett Rd.	~1.1 miles
Kevin Campion (1 housing units)	W. Berryhill Dr.	~1.9 miles
Ridge Village Jeff Helm (Residential 49 units, located on a 10.6-acre plot. The access road is Slate Creek Road.)	2418 Ridge Rd, located on the north side of Ridge Rd. near the Hughes Rd. intersection	~3.3 miles
Ridge Meadows Rick Kerr (Residential 50 units)	2521 Ridge Rd, located off of Ridge Rd at both Upper and Lower Slate Creek Rd.	~3.3 miles
Co-Housing Project (70 housing units)	W. McKnight Way and Freeman St.	~2.1 miles
Steven DeSena (2 housing units)	455-515 Mill St.	~1.9 miles
Dave Ferguson (24 housing units)	Bennett St.; Project is the last parcel in the City limits on the south side of road.	~1.1 miles
CITY OF GRASS VALLEY - RESIDENTIAL PROJECTS PENDING APPROVAL		
Jay Abelyn (Addition of 4 housing units)	224 Bennett St.	~1.2 miles
Ionic Enterprises (Conceptual development review for 102 senior apartments., 23 single family Home sites, 22 small lot home sites)	1426 E. Main St.	~2.5 miles

Project Name (Description)	Address / Location	Approx. Distance from Proposed Project Sites
CITY OF GRASS VALLEY - COMMERCIAL AND MIXED USE APPROVED PROJECTS (BUILDING PERMITS ISSUED)		
WCS Properties LaVonne Mullin (Permits for mixed use development, including 12 housing units)	152 East Main St./ 139&141 Richardson St.	~1.4 miles
Chris Weir & Elain Lieske (Small office at 1,957 sq. ft.)	447 S. Auburn St.	~1.4 miles
Tim DeMartini (RV Showroom at 28,800 sq. ft.)	625 Idaho Maryland Rd.	~2.4 miles
Clifford Vixie (Modular Classroom at 1,000 sq. ft.)	335 Joerschke Dr.	~2.8 miles
Bob's Carpet (Kirt Pinkham) (Development of a 6,050 sq. ft. retail carpet store/warehouse.)	Located southerly of Golden Gate Terrace, at the northwest corner of the Idaho Maryland Rd. and Sutton Way Intersection.	~2.6 miles
Jeff Johnson Lot 5 Litton Hill (Office Building at 25,224 sq. ft.)	280 Sierra College Dr.	~2.7 miles
CITY OF GRASS VALLEY - COMMERCIAL AND MIXED USE APPROVED PROJECTS (NOT BUILT)		
Olympia Plaza II (A mixed use development (including 40 apartment units), within six buildings, to be constructed in three phases on 4.7 acres. The Use Permit was required to allow residential development in the Commercial Zoning District. On January 17, 2006, the Planning Commission granted a one year extension on the project.)	Easterly of Plaza Dr.	~3.2 miles
Village at South Auburn (57 duplex and apartment units)	Adams Lane and South Auburn St.	~1.4 miles
CITY OF GRASS VALLEY - COMMERCIAL AND MIXED USE APPROVED PROJECTS (NOT BUILT)		
Rasor & Associates (Develop a mixed-use project, consisting of approximately 3,826 sq. ft. consisting of 3 residential units and 2 office/ professional units.)	421 S. Auburn St.	~1.4 miles
Berryman Street Project Amalia Griego (Apartment building with 3 units)	Berryman St.	~1.2 miles

Project Name (Description)	Address / Location	Approx. Distance from Proposed Project Sites
Phil Ruble (Warehouse buildings at 27,516 sq. ft.)	125 Springhill Dr., north side of Idaho-Maryland Road, just west of the Centennial Road intersection.	~1.1 miles
Walgreen's (The construction of a 14,500 sq. ft. building (Walgreen's) and two 800 sq. ft. buildings for commercial use. Currently, the site is occupied with a closed automobile dealership.)	Brunswick Rd. and Sutton Way	~3.0 miles
Grass Valley Partners (2 Medical Office Buildings at 23,579 sq. ft.)	360 Crown Point Cir.	~2.9 miles
Keith Robertson (Revisions to an approved Development Review and Use Permit Application for Sons Building and Development for the addition of 805 sq. ft. of warehouse, 876 sq. ft. of office and a residential caretakers quarters of 1,130 sq.ft.)	563 Idaho Maryland Rd.	~1.9 miles
John Coyle (Office/Manufacturing)	Lot 22 Crown Point Cir.	~2.8 miles
CITY OF GRASS VALLEY - COMMERCIAL AND MIXED USE PROJECTS PENDING APPROVAL		
Dave Ferguson (Planning application for a building height variance and Development Review Application for review of a proposed commercial building/warehouse (23,000 sq. ft.) for Gray Electric)	150 Crown Point Cir.	~2.8 miles
Wayne and Pat Klauer (Showroom and office at 17,000 sq. ft.)	Railroad Ave.	~2.1 miles
AJA Video (Jeff Gold) (Proposal to construct a 45,200 sq. ft. two-story office, manufacturing, and warehouse building on a 4.6 acre parcel.)	200 Litton Dr.	~3.0 miles
Grill & Allen, LLC (Conceptual development review for 20 units mixed commercial and Residential)	Bennett and Kidder Streets	~1.1 miles
Edward Ferguson APN 08-470-06 (Conceptual development review for two mixed use buildings)	246 Colfax Ave.	~1.1 miles
Sutton Way Partners (Modification and expansion of 49er Family Fun Park)	314 Railroad Ave.	~2.1 miles

Project Name (Description)	Address / Location	Approx. Distance from Proposed Project Sites
Steven & Katalin Racz (Conceptual development review for hotel expansion of 9 rooms, meeting room, and demolition of existing structures at Courtyard Suites)	228 N. Auburn St.	~2.0 miles
Env-Vision Development (Tentative Map application for subdivision of 3 existing lots into 11 residential lots)	454, 478 Carol Dr. & 10530 Doris Dr.	~2.0-2.5 miles
Whaley & Associates (Use permit application for the expansion of eight additional mobile homes in the Olympia Glade Mobile Estates; multi-family and mobile home)	918 Pampas Ct.	~3.5 miles
CITY OF GRASS VALLEY - MASTER PLANS/INFILL STUDIES		
Wolf Creek Parkway Alignment Study and Conceptual Master Plan (Proposed multi-use trail along 2.2 mile stretch of Wolf Creek Parkway. See Section 4.12, Recreation, for further description of the Wolf Creek Parkway Alignment Study and Conceptual Master Plan.)	Along Wolf Creek Parkway between the intersection of Idaho Maryland Road and Sutton Way and Glenn Jones Park.	~2.6 miles
South Auburn Street Master Plan (The Master Plan proposes design improvements to enhance the image, economic vitality, development pattern and pedestrian qualities with the study area.)	2.5 acres fronting the east side of South Auburn St., located between Colfax Ave. and Bank St.	~1.8 miles
Colfax Avenue Infill Study (The Infill Study was conducted to (1) evaluate future redevelopment opportunities; (2) connection to the Downtown business corridor; and (3) develop infrastructure and streetscape improvements design.)	Colfax Ave. corridor between State Highway 20/49 and Memorial Park	~1.3 miles
CITY OF GRASS VALLEY - SPECIAL DEVELOPMENT AREAS		
Southhill Village Master Plan (Commercial Acreage: 16 (151,000 sq. ft.) Business Park/Industrial Acreage: 18 (192,000 sq.ft.) Residential Units: 122 Notes: Was the Bear River Mill site, now known as Southhill Village Master Plan. 66 acres of property. Southhill Village is one of Grass Valley's SDAs.)	Bounded by Highway 49 and La Barr Meadows Rd. See Figure 3-2	~3.4 miles

Project Name (Description)	Address / Location	Approx. Distance from Proposed Project Sites
Loma Rica Ranch Master Plan (Commercial Acreage: 27-69 (~385,000 sq. ft.) Business Park/Industrial Acreage: 24 (580,000 sq. ft.) Residential Units: 700 Notes: Proposes constructing six unique neighborhoods. Consists of nine contiguous parcels measuring approximately 452 acres of property.)	Located 1.5 mi. east of downtown Grass Valley and 0.4 mi. south of the Glenbrook Basin. Near the intersection of Brunswick Rd. and Idaho-Maryland Rd. The western edge is primarily defined by Sutton way and the Whispering Pines Business; the eastern edge is defined by the Nevada County Airpark and the Loma Rica Industrial Park; and the southern edge is defined by Loma Rica Dr.	~3.2 miles
Kenny Ranch (Commercial Acreage: 0 Business Park/Industrial Acreage: 0 Residential Units: 77)	Located off of Ridge Rd. and Rough and Ready Hwy.	~3.3 miles
Northstar (Commercial Acreage: 17 Business Park/Industrial Acreage: 68 (20 plus 48 for conference center) Residential Units: 438 Notes: North Star is encouraged to locate all residential and neighborhood land uses in the northern one-third of the North Star Property, in order to provide a linkage to existing development within the City and facilitate efficient service and infrastructure extensions.)	Located near McCourtney Rd and Auburn Rd.	~2.5 miles
CITY OF GRASS VALLEY - CAPITAL IMPROVEMENT PROJECTS		
Main Street / Auburn Street Traffic Signal Modification (Design and replace the existing traffic signals to provide decorative signals and improve operation)	Main St. & Auburn St.	~1.9 miles
Lane Expansion: East Main Street, East of Richardson Street (Widen East Main Street east of Richardson Street in order to lengthen the westbound through/right turn lane and extend the westbound left turn lane.)	East Main St. (east of Richardson St.)	~1.4 miles
East Main Street/Idaho Maryland Road Intersection Improvement Project (The Engineering Division has procured the professional services of Whitlock & Weinberger, Inc. for civil and traffic engineering services for the evaluation and design of a modern roundabout at the intersection of East Main Street and Idaho Maryland Road.)	East Main St. and Idaho Maryland Rd.	~1.8 miles

Project Name (Description)	Address / Location	Approx. Distance from Proposed Project Sites
Morgan Ranch and Slate Creek Sanitary Lift Station Modifications (Construct pumping improvements to the Morgan Ranch and Slate Creek Lift Stations to rehabilitate the lift stations)	Morgan Ranch Rd.	~3.3 miles
City Traffic Model (Prepare a traffic model for the City's Sphere of Influence)	N/A	-
Dorsey Drive Interchange Project (The project components include: 1) Constructing a new Dorsey Drive overcrossing structure, 2) Adding highway auxiliary lanes from Idaho-Maryland Road to Brunswick Road, 3) Widening Dorsey Drive, 4) Realigning Joerschke Drive.)	Intersection of Dorsey Dr. and Joerschke Dr.	~2.7 miles
NEVADA COUNTY PLANNING DEPARTMENT PROJECTS		
Loma Rica Industrial Area Plan (Area Plan for 480-acre area; Loma Rica Industrial Park, English Mountain Industrial Park, County Airport, and adjacent industrial lands between Greenhorn Road and Idaho Maryland Road)	Located 300 ft. east of the City of Grass Valley, situated east of Brunswick Rd., south of Idaho-Maryland Rd., & north of Greenhorn Rd.	~3.2 miles
Wolf Creek Ranch Estates (142 residential lots in four phases)	Off of Lime Kiln Rd.	~10.0 miles
Quail Lake Estates (93 residential lots proposed in four phases)	Located just beyond the Wolf Creek Ranch Estates (see above).	~10.5 miles
NEVADA COUNTY TRANSPORTATION COMMISSION PROJECTS		
Nevada County Highways (Installation of signal)	Brunswick/Hwy 174 Interchange	~2.0 miles
Crestview Interchange Exchange Project (The proposed project would improve east-west connectivity in the southern portion of Grass Valley with a new Route 49 connection south of McKnight Way.)	State Route 49 near Crestview Dr. and Smith Rd. (south of McKnight Way)	~3.0 miles
CALTRANS AND NEVADA COUNTY PROJECTS		
Idaho Maryland Deceleration Lane (Widening of deceleration lane)	Near Grass Valley from 0.03 Mi to 0.01 Mi West of Idaho Maryland under crossing	~4.0 miles
La Barr Meadows (Widen 4 lanes with continued Left turn.)	Near Grass Valley from 0.05 Mi north of Alta Sierra Dr. to 0.5 Mi south of Wellswood Way (phase I)	~7.0 miles

5.2.3 GEOGRAPHIC AREA OF ENVIRONMENTAL RESOURCE CUMULATIVE EFFECTS

The following defines the geographic area for the cumulative impact analyses utilized in this EIR:

- **Aesthetics**

  The geographic scope for cumulative effects to aesthetic resources is the viewshed from public viewpoints as well as from areas of the Park that visitors utilized.

- **Agricultural Resources**

  The geographic scope for cumulative effects to agricultural resources is City of Grass Valley and Nevada County.

- **Air Quality**

  The geographic area for cumulative effects to air quality is the Mountain Counties Air Basin (MCAB,) which consists of the seven counties Plumas, Sierra, Nevada, Amador, Calaveras, Tuolumne, Mariposa, and parts of Placer and El Dorado (California ARB 2007a). The scope of the cumulative greenhouse gas impacts include statewide considerations and contribution to global climate change.

- **Biological Resources**

  The geographic area for cumulative effects to biological resources encompasses City of Grass Valley and Nevada County.

- **Cultural Resources**

  The geographic scope for cumulative effects to cultural resources is the City of Grass Valley and Nevada County.

- **Geology**

  The geographic area for cumulative effects to geological resources encompasses City of Grass Valley and Nevada County.

- **Hazards And Hazardous Materials**

  The geographic scope for cumulative effects to hazards and hazardous materials is the City of Grass Valley and Nevada County.

- **Hydrology and Water Quality**

  The geography for cumulative effects to hydrology is the Little Wolf Creek Watershed and South Fork Wolf Creek Watershed.

- **Land Use**

  The geographic scope for cumulative effects to land use is the City of Grass Valley and Nevada County.

- **Noise and Vibration**

  The geographic scope for cumulative effects to noise and vibration is the City of Grass Valley and Nevada County.

- **Traffic**

  The geographic scope for cumulative effects to traffic is the City of Grass Valley and Nevada County.

5.2.4 CUMULATIVE IMPACTS EVALUATION

The Project's potential impact to cultural resources is potentially significant and unavoidable. Program Actions analyzed at both a programmatic and area-specific level could cause a substantial adverse change in the significance of a historic resource as defined in 14 CCR § 15064.5, as well as a substantial adverse change in the significance of an archaeological resource pursuant to 14 CCR §15064.

In terms of cumulative impacts to historic resources, the Project Proponents are implementing several projects described in Table 5.2-1. The Empire Mine Underground Tour/Adit Project would drive a slight decline to intersect an old drift below the surface and create safe access for public tours of the Empire Mine shaft. Empire Mine Starr Garage Conversion Project would convert the Starr Garage into an American Disability Act compliant restroom facility. The Empire Mine Bourn Cottage Modification Project would make minor modifications to the Born Cottage access to be more user friendly. The Empire Mine Visitor Center Project would install a drop ceiling and insulation in the Visitor Center to reduce heating and air conditioning costs. The Empire Mine Installation of Interpretive Signs Project involves installing directional informational signs throughout the Park. Last, the Osborne Hill Trail Network Project is performing remediation activities at the Osborne Hill Trails Network.

These projects are adding modern features, altering historic buildings and removing of cultural landscape features. A cumulative impact "consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts" (14 CCR § 15130(a)(1)). A combination of these projects, in conjunction with Program Actions, would cause a cumulatively considerable adverse impact on historic resources at the Park.

In addition, the Program Actions would take place at 10 or more distinct Remediation Areas at the Park. As discussed above, Guidelines Section 15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." (14 CCR § 151355). As the Program Actions would have two or more individual effects at various locations throughout the Park, the Programmatic approach to Program Actions at the Park compound and increase the impacts on historic resources in a cumulatively considerable fashion. In addition, all of the ground disturbing activities anticipated as

part of the Program Actions would have cumulatively considerable impacts on archeological resources. While impacts to archeological resources at one particular Remediation Area could be minimized through incorporation of Project Requirements or implementation of mitigation measures, Park-wide impacts at 10 or more Remediation Areas would be cumulatively considerable.

Implementation of Project Actions would also have potentially significant and unavoidable impacts on potential noise receptors. Program Actions could result in short-term exposure of persons to, or generation of, noise levels in excess of standards established in local general plan, noise ordinance, or applicable standards of other agencies at existing off-site noise-sensitive areas, or at the noise-sensitive visitor center area of the Park. To minimize noise impacts, DPR will incorporate Standard Project Requirement NOISE-1.

Standard Project Requirement NOISE-1 will be incorporated into the Project to reduce noise impacts. Standard Project Requirement NOISE-1 states that Project Actions will be limited to the daylight hours, Monday through Friday. However, weekend work could be implemented to accelerate construction or address emergency or unforeseen circumstances. If weekend work is necessary, no work will occur on those days before 8:00 a.m. or after 6:00 p.m. Further, NOISE-1 provides that internal combustion engines used for the implementation of Program Action at the Park will be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for Project-related activities will utilize the best available noise control techniques (e.g., engine enclosures, acoustically attenuating shields or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary. Finally, stationary noise sources and staging areas will be located as far from potential sensitive noise receptors, as possible. If they must be located near potential sensitive noise receptors, stationary noise sources will be muffled or shielded to the extent feasible, and/or where practicable, enclosed within temporary sheds.

Standard Project Requirement NOISE-1 would reduce the severity of potential impacts from remediation activities, but it is uncertain at this time if all noise impacts could be reduced to a less than significant level.

5.3 EFFECTS CONSIDERED NO IMPACT OR LESS THAN SIGNIFICANT WITHOUT PROJECT REQUIREMENTS

The following describes environmental effects that were determined to be less than significant without Project Requirements or no impact; therefore, they are not discussed in detail in the Draft PEIR:

Program Actions, Together with Anticipated Cumulative Development in the Area, would Contribute to Regional Criteria Pollutants, and TACs: The geographic scope of potential cumulative criteria air pollutant impacts encompasses the project sites, areas along the access to the project sites, and the Mountain Counties Air Basin. The current and foreseeable future projects could include numerous major development projects in the City of Grass Valley and Nevada County that could substantially increase the criteria air pollutant emissions within the project vicinity (see Table 5.0-1).

A cumulative impact arises when two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant impacts, meaning that the project's incremental effects must be viewed in connection with the effects of past, current, and probable future projects. Notably, any project that would individually have a significant air quality impact would also be considered to have cumulatively considerable contribution to a significant cumulative air quality impact.

However, Program Action activities that equate to the maximum daily scenario would generate criteria pollutant emissions that, depending on the pollutant, would be potentially significant (Level A or B) according to the NSAQMD significance criteria. In addition, the implementation of Project Requirements would maintain and or reduce these impacts to a less than significant level. As a result, no cumulatively considerable impact related to criteria pollutants emissions would occur.

In addition, the Project would not result in odor emissions (and hence a less than significant impact) that could affect nearby sensitive receptors. Even if other projects cause odor complaints in the future the project would not have a cumulatively considerable odor impact for two reasons. First, the project would generate less than significant odorous emissions. Secondly, odors are site specific in nature and odors affected by one source generally would not be affected by another source. Therefore the contribution of the proposed project to odor impacts would not be cumulatively considerable.

5.4 FINDINGS

Impacts from environmental issues addressed in this Draft PEIR do not overlap with these additional projects in a way that results in cumulative impacts that are greater than the sum of the parts or, with the exception of cultural resources and noise, that

result in a significant adverse impact that cannot be mitigated. Except as noted in Section 5.1, above, full implementation of all Standard and Specific Project Requirements, mitigation measures, with this and other projects would reduce any potential cumulative impact to a less than significant level.