4.0 CUMULATIVE IMPACTS

4.1 CEQA ANALYSIS REQUIREMENTS

CEQA requires that impacts of cumulative projects be considered in the EIR. The project may have environmental effects that are individually limited, but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probable future projects.

The identification of reasonably foreseeable future projects will be based on the standards of practicality and reasonableness. Reasonably foreseeable future projects include unapproved projects that were undergoing environmental review at the time that the NOP was submitted (July 2007).

CEQA Guidelines Sections 15130(a) and (b) state:

a. An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in Section 15065(c). 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.

   - As defined in Section 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. An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.
   - When the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR shall briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR. A lead agency shall identify facts and analysis supporting the Lead Agency's conclusion that the cumulative impact is less than significant.

- An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The Lead Agency shall identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable.

b. 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. The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact. The following elements are necessary to an adequate discussion of significant cumulative impacts:

1) Either:

- 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.

The following sections identify cumulative projects, including foreseeable projects that were undergoing environmental review at the time that the proposed project NOP was filed and include an evaluation of the potential cumulative impacts.

4.2 POTENTIAL PLANS AND PROJECTS WITH RELATED OR CUMULATIVE EFFECTS

4.2.1 Geographic Scope

The potential for project-generated impacts to contribute to a significant cumulative impact would arise if the projects are located within the same geographic area. This geographic area may vary, depending upon the issue discussed and the geographic extent of the potential impact. For example, the geographic area associated with construction noise impacts would be limited to areas directly affected by construction noise, whereas the geographic area that could be affected by construction related air emissions may include the larger airshed.

4.2.2 Project Timing

In addition to the geographic scope, cumulative impacts are determined by timing of the other projects relative to the proposed project. For example, for a group of projects to generate cumulative construction impacts, they must be nearby projects that will occur approximately in the same timeframe. The projects described in the sections below may or may not occur simultaneously with the proposed project, depending upon the schedule of each individual project. Although the timing of the projects is likely to fluctuate due to schedule changes or other unknown factors, this analysis assumes these projects would be implemented concurrently with implementation of the proposed project.

4.2.3 Description of Cumulative Projects

Table 4-1 provides a list and is a brief summary of the projects that were evaluated in regards to potential cumulative impacts. The cumulative project list for this DEIR includes projects that are either reasonably foreseeable or are expected to be constructed or operated in the vicinity of the proposed project that were considered to have the potential of a significant cumulative impact in combination with the proposed project. The projects below were compiled based on discussions with various local planning agencies, Caltrans, and other government entities. Projects that meet the requirements listed under Sections 4.1 and 4.2 are evaluated in more detail as it pertains to cumulative impact(s).

Table 4-1
Summary of Potential Cumulative Impacts

Project Name	Description	Meets Cumulative Criteria under Sections 4.1 and 4.2
Mendocino County		
Harris Quarry Expansion	The proposed project would expand the existing 11.5-acre quarry to a final size of about 46 acres. The quarry site is on the west site of U.S. Route 101, just south of the Ridgewood Grade and Black Bart Drive. The project includes adding an asphalt facility and concrete plant, with associated support facilities, at a separate site on the project property, immediately south of Black Bart Drive and about 2,000 feet west of Highway 101. The project also includes a proposed Reclamation Plan that describes how the site will be reclaimed after completion of operations.	NO
Rehabilitation of the Rail Line	The project involves routine maintenance and repairs required to bring the rail line to FRA Class 3 standards. Tasks include the repair of signals, culverts, track, ties, and ballast, and bridges.	YES
Town of Willits		
Willits Bypass	The California Department of Transportation (Caltrans) in conjunction with the Federal Highway Administration (FHWA) is planning to construct a new segment of U.S. Highway 101 that would bypass the city of Willits in Mendocino County. A final joint EIR/EIS was issued in October 2006. The purpose of the Willits bypass is to reduce delays, improve safety and achieve a "C" LOS for interregional traffic on U.S. 101. It is anticipated that construction will start in 2010 and be completed in 2014.	YES
Town of Windsor		
Town Green Village Phase I, Windsor	34 condominiums and 25,000 square feet of retail. Located along Windsor Road between McClelland Drive and Joe Rodota Drive.	NO
Town Green Village Phase II, Windsor	20 condominiums and 17,500 square feet of retail. Located along McClelland Drive at Windsor Road.	NO
Town Green Village Phase III, Windsor	13 condominiums and 9,500 square feet of retail. Located along Windsor River Road at Old Redwood Highway.	NO
Sonoma County		
Sonoma-Marin Area Rail Transit (SMART)	The Sonoma-Marin Area Rail Transit (SMART) District project is a proposed multi-modal transit project which would address an identified need for an improved passenger rail transportation system within Sonoma and Marin counties. The need was determined from aspects such as growing congestion, increasing travel times and delays on Highway 101, especially during peak travel periods. The capacity of	YES

Table 4-1 (Continued)
Summary of Potential Cumulative Impacts

Project Name	Description	Meets Cumulative Criteria under Sections 4.1 and 4.2
	the passenger transportation system has not kept pace with the growth of travel demand in the two counties, a trend that is projected to continue into the future. Passenger rail service is proposed along approximately 70 miles of the SMART corridor from Cloverdale in Sonoma County to Larkspur in Marin County. The proposed project also includes a bicycle/pedestrian pathway that will be located within or adjacent to the rail corridor. A supplemental EIR was issued in March 2008.	
Dutra Haystack Landing Asphalt and Recycling Facility	The Dutra Haystack Landing Asphalt and Recycling facility project is located in southwestern Sonoma County, directly south of Petaluma, along the Petaluma River.	NO
Rehabilitation of the Rail Line	The project involves routine maintenance and repairs required to bring the rail line to FRA Class 3 standards. Tasks include the repair of signals, culverts, track, ties, and ballast, and bridges.	YES
Sonoma Land Trust--Sear's Point Restoration	The Project Vision calls for tidal marsh restoration on 970 acres south of the NCRA rail line in southern Sonoma County near Highway 37, retaining and modifying agricultural practices to enhance seasonal wetlands and grasslands on 400 acres north of the rail line, modifying grazing and implementing watershed management activities to benefit grasslands, seasonal wetlands and riparian corridors on almost 1,000 acres of uplands, and as much as 6 miles of new Bay Trail.	NO
Solid Waste Loading and Unloading Facilities.	For a complete project description, please refer to Section 4.2.3.4 below.	NO (but included, see Section 4.2.3.4)
Port Sonoma	Port Sonoma had been considered by the Water Transit Authority as a ferry site, with the potential of serving about 1,300 passengers a day, or about 10 percent of all passengers now carried by Bay Area ferries. Although, Northbay Ferry Service has received federal grant funds to research environmental impacts associated with ferry service, there are no known plans at this time.	NO
Schellville Levee Repair	The proposed project will be to provide a long-term solution to levee breaks and subsequent flooding of the Wingo Unit fields by relocating the existing levee at the east edge of Camp II to the railroad grade.	NO
City of Santa Rosa		
Steele Lane U.S. 101 HOV Widening Project	For a detailed and complete project description, please refer to the Caltrans District 4 website, under the projects tab , located at: http://www.dot.ca.gov/dist4/projects.htm.	NO

Table 4-1 (Continued)
Summary of Potential Cumulative Impacts

Project Name	Description	Meets Cumulative Criteria under Sections 4.1 and 4.2
Rte. 12 Widening Project at Jamison Canyon	For a detailed and complete project description, please refer to the Caltrans District 4 website, under the projects tab , located at: http://www.dot.ca.gov/dist4/projects.htm.	NO
Rte. 116 Widening Project Widening Project	For a detailed and complete project description, please refer to the Caltrans District 4 website, under the projects tab , located at: http://www.dot.ca.gov/dist4/projects.htm.	NO
Farmers Lane Extension Project	Objectives of the Farmers Lane Extension project include: providing a route for traffic from outside southeast Santa Rosa to pass through southeast Santa Rosa without impacting local streets; providing an additional cross-town arterial for Santa Rosa traffic to bypass congested U.S. 101 interchanges; providing a new road to connect residential areas in the northeast part of the City and employment centers in the southwest; providing access for existing and planned development in southeast Santa Rosa; reducing pass-through traffic on streets within the South Park and Aston Avenue neighborhoods, not to the exclusion of other objectives as explained in the 2003 Draft EIR.	NO
Yolanda Lane Widening Project	For a detailed and complete project description, please refer to the City Planning Department's website, located at: http://ci.santa-rosa.ca.us/DEPARTMENTS/COMMUNITYDEV/DEVELOPMENT/Pages/ReportsandEIR's.aspx	NO
Santa Rosa Ave. Widening Project	For a detailed and complete project description, please refer to the City Planning Department's website, located at: http://ci.santa-rosa.ca.us/DEPARTMENTS/COMMUNITYDEV/DEVELOPMENT/Pages/ReportsandEIR's.aspx	NO
Stony Point Road Widening Project	For a detailed and complete project description, please refer to the City Planning Department's website, located at: http://ci.santa-rosa.ca.us/DEPARTMENTS/COMMUNITYDEV/DEVELOPMENT/Pages/ReportsandEIR's.aspx	NO
Bridge Housing, Santa Rosa	70 apartments (proposed). Located south of Jennings Avenue at Range Avenue.	NO
Burbank Housing, Santa Rosa	108 apartments and 54 senior housing (proposed). Located south of Jennings Avenue at Range Avenue.	NO
Proposed Food and Wine Center, Santa Rosa.	Located between 6th Street and 3rd Street to the west of the railroad corridor.	NO

Table 4-1 (Continued)
Summary of Potential Cumulative Impacts

Project Name	Description	Meets Cumulative Criteria under Sections 4.1 and 4.2
Santa Rosa Railroad Square Station Transit-oriented Development, Santa Rosa	housing, retail, commercial and public open space on 5.4 acre site (planned). Located in the Railroad Square area.	NO
Federated Indians of Graton Rancheria Hotel and Casino Resort, Rohnert Park	340,000 square feet of casino/dining/entertainment facilities; 30,000 square feet of banquet/meeting facilities; 300 room hotel (20% suites); 20,000 square feet spa; 4400 surface parking spaces and 2000 parking structure spaces. There are 2 alternative casino/hotel development locations on adjacent parcels (with some overlap), both to the west of Hwy 101 in Rohnert Park and both bounded by Rohnert Park Expressway on the south and Stony Point Road on the west and more or less bounded by Wilfred Avenue on the north.	NO
Town of Rohnert Park		
Mountain Shadow Apartments, Rohnert Park	176 apartments (completed 2002). Located south of Golf Course Drive adjacent the railroad corridor.	NO
Town of Cotati		
Cotati Station Townhomes, Cotati/Rohnert Park –	70 townhouses (under construction). Located between Santero Way and Lombard Way.	NO
City of Petaluma		
Turnbridge Homes, Petaluma	78 houses (under construction). Located along Morning Glory Drive just south of Sonoma Mountain Parkway.	NO
Basin Street Landing, Petaluma	12 screen cinema, 226 apartments and lofts, 86,000 square feet of retail, 70,000 square feet of office (under construction). Located at Petaluma Boulevard and D Street.	NO
Petaluma Depot Station Transit-oriented Development, Petaluma	Commercial and residential uses on 6 acre site. Located south of Lakeville Street and Petaluma Rail Depot.	NO

Table 4-1 (Continued)
Summary of Potential Cumulative Impacts

Project Name	Description	Meets Cumulative Criteria under Sections 4.1 and 4.2
East Washington Place, Petaluma	The proposed East Washington Place project includes the development of the former Kenilworth Junior High School site, with associated bus facilities. The proposed project would replace existing uses with a 24.5-acre residential component on the northwest portion of the site, and a 12.6-acre residential component on the southeast portion of the site. The proposed retail project would include up to approximately 298,000 square feet of retail space and 1,260 parking spaces. The proposed residential project would include about 227 residential units, including townhomes, row houses, and mixed-use condominiums, and about 570 parking spaces.	NO
Shamrock Materials, Inc, Petaluma	Shamrock Materials, Inc. (Shamrock) proposed a ready-mix concrete plant, concrete and asphalt recycling operations, sand and gravel processing and topsoil composting facility to be located adjacent to the existing rail right-of-way at a site south of Santa Rosa at Todd Road. The Shamrock project consists of 1) an aggregate railcar offloading facility, 2) a ready-mix concrete plant, 3) a sand and gravel processing plant, 4) a concrete and asphalt recycling plant, and 5) a topsoil composting operation. Related structures to support the primary operations would include a maintenance shop, above-ground fuel and other fluid storage containers, and an office building and truck scale. Normal operating times would be 6:00 am and 5:00 pm Monday through Saturday. The Shamrock project is located in an existing industrial area west of Highway 101. A MNG was issued in March 2007.	YES
Marin County		
Redwood Landfill Expansion, Marin County	For a detailed and complete project description, please refer to the Marin County Planning website located at: http://www.co.marin.ca.us/depts/CD/main/pdf/eir/Redwood_Landfill_FEIR1&2/RL_FEIR1_001-111.pdf.	NO
Rehabilitation of the Rail Line	The project involves routine maintenance and repairs required to bring the rail line to FRA Class 3 standards. Tasks include the repair of signals, culverts, track, ties, and ballast, and bridges.	YES
Gnoss Field Proposed Extension of Runway 13/31, Marin County	To solve the aircraft safety and efficiency problems created by the Airport's existing runway, the County of Marin has proposed the following actions: (A) Extend Runway 13/31 from 3,300 to 4,400 feet with Runway Safety Areas that meet current FAA guidelines; (B) Extend the corresponding taxiway to the full length of the runway; and	NO

Table 4-1 (Continued)
Summary of Potential Cumulative Impacts

Project Name	Description	Meets Cumulative Criteria under Sections 4.1 and 4.2
	(C) Extend the nearby levees to properly realign the drainage around the project site.	
City of Novato		
Redevelopment of the Fireman's Fund Office Campus, Novato	American Assets, Inc., a San Diego based real estate investment and development company, has submitted a proposal to redevelop the Fireman's Fund Office Campus located on San Marin Drive. The project, referred to as The Commons at Mount Burdell, proposes a comprehensive redevelopment of the 65-acre Fireman's Fund campus, which is currently developed with three office buildings totaling 710,000 sq. ft. and approximately 1,800 parking stalls located in surface parking lots. The proposed project would retain the existing office buildings and add approximately 700,000 sq. ft. of new development, including: office and retail space, hotel/meeting center, health club, community facility, senior care, and multi-family residential units (150 units). The project would locate new development where surface parking lots currently exist at the project site. The project would rely on underground and structured parking facilities to meet parking demand. The project has been designed with the goal of being carbon neutral, relying on passive and active measures to meet the energy, heating/cooling, water, and solid waste disposal needs of the development.	NO
Improvements to Redwood Blvd. And U.S. 101 Southbound Ramps at San Marin Drive. Novato	The project would modify the southbound, eastbound and westbound approaches at Redwood Boulevard and San Marin Drive and eastbound right turn lane onto the southbound U.S. 101 on ramp and include ramp widening. The work could require widening the San Marin Drive bridge over the SMART/NCRA railroad.	NO
The Millworks/Whole Foods, downtown Novato	Mixed-use development project at southeast end of grant avenue with a Whole Foods Market and 124 housing units.	NO

Table 4-1 (Continued)
Summary of Potential Cumulative Impacts

Project Name	Description	Meets Cumulative Criteria under Sections 4.1 and 4.2
Albertsons Grocery Store, Novato	Under construction. Located along Nave Drive south of Bel Marin Keys Boulevard.	NO
Olive Ave. Improvements, Phase III (between Redwood and Railroad Avenues), Novato	The project will rehabilitate the pavement, improve the sight distance, and provide a smoother transition across the railroad tracks. Widening the railroad crossing will require negotiations with NCRA/SMART.	NO
Napa County		
Rehabilitation of the Rail Line	The project involves routine maintenance and repairs required to bring the rail line to FRA Class 3 standards. Tasks include the repair of signals, culverts, track, ties, and ballast, and bridges.	YES

[The above information was gathered from the following sources: (A) local planning and Caltrans District 4 websites; (B) SMART FEIR App. D; (C) communication with Deborah Harmon and Melanie Brent at Caltrans District 4; (D) Steve Marshall (Senior Planner) City of Novato; (E) Scott Briggs and Stephen Dee at Sonoma County PRMD; (F) Irene Borba at the City of Petaluma Planning Department; (G) Joel Galbraith, Senior Planner at the City of Santa Rosa Planning Department; (H) Alan Falleri for the town of Willits.]

The following probable future projects have been considered in this DEIR:

- SMART;
- Shamrock Materials, Inc.;
- Willits Bypass;
- Re-routing of containerized solid waste to proposed project loading and unloading area; and
- Rehabilitation of the rail line from Lombard to Windsor.

A summary of the above identified cumulative projects which meet the criteria listed under Sections 4.1 and 4.2, and their anticipated cumulative environmental impacts is provided below.

4.2.3.1 SMART

SMART Project Summary

The SMART project is a proposed multi-modal transit project which would address an identified need for an improved passenger rail transportation system within Sonoma and Marin counties. The need was determined from aspects such as growing congestion, increasing travel times and delays on Highway 101, especially during peak travel periods. The capacity of the passenger transportation system has not kept pace with the growth of travel demand in the two counties, a trend that is projected to continue into the future. Passenger rail service is proposed along approximately 70 miles of the SMART corridor from Cloverdale in Sonoma County to Larkspur in Marin County. The proposed project also includes a bicycle/pedestrian pathway that will be located within or adjacent to the rail corridor.

A DEIR was completed for the SMART project in 2005, with a Final EIR completed in June 2006. Subsequently, several project elements changed which then required that a Supplemental EIR (SEIR) be prepared in March 2008 to analyze the impacts from the modifications. The modifications included the potential addition of weekend passenger rail service supplementing the proposed weekday service, the potential use of light Diesel Multiple Units (DMUs) instead of heavy DMUs, and several alternative locations

for one of the proposed stations. The SEIR also reevaluated cumulative impacts from the NCRA's proposed freight rail operations using NCRA's updated project description.

The SMART project consists of the following components:

- Passenger rail service along the 70 mile corridor on weekdays. Service includes a maximum total of 13 daily passenger rail roundtrips between various cities along the corridor. The proposed project includes: four daily roundtrips between Cloverdale and Larkspur, two daily roundtrips between Healdsburg and Larkspur, three daily roundtrips between Windsor and Larkspur, two daily roundtrips between Petaluma and Larkspur, and two daily roundtrips between Healdsburg and Petaluma;
- A total of 14 rail stations along the corridor ranging from Cloverdale to Larkspur;
- Structural improvements and construction of sidings and a rail maintenance facility;
- Construction of a bicycle/pedestrian pathway along the rail corridor;
- Potential addition of weekend passenger rail service with four roundtrips per day, to supplement the proposed weekday service (analyzed in the SEIR).

Cumulative Analysis

In the SMART 2008 SEIR, SMART prepared an analysis of the potential cumulative impact between the proposed SMART and NCRA rail projects. The following discussion is taken either directly from the SMART analysis or provides a summary of certain aspects of their analysis. After the SMART SEIR was issued, NCRA finalized an independent cumulative analysis for potential air, noise and traffic impacts. The NCRA results essentially support the SMART findings. A summary of the NCRA analysis is also provided in the following sections.

Assumptions

Information about how freight and passenger rail can operate on a shared corridor is found in the 2006 SMART FEIR (in Master Responses O and P). Details regarding operation on the shared corridor will be negotiated between SMART and NCRA prior to simultaneous operations.

The following assumptions (sourced from the SMART SEIR) about the combined freight/passenger operations were used in the SMART SEIR for the cumulative impact evaluations, and used in this evaluation of cumulative impacts. Subsequent modifications were made by NCRA based on the proposed freight operations as described in the proposed Project Description.

Freight/Passenger Train Operations and Separation. Railroads have many years of experience with operating freight service and passenger service on the same rail system. However, there are operational considerations associated with combining the services. Freight trains are usually longer and slower than passenger trains, with the number and duration of stops dependent on customer needs, while passenger service operates on a fairly strict schedule. SMART's cumulative analysis assumed that freight trains would operate primarily during off-peak passenger service time periods, because SMART believes that NCRA's freight easement over SMART's corridor makes freight operations subordinate to regularly scheduled passenger commute operations. For trains that share the same track, SMART's cumulative analysis assumed that following trains, whether freight or passenger, may run no closer than 30 minutes behind their leaders , because of both the SMART commuter train schedules and the signal system that would control all rail train movements.

The details of passenger and freight service schedule will be determined prior to combined operations and will be in compliance with rail safety regulations. For purposes of the analysis in this DEIR, NCRA has used SMART's scheduling assumptions.

Hours of Operation and System Capacity. SMART's SEIR assumed that freight train service at the levels proposed by NCRA could be accommodated on the SMART right-of-way during daytime off-peak hours without the need for night trains.

NCRA understands that SMART proposes to operate 14 northbound and 14 southbound commuter trains daily on weekdays (six in the morning peak period and six in the evening peak period), and four trains northbound and four trains southbound on Saturdays and Sundays. The weekday commuter trains will operate every thirty minutes at regular intervals. Most commuter train meets will be made at stations although there are four new sidings planned north of Ignacio. On weekdays, there is one midday turn that operates from Cloverdale to San Rafael and return generally

between the hours of 10:00 a.m. and 2:00 p.m. The proposed commuter schedules that were evaluated in the SMART SEIR do not now contemplate the use of non-compliant equipment that would require either a time or space separation in order to comply with FRA regulations.

The proposed freight train schedules proposed in SMART's SEIR appear unrealistic in their representation of the freight capacity that NCRA's operator needs in the Ignacio to Cloverdale Corridor. As one example, in the event that a solid waste train is operated, it will be necessary to accommodate connecting train schedules with the Union Pacific Railroad. Decisions on schedules are not made unilaterally, but in the context of intra and interstate commerce over trackage owned by other lines. As a common carrier so-designated by the Surface Transportation Board, NCRA's operator is obligated to operate trains at times and with the frequencies required so as to fully perform its common carrier obligations, and to conduct safe, timely, and efficient rail freight operations that provide adequate rail freight service to the shippers and receivers on the NWP Line. As identified in the SMART Draft SEIR,, NCRA's operator's common carrier status will permit it to operate trains at night and night operation is considered as part of the proposed project.

Truck Traffic Offsets. The SMART SEIR assumed an equivalency of two trucks for each rail car movement for general merchandise premised on a further assumption that rail cars are more likely than trucks to be returned empty. This assumption is not consistent with the freight operations for the proposed project. The principal merchandise commodities projected for the proposed project are grain, lumber, and aggregate inbound, and wine outbound. Therefore, NCRA's cumulative analysis assumes an equivalency of four trucks per each merchandise rail car movement.

Public Safety. SMART is is in the process of selecting an engineering firm to design bike and pedestrian pathways within their right-of-way. This DEIR assumes that these pathways will be designed appropriately to protect the public using these trails. Any agency or jurisdiction who wishes to construct a bike or pedestrian pathway on the NCRA right-of-way will be required to conform with NCRA's adopted trail projects guidelines, and demonstrate prior to approval that it will provide a safe environment for the public.

Track Repairs. Due to the proposed start up schedules of the two projects, it is unlikely that temporary impacts associated with construction and repair activities of the two projects would occur at the same time. Even if NCRA's repairs were delayed and there were some overlap in the construction phase of the two projects, it is unlikely there would be a more substantial cumulative impact from these temporary construction and repair activities, as many of these activities could be coordinated between the two agencies. The SMART 2005 DEIR and 2006 FEIR analyzed the full array of track improvement repairs needed for passenger service which likely covered many of the repairs that NCRA will be required to make. Impacts associated with freight service repairs outside of the SMART corridor (e.g. Schellville, Lombard and Willits) are not considered to be part of the potential cumulative impact.

Sidings. Any potential cumulative impacts resulting from new sidings proposed by SMART are addressed in the 2006 FEIR for the SMART project. As discussed in Sections 4.2.3.2 and 4.2.3.4, NCRA has identified several potential projects that could result in four possible future freight siding locations, three of which would be along the corridor shared with the proposed SMART project. However, these projects and associated sidings are uncertain and may change according to future freight client needs. These possible new sidings are in locations where freight railcars would be stored, loaded and unloaded and would not be used for SMART/freight "meets". The impacts of constructing and operating NCRA sidings would be similar to those identified in SMART's FEIR for the SMART project. SMART operations will not use existing or future freight sidings, and therefore there will not be a cumulative impact associated with sidings between the two projects.

Quiet Zone Improvements. The quiet zone improvements identified for the proposed project is related to freight traffic. SMART will need to conduct an independent analysis to determine if any additional quiet zone improvements are required based on SMART's operation plans. The quiet zone improvements proposed to be installed as part of the proposed project may be sufficient, but a final determination will be made by FRA and the CPUC as part of SMART's facility approval.

Cumulative Analysis

The results of SMART's and NCRA cumulative impact analyses are presented below by issue area.

Air Quality

The cumulative regional and localized air quality impacts identified by SMART, the proposed passenger rail service enables reductions in future motor vehicle emissions, and with these reductions, the proposed project would not make a significant contribution to cumulative emissions in the region. While the SMART 2006 FEIR found that the reintroduction of freight service would add to these emissions, cumulative emissions were still below the applicable significance thresholds. Accordingly, the SMART 2006 FEIR determined that cumulative emissions would be less than significant.

As discussed in SMART's 2008 SEIR, resuming freight service at the levels identified in NCRA's project description does not change the significance conclusions in SMART's 2006 FEIR with respect to regional emissions in the study area. Even with the additional emissions from adding SMART's proposed weekend service to the project, the net cumulative effect would still be less than significant.

With regard to localized impacts, concentrations of CO (carbon monoxide), and diesel particulate matter (diesel PM) from the proposed SMART project both at the project level and in the cumulative context were found to be less than significant in SMART's 2005 DEIR and 2006 FEIR. With respect to diesel PM emissions, the SMART 2006 FEIR concluded that the proposed project's potential cancer risk impacts to residences and other sensitive receptors within 30 feet of the rail tracks was less than one excess cancer case per million. The 2006 FEIR determined that adding freight service would result in a cumulative total of no more than 7 excess cancer cases, below the significance criterion of 10 excess cancer cases per million. As described in SMART's 2008 SEIR, this conclusion regarding the significance of localized impacts does not change with the revised SMART project (addition of weekend service and/or light DMUs) and NCRA's proposed freight service.

In addition to SMART's analysis of the potential cumulative impacts associated with air emissions between the two projects, NCRA prepared an independent technical evaluation. NCRA's findings support the conclusions made by SMART.

However, in order to address public concern over potential future operations, the analysis conducted by SMART assumed a larger scale freight operation than proposed

for the NCRA project. Specifically, the SMART cumulative analysis assumed operations of two additional trains that are not currently anticipated for the proposed NCRA project operations. As a result, the SMART analysis is considered highly conservative indicating greater potential cumulative impacts than would be anticipated if the analysis applied the proposed NCRA project as described in the NCRA DEIR.

The cumulative impact analysis, as evaluated by SMART, indicates that the cumulative impacts will be less than significant. Because the SMART analysis is considered overly conservative, the cumulative impacts with the basis of the proposed NCRA project, as described in the NCRA DEIR, would show even less of a cumulative impact. Therefore, the conclusion for cumulative impacts for combined overlapping operations of both SMART commuter transportation and NCRA freight operations are considered less than significant.

Greenhouse Gases

The 2006 FEIR concluded that by replacing more energy-consuming modes of travel (i.e., auto and bus) with train travel, the original SMART project would result in an overall decrease in GHG compared to future conditions without the project. Similarly, freight service would reduce GHG compared to use of heavy-duty trucks to move the same ton of cargo the same distance. The cumulative impact of the original SMART project and NCRA's proposed freight rail service on emissions of GHG would be beneficial.

Biological Resources

The proposed freight operations have been evaluated and potential impacts were found to be less than significant, or can be reduced to less than significant levels with mitigation. Further evaluation of the freight operations in consideration of the proposed SMART passenger operations does not increase the levels for most biological impacts since the same rail system will be used for both operations. More rail traffic may potentially increase the incidence of wildlife collisions and noise impacts with wildlife, but the incorporation of the identified mitigation measures will still reduce this impact to less than significant. The incidence of freight rail traffic is relatively low compared to the passenger rail service proposed by SMART. The 2006 FEIR for the SMART project included additional analysis of cumulative impacts from passenger and freight service

on biological resources and determined that the cumulative impacts would be less than significant with the proposed project's identified mitigation measures. In the SEIR prepared for SMART to address modifications in proposed service and facilities, all cumulative impacts of the project were reevaluated and still found to be less than significant or would be reduced to less than significant with mitigation. The potential increases in future NCRA service levels were determined not to be substantial enough to change the FEIR conclusions.

Cultural Resources

Freight service combined with the passenger service proposed by SMART, including project changes identified in the SMART SEIR (weekend service, light DMUs, alternative station sites), would not result in increased impacts other than what was already included in the project level evaluations.

Geology, Soils and Seismicity

The proposed operations of both NCRA freight rail service and SMART passenger rail service will not result in significant cumulative impacts. The combined rail service does not appreciably increase the level of potential impact and, therefore, cumulative impacts are not significant.

Growth Inducing Impact

Freight service combined with the passenger service proposed by SMART, including project changes identified in the SMART SEIR (weekend service, light DMUs, alternative station sites), would not result in increased impacts other than what was already included in the project level evaluations.

Hazardous Materials

NCRA is not proposing to haul hazardous waste and the proposed passenger service by SMART also does not propose to transport hazardous material. Both projects have BMPs for the management of hazardous materials and hazardous waste needed for or resulting from the maintenance and repair of the railroad. Therefore, the combined operation of the freight and passenger services would not result in a cumulative impact.

Land Use and Planning

Freight service combined with the passenger service proposed by SMART, including project changes identified in the SMART SEIR (weekend service, light DMUs, alternative station sites), would not result in increased impacts other than what was already included in the project level evaluation. Moreover, the addition of both freight and passenger services will cumulatively enhance and meet many General Plan policies and objectives for those jurisdictions that include the rail corridor.

Noise and Vibration

The cumulative noise and vibration impacts identified in the SMART 2005 DEIR and 2006 FEIR (p. 4-56) for the original SMART project and proposed freight service were determined to be less than significant, except for impacts under the criteria of the Federal Transit Administration (FTA) due to train horn noise in the vicinity of grade crossings.

In locations away from grade crossings, the long-term cumulative noise impacts for daily noise exposure were found to be less than significant in the SMART 2006 FEIR. The basis for the conclusion was that day/night levels were found to be less than 60 dBA Ldn, which is the level considered acceptable for outdoor uses in residential areas according to residential noise compatibility standards established in local general plans or ordinances. The SMART 2005 DEIR identified an estimated cumulative noise exposure of 59 dBA Ldn at 50 feet and 54 dBA Ldn at 100 feet from the tracks, based on eight freight train pass-bys per day (each consisting of one locomotive and 15 railcars) in conjunction with the noise and vibration from the original SMART project. Based on revised information from NCRA, SMART's 2006 FEIR (published May 16, 2006) updated that assessment to assume that only two freight pass-bys per day would occur with trains of 15 cars. The 2006 FEIR showed that this level of freight activity would cause 55 dBA Ldn at distances of 50 feet from the tracks and 50 Ldn at 100 feet from the tracks cumulatively with the original SMART project. These levels assumed only daytime operation of the freight service. Both the 2005 DEIR and the 2006 FEIR showed that cumulative noise exposure from combined passenger and freight operations would not result in levels over 60 dBA Ldn for locations at or greater than 50 feet from the tracks and, thus, determined that the cumulative impact would not be significant.

The SMART 2005 DEIR and 2006 FEIR conclusions, with respect to cumulative noise exposure along the rail line, would change with the level of freight service proposed in the NCRA project description when freight trains exceed 25 mph and night time operations. Noise from freight trains exceeding 25 mph would exceed 60 dBA Ldn at 50 feet from the tracks. This is because higher freight train speeds result in higher noise levels. As a result, there would be a significant cumulative noise impact, primarily attributable to freight operations.

Cumulative Impacts and Mitigation for an Increase in Ambient Noise Levels

Impact CUM – SM1: Future combined SMART passenger and NCRA freight operations would result in a permanent increase in ambient noise levels in some segments for sensitive receptors within 50 feet of the tracks. **[*Significant and Unavoidable]***

As shown in the SMART 2005 DEIR, the original SMART project alone would not exceed the significance criteria of 60 dBA Ldn at any sensitive receptors along the track; at 50 feet from the tracks, the maximum noise levels generated by the SMART project would be 54 dBA Ldn. However, with the addition of freight service, the maximum cumulative noise impact would be approximately 64 Ldn for areas where freight operates at 50 mph and 60 Ldn where freight operates at 25 mph. By exceeding 60 Ldn at speeds above 25 mph, NCRA proposed freight operations would cause the cumulative impact to become significant for residences (an estimated 10 to 20) and other noise-sensitive land uses within 50 feet of the tracks. It should be noted that in the more densely populated areas where residential uses and other noise-sensitive uses are more likely to be encountered, freight train speeds would be lower, but noise could still be over the significance threshold for freight train speeds greater than 25 mph. The noise levels described here assume that each of the six freight pass-bys per day would be brief (less than two minutes for a 60-car train at 25 mph) and that they would occur in the daytime (outside of SMART peak hours). If freight pass-bys occur between 10 p.m. and 7 a.m., the impacts would be greater than described here (e.g., over 68 Ldn within 50 feet of the tracks with a nighttime freight pass-by). Table C.6-1 in the SMART Draft SEIR summarizes the maximum ambient noise levels as a result of the combination of passenger and freight service at freight speeds of 25 mph and 50 mph. (To put these noise levels in perspective, see Section 3.7 in the SMART 2005 DEIR for a comparison of different vehicle noise levels.

SMART's 2008 SEIR concluded that the cumulative noise level of passenger and freight service would exceed 60 dBA Ldn within 50 feet of the tracks when freight operates at speeds greater than 25 mph. This would be a significant cumulative impact. Although passenger service would not individually result in a significant impact, it would make a cumulatively considerable contribution to the impact. This determination is consistent with the NCRA / SMART cumulative impact analysis presented in the Environmental Noise Assessment, Appendix H.

Impact CUM – SM2: Future combined SMART passenger and NCRA freight operations would result in a significant cumulative impact from train horn noise near grade crossings. ***[Significant and Unavoidable]***

As already determined in the SMART 2005 DEIR, there would be a significant cumulative impact from train horn noise near grade crossings. Since the number of trains proposed in NCRA's project description is three roundtrips rather than the four roundtrips considered in the 2005 DEIR, this cumulative impact would not be increased.

Impact CUM – SM3: Future combined SMART passenger and NCRA freight operations would result in a cumulative impact from groundborne noise and vibration. ***[Significant and Unavoidable]***

Groundborne noise and vibration along the combined project route would substantially increase with the increase in NCRA proposed freight service. Vibration as a result of the original SMART project was determined to be lower than the level generally perceptible to humans for distances greater than 100 feet from the tracks, and while possibly perceptible within 100 feet of the tracks, the SMART 2005 DEIR determined that vibration would be negligible at less than the applicable FTA significance criteria of 0.01 inches per second of root-mean-square (RMS) vibration velocity. The significantly greater length, weight and axle loads of freight trains would generate vibration levels that could potentially exceed the FTA impact criteria within 100 feet of the tracks, up to six times per day for the amount of time it took the train to pass (i.e., less than 2 minutes for a 60-car train at 25 mph). As noted in the SMART 2005 DEIR in Section 2.9, SMART is committed to using timber crossties and switchties and continuous welded rail to further reduce noise and vibrations from all train operations. Even with these noise reduction techniques, the addition of SMART trains on the line would make a cumulatively considerable contribution to the impact.

Public Facilities and Safety

Both the NCRA proposed freight service and the SMART proposed passenger service will reduce the amount of traffic and will reduce traffic congestion, which will help improve road safety. Other potential cumulative impacts on public safety from the two projects have been evaluated and include potential conflicts of combining passenger service and freight service on the rail system, safety for motorists, pedestrians and cyclists at at-grade crossings, the potential for delaying the time for emergency responses, and the safety of public users of SMART's proposed bicycle/pedestrian pathway.

The operation of both freight service and passenger service on this rail system has created public safety concerns regarding freight/passenger interaction that may result in schedule conflicts, stalls or accidents. Freight service allows for operations at times that accommodate passenger service: during off-peak hours or periods when no passenger service occurs, such as nights or weekends. Coordination of freight service and passenger service may require freight trains to operate primarily during off-peak passenger service time periods during the day and night. SMART's proposed operations plan also requires that freight or passenger may not run closer than 30 minutes behind their leaders which, although reducing track capacity, will enhance the safety of rail operations.

The cumulative effects on public safety related to operating both freight service and passenger service on this rail corridor would remain less than significant. Also, the possible addition of weekend passenger rail service will not significantly increase safety risks since it is likely that there will be less freight activity on the weekend than during weekdays, so the potential cumulative impacts would remain less than significant.

All rail-highway at-grade crossings will receive new or repaired safety devices, and the proposed rail service by SMART and NCRA include maintenance of such at-grade crossing safety devices. Both SMART and NCRA propose implementation of a public safety awareness program, called Operation Lifesaver, as a means to promote and improve public safety for the rail operations at grade crossings.

The potential for emergency response delays at at-grade crossing by operations of both freight service and passenger service was also evaluated in the SMART 2008 SEIR and

determined to be less than significant. The combined operation of freight trains and passenger trains in the corridor could increase the incidence of emergency response delays at at-grade crossings if trains are present when emergency vehicles need to cross. The proposed passenger trains are fairly short and can typically pass through a crossing in 35-40 seconds. This could occur as often as 26 times per week day and possibly eight times daily on the weekends. The SMART findings concluded that the potential for delays of emergency response to be less than significant. NCRA's analysis of potential impacts on emergency services also found that the potential delay to emergency response to be less than significant. There are only three daily freight service trips that will operate during off-peak periods. While the freight trains are longer than the passenger trains, up to 60 cars, they will still move through intersections quickly and NCRA will coordinate with the emergency services.

The cumulative impact of the two projects on public safety and emergency services at grade crossings with the project specific mitigations already identified will not result in a significant cumulative impact.

The potential for these projects to cumulatively impact pedestrians and cyclists using the proposed SMART bicycle/pedestrian pathway was evaluated by SMART in both the 2005 DEIR and the 2008 SEIR. Those evaluations found the potential cumulative impacts to be less than significant through implementation of the proposed at-grade crossing safety devices, fencing, pathway safety structures, multilingual signage, and Operation Lifesaver.

Transportation

There are two cumulative transportation impacts when considering the NCRA proposed freight service combined with the proposed passenger service by SMART, one of them beneficial. The beneficial cumulative impact pertains to the reduction of vehicle miles travel on the Highway 101 corridor. The NCRA project would divert freight from being transported by truck and the SMART project would reduce auto vehicle trips.

Future SMART passenger service would contribute to this beneficial impact by providing an alternative transportation option to automobile travel on the Highway 101 corridor.

Future freight operations would contribute to this beneficial impact by diverting some freight that would otherwise travel by truck. Because freight rail cars accommodate

more freight than a typical truck, and can carry greater weight and bulk than normally allowed on a highway, each full freight car has the potential for eliminating up to four truck trips. In addition, because of inferior performance characteristics of trucks (slower acceleration on both flat and rolling terrain) compared to autos, each truck removed from Highway 101 would be equivalent to removing several automobiles. This would be a beneficial impact to the North Bay's transportation system in terms of congestion relief and pavement wear. Therefore, the combination of passenger and freight service would result in a beneficial cumulative effect due to a combined reduction in auto and truck traffic.

The other cumulative impact concerns the potential for vehicle delays at at-grade crossings while trains pass. Freight and passenger trains will generally operate at different times of day, with freight operating during off-peak hours, while the proposed passenger service would operate primarily during the peak travel demand periods. Freight and passenger rail service will never combine together at individual crossings to delay vehicle cross-traffic. Traffic delays caused by freight trains can be up to several minutes long, depending on the length and speed of the trains, but will occur only up to six times per day. Delays at crossings by passenger trains will occur more often, but they are relatively brief (only 35-40 seconds). For these reasons, freight and passenger rail operations would not create a significant cumulative increase in travel times and queues at at-grade crossings.

Water Resources

The proposed freight service combined with the passenger service proposed by SMART, including the proposed project changes (weekend service, light DMUs, alternative station sites) identified in the SMART SEIR, would not result in changes to impacts other than what was already included in the project level evaluations.

4.2.3.2 Shamrock Materials, Inc. – Sonoma County

Shamrock Project Summary

Shamrock Materials, Inc. (Shamrock) proposed a ready-mix concrete plant, concrete and asphalt recycling operations, sand and gravel processing and topsoil composting facility to be located adjacent to the existing rail right-of-way at a site south of Santa Rosa at Todd Road. The Shamrock project consists of 1) an aggregate railcar

offloading facility, 2) a ready-mix concrete plant, 3) a sand and gravel processing plant, 4) a concrete and asphalt recycling plant, and 5) a topsoil composting operation. Related structures to support the primary operations would include a maintenance shop, above-ground fuel and other fluid storage containers, and an office building and truck scale. Normal operating times would be 6:00 am and 5:00 pm Monday through Saturday.

The Shamrock project is located in an existing industrial area west of Highway 101. The adjoining property to the north contains an existing asphalt plant operated by Syar Industries, Inc. The property to the west is an equipment and materials yard operated by Ghilotti Construction, Inc. The adjacent parcels to the south are developed as rural residential. Uses beyond the adjoining parcels include a mix of light industrial and rural residential.

The Sonoma County Permit and Resource Management Department (PRMD) prepared a Mitigated Negative Declaration (MND) in March 2007 for the Shamrock Materials project. Shamrock is considering the potential for shipment of gravel via rail using the NWP rail line, and the MND evaluated the cumulative impacts associated with the Shamrock Materials project and the resumption of railroad service to the area. The overall conclusion of PRMD's evaluation of cumulative impacts between Shamrock and the proposed NCRA freight railroad project was that potential impacts would be less than significant as long as activities were conducted in accordance with approved BMPs and permit conditions. In addition, the evaluation concluded that the use of rail transportation will provide a beneficial impact in several resource areas by reducing the number of heavy diesel trucks on the local roads.

Access to the NWP rail line may require the construction of a new spur to allow rail access to the Shamrock facility. If needed, this spur may require an amendment to the MND to address construction specific impact areas. These potential impacts will likely be similar to construction of the on-site siding presently identified in the MND.

Aesthetics

The Shamrock aggregate processing site is located within an area that is designated for industrial land use in the county General Plan. The Shamrock project would not have an adverse effect on scenic lands or a scenic vista and it conforms to all zoning

requirements. A landscape berm with trees, shrubs and other native vegetation shall be installed along the southern and western boundaries of the site to mitigate visual impacts of the facilities and operations from rural areas. In addition, an exterior lighting plan shall be prepared and approved by PRMD.

Resuming the operations of the railroad will not result in a significant cumulative impact to the aesthetics of the area. The rail line is already existing and has been part of the visual aspects of the area for more than a century. The short term presence of a freight train during loading operations would not result in a significant visual impact.

Agriculture

The Shamrock site is not zoned for agricultural use and is not under the Williamson Act contract. The Shamrock facility will not discontinue agricultural use or result in changes to the existing environment that could result in conversion of farmland to non-agricultural use. However, 50.18 acres of land located approximately 1.8 miles northwest of the Shamrock project site has been identified as mitigation property for the project. The mitigation property (referred to as "Terra Bagnata") consists of two parcels and has a recent history of being used for the growing of flowers, hay, and eucalyptus. The mitigation project would create, enhance, and preserve approximately 19 acres of seasonal wetlands and swales on the 50.18 acre site. The net effect on agriculture will be the loss of the existing cultivated farming on approximately 35 acres. The creation and enhancement of wetlands on the Terra Bagnata site are subject to separate zoning permit approval which will require that the land be utilized for cattle grazing. Cattle grazing and management of wildlife habitat are compatible with policies and allowable uses in the Diverse Agriculture District; therefore, the potential impact to farmland was concluded to be less than significant.

The construction of a new spur to the Shamrock facility will possibly require permitting and mitigation related to the impacts to seasonal wetlands and the federally endangered California tiger salamander known to be in the area. Mitigation property may be required as a result of the new siding, but it will have similar restrictions as the Terra Bagnata site.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Air Quality

The Shamrock facility is consistent with the General Plan designation so its impacts would have been assumed by the Clean Air Plan. An air quality permit to operate is required by the BAAQMD. Shamrock will be required to prepare and implement a compressive dust control program. A health risk assessment for diesel exhaust emissions was prepared for the Shamrock project ChemRisk in 2006. It concluded that all health risks are below the BAAQMD significance level of 1 in 100,000.

Resuming operations of the railroad will allow for aggregate to be imported to the site by rail, thus reducing the number of heavy diesel trucks on the local roads. Because one railcar can displace up to four aggregate trucks, the cumulative impact to air quality will be a beneficial impact resulting in less air emissions.

Biological Resources

Biological assessments and protocol plant and animal surveys were conducted for the Shamrock project. The Shamrock MND provides a brief summary of the results of the assessments and surveys and the mitigations measures designed to reduce potential impacts to special status species and their habitat to a less than significant level.

The site is located within the current range of the federally endangered California tiger salamander (CTS). A preliminary on-site meeting was contacted between Shamrock and the USFWS on March 25, 2003. It was determined that the site does provide suitable aestivation habitat for the CTS given its proximity to known breeding locations to the south and west.

Protocol level botanical surveys were conducted during two consecutive years of surveys and no special status plant species were observed.

Potential impacts to the CTS aestivation habitat would require mitigation as specified in the USFWS's Santa Rosa Plain Conservation Strategy (December 2005). (It should be noted that the Shamrock site is located within an area designated for future development in the Conservation Strategy and, therefore, makes the project consistent with that designation.) Specific CTS mitigation requirements will be determined in consultation with the USFWS through the CWA Section 404 permitting process.

For projects on the Santa Rosa plain that result in impacts to seasonal wetlands, the Corps and USFWS require applicants to create wetlands as required in the Programmatic Formal Consultation for USACE 404 Permitted Projects That May Affect Four Endangered Plant Species on the Santa Rosa Plain. The Shamrock project mitigation consists of creating 6.38 acres of seasonal wetlands.

The construction of the siding to the Shamrock facility will be conducted in accordance with specific mitigation measures identified by the USFWS, U.S. Army Corps of Engineers and other authorizing agencies. The mitigation measures will include obtaining the necessary permits and implementing the measures identified by the regulatory agencies to reduce potential impacts to special status species and their habitat to less than significant.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Cultural Resources

A cultural resources study was conducted for the Shamrock project. A review of the California Historical Information System did not reveal any historical resources on or within .25 miles of the project sites. Field surveys were conducted and no indicators of potential historic or prehistoric cultural deposits were observed. No significant prehistoric or historic archaeological sites, features or artifacts were found, nor were any significant historic buildings, structures or objects identified. Field studies were also conducted for the Terra Bagnata site. The Terra Bagnata site has been previously disturbed by agricultural disc-plowing, however there are two areas that contained potentially significant cultural deposits. The Shamrock MND identified mitigation measures to reduce potential cultural impacts to less than significant.

Activities associated with the construction of a new spur will be done in accordance SHPO consultation, and the necessary permits and mitigation measures as required by the authorizing agencies.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Geology, Soils and Seismicity

Geotechnical investigation reports were prepared by RGH Consultants and Miller Pacific Engineering Group for the Shamrock and Terra Bagnata sites, respectively. The report indicated that neither site is located within an Alquist-Priolo Earthquake Fault Zone. No know active faults traverse the sites.

The geotechnical report indicated that the development of the Shamrock site (including a railroad spur) is feasible provided standard geotechnical considerations, including but not limited to excavation and replacement of weak and expansive soils are identified and corrected as needed. The MND for the Shamrock project concluded that the excavation and grading activities would be less than significant when conducted in accordance with the grading and building permits, drainage and erosion control plans and a construction SWPPP.

The construction of a new spur will be conducted in accordance with the permits and requirements identified by the authorizing agencies.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Growth Inducing Impacts

The proposed freight service combined with the Shamrock project would not result in changes to impacts other than what was already included in the project level evaluation. Sources of aggregate are available both inside and outside the County; the mode of transportation utilized to transport such aggregate will not, in and of itself, be growth inducing. The proposed project will change only the mode of transportation for aggregate and other construction materials from Shamrock, and will not facilitate additional growth of the Shamrock facility or development in the service area.

Hazardous Materials

The MND for the Shamrock project concluded that the potential for a hazard to the public or the environment due to reasonably foreseeable upset and accident conditions as a result of a release of hazardous substances would be less than significant. This

was due to the small amount of fuel and other compounds that would be stored onsite and the measures required by the facility SPCC plan.

The construction of a new spur and loading and unloading activities will be conducted in accordance with the mitigation measures identified by the authorizing agencies.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Land Use and Planning

The Shamrock facility is located on a site that is zoned for this type of industrial use in the Sonoma County General Plan. The proposed use is compatible with existing zoning.

The construction of a new spur will not result in a significant impact associated with land use and planning and it will not divide an established community.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Mineral Resources

The project site is not designated as an important mineral resource site on any land use plans. The construction of a new spur will not result in a significant impact associated with mineral resources.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Noise

A noise assessment of the Shamrock project was prepared by Illingworth & Rodkin (June 13, 2006). The assessment included a follow-up analysis on the anticipated railcar operations and potential noise impacts at a specific residence. The primary sources of noise associated with the Shamrock project are the concrete crusher, tub grinder and sand/gravel crusher. The stockpiles and perimeter berm will provide the shielding necessary to reduce noise levels outside of the nearest residences to meet

County noise standards. The maximum noise level at the nearest receptor will be below a level of 65 dBA which is in compliance with the General Plan.

The study assessed several factors associated with the delivery of railcars to the site and the movement and unloading of cars while at the site. The study resulted in the following conclusion and recommendation: "We conclude that noise levels due to daytime operations would not be noticeable above background noise levels in the area. However, switching of trains on the site at night could be a potential impact on adjacent residences. The study suggests that, if possible, switching operations should be restricted to the daytime hours on site, consistent with other industrial operations in the area."

The Shamrock MND identified mitigation measures to reduce the potential cumulative impact associated with the railroad to less than significant. The operation of the railcar switching operations shall be restricted to 7:00 am to 10:00 pm daily.

Trains delivering railcars loaded with aggregate may generate some vibration, but the Shamrock MND concluded that there is no evidence to suggest that it would be in excess of what would typically be expected and not significantly different than previous operations of the railroad.

Potential noise impacts associated with construction activities, such as the construction of a new spur, are mitigated by the Shamrock MND to less than significant by requiring that construction activities be restricted to the hours of 7:00 am to 7:00 pm on weekdays and 9:00 am to 5:00 pm on weekends.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Public Facilities and Safety

The Shamrock MND concluded that the Shamrock project would not significantly impact schools, parks, or the provision of fire and police protection, nor affect any public services to the extent that additional personnel or facilities would be needed.

The construction of a new spur will be a temporary and will not create a significant impact to public services.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Recreation

Neither the Shamrock project nor the proposed freight railroad project would generate an increase in population that would result in a significant increase in the use of any parks or other recreational facilities. The rail cars will be covered, preventing the release of aggregate along the railroad right-or-way or impacting the use of the proposed bike lanes and pathways.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Transportation

A traffic impact study was completed for the Shamrock project by Whitlock & Weinberger Transportation, Inc. The traffic impact study evaluated the intersections of Todd Road/Standish Ave, Todd Road/Moorland Ave, Todd Road/South Moorland/South U.S. 101, Todd Road/South Moorland and Todd Road East/North U.S. 101. The study concluded that the increase in delay resulting from the Shamrock project at all the study intersections was less than the county's significance threshold of 5 seconds of increased delay and no safety issues were identified. The study did conclude that heavy trucks importing material to the site would potentially cause excessive wear on local roadways and require increased pavement depths on haul routes to support truck weights for the use. Therefore resuming the operations of the freight railroad would have a beneficial cumulative impact by reducing the number of heavy trucks on the roadways.

Utilities and Service Systems

Resuming the operations of the freight railroad would not result in the Shamrock project increasing their water or utility requirements, therefore the potential cumulative impact on utilities and service systems would be less than significant.

Water Resources

The Shamrock project was designed to comply with the water quality standards, waste discharge requirements and permit conditions of the North Coast RWQCB through the incorporation of mitigation measures, including the construction of earthen berms, drainage swales and the incorporations of BMPs. The Shamrock project is not located within a 100-year flood hazard area as evidenced by its exclusion from the F2 Floodplain Combining District. It will not expose people or structures to significant risk of loss, injury or death from flooding.

The construction of a new spur will be conducted in accordance with the mitigation measures identified by the authorizing agencies and the required permits.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

4.2.3.3 Willits Bypass – Mendocino County

Willits Bypass Summary

The California Department of Transportation (Caltrans) in conjunction with the Federal Highway Administration (FHWA) is planning to construct a new segment of U.S. Highway 101 that would bypass the city of Willits in Mendocino County. A final joint EIR/EIS was issued in October 2006. The purpose of the Willits bypass is to reduce delays, improve safety and achieve a "C" LOS for interregional traffic on U.S. 101. It is anticipated that construction will start in 2010 and be completed in 2014.

Cumulative Analysis

The cumulative analysis conducted for the Willits Bypass Final EIR/EIS identified two potential cumulative impacts associated with the proposed NCRA project. These include potential cumulative impacts to wetlands and salmonids. The Willits Bypass EIR/EIS concluded that with the implementation of BMPs and consultation with the appropriate regulatory agencies that both of these potential cumulative impacts would be less than significant.

The following provides a summary of key resource areas that could potentially be cumulatively impacted by the proposed project and the Willits bypass:

Air Quality

During the construction of the Willits bypass, the proposed NCRA project would be conducting routine maintenance and repair activities associated with the operation of the railroad that could result in temporary air emissions. Both the Willits bypass construction activities and the NCRA maintenance and repair activities will be conducted in accordance with approved BMPs.

The cumulative air quality impact of resuming the operations of the railroad and the relocation of highway traffic will result in a net air quality benefit. Both projects will decrease traffic congestion and emissions associated with idling vehicles by reducing the number of vehicles on the local roadways. The proposed NCRA freight railroad project will remove up to 800 heavy diesel truck trips from the area. The Willits bypass will reduce delays (idling vehicles) and achieve a "C" LOS for interregional traffic on US highway 101. These improvements will result in a net air quality benefit to the area.

Biological Resources

The Willits Bypass EIR/EIS identified that improvements to the railroad could result in a significant cumulative impact to wetlands and salmonids; however, with the implementation of BMPs and consultation with the appropriate regulatory agencies it was determined that the impact would be less than significant.

Resuming operations of the railroad will be conducted such that there will not be a significant impact as a result of noise or locomotive lights to biological resources (see Section 3.2, Biological Resources). Maintenance and repair activities will be conducted in accordance with approved BMPs in order to avoid significant impacts to biological resources. The Willits EIR/EIS did not identify significant impacts as a result of noise or lights on biological resources.

Impact CUM-WI1: The relocation of the highway combined with resuming the operations of the proposed NCRA freight railroad could result in an impact to wetlands and salmonids. ***[Less Than Significant With Mitigation CUM-WI1]***

Mitigation CUM-WI1: The appropriate authorizing agencies shall be consulted and all necessary permits shall be obtained. Agency approved BMPs shall be implemented.

The relocation of the highway combined with resuming the operations of the proposed NCRA freight railroad could result in an impact to wetlands and salmonids. The cumulative impact of the combined two projects with the project specific mitigation measures implemented for each, such as consultation with appropriate authorizing agencies, obtaining all necessary permits, and implementing Agency approved BMPs shall be implemented.

Cultural Resources

Construction and maintenance activities for both projects will be conducted in accordance with BMPs that have been reviewed by the SHPO and other appropriate agencies.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Geological, Soil and Seismicity

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Growth Inducing Impacts

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact. Transport of goods by rail to and from the Willits area will alter only the mode of transportation, and will not facilitate increased business or housing in the area.

Hazardous Materials

Construction and maintenance activities that involve the use of hazardous materials or generate hazardous waste will be conducted in accordance with approved BMPs. The cargo for the proposed NCRA project will not include hazardous materials or waste.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Land Use and Planning

Both projects are consistent with the land use policies identified in the Mendocino County General Plan.

Noise

During the construction of the Willits bypass, the proposed NCRA project would be conducting routine maintenance and repair activities associated with the operation of the railroad that could result in temporary noise impacts. Both the Willits bypass construction activities and the NCRA maintenance and repair activities will be conducted in accordance with approved BMPs to reduce or eliminate these temporary impacts. The significant impacts resulting from noise and vibration from rail operations will not significantly increase by noise generated by construction of the bypass or traffic on the highway once completed.

Public Facilities and Safety

The increased road safety as a result of the reduced traffic congestions and number of heavy diesel trucks on U.S. 101 and the local roads will result in a potential decrease of accidents associated with trucks.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Transportation

Both projects will result in decreased traffic congestion in the area. The Willits bypass will allow heavy diesel trucks to bypass the City of Willits, will reduce delays, improve safety and achieve a "C" LOS for interregional traffic on US highway 101. The proposed NCRA project will remove up to 800 heavy diesel truck trips from the roadways by providing an alternative means of freight transportation. This is equivalent to a 20-25% reduction in truck traffic throughout the NCRA freight train project corridor, but the reduction in the Willits bypass area is not precisely known. The cumulative impact of the two projects with the project specific mitigation measures implemented will result in a beneficial cumulative impact.

Water Resources

Neither project will result in an increased demand on the water resources in the area. The construction and maintenance activities will be conducted in compliance with approved BMPs and the construction SWPPPs. The maintenance activities of the proposed NCRA project will be with in the right-of-way and will not require excavations that could impact groundwater.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

4.2.3.4 Re-routing of Containerized Solid Waste to the Conceptual Loading and Unloading Rail Areas

The County of Sonoma is currently pursuing requests for proposals from private waste companies for purposes of divesting itself on the county's central landfill. As part of any divestiture plan, which includes private acquisition of the landfill and ultimate responsibility for the any closure and clean up costs associated with the central landfill, it would be necessary to divert the county's waste stream to the central landfill to justify the cost of acquisition and clean up. The income stream from tipping fees associated with the disposition of waste at the central landfill would be used by the purchaser to offset acquisition and clean up costs. This presently avowed course of action by the county would preclude most, if not all, of the transport of solid waste by rail to waste facilities outside the county. For this reason, the addition of any future solid waste trains is further very speculative.

However, an alternative to this is that the County of Sonoma may shut down the central landfill and haul solid waste out of the county by rail. Because there is the potential that this may happen, a conservative approach was taken in the evaluation of the proposed project. The evaluation included the hauling of containerized solid waste and the loading and unloading activities of the containers with portable ramps at the envisioned railroad sidings. This cumulative analysis addresses the actual solid waste project where county solid waste trucks would be re-routed to the railroad siding where the containers would be loaded onto flatbed rail cars.

At this point in time there has not been a contractual commitment to use rail as an alternative transportation method to the diesel trucks currently hauling solid waste in

Sonoma County, nor has an environmental review process for the re-routing of solid waste trucks to the conceptual rail sidings been initiated. Because there is an economic benefit for both the NWP Co. and the County of Sonoma, and a net environmental benefit to the region, there is a reasonable possibility that this future project may happen. Therefore, this DEIR takes a conservative approach and evaluates the potential cumulative impacts from the potential solid waste train movements and the potential activities at the loading and unloading areas at the conceptual rail siding.

The conceptual design and assumptions used to describe train movements for the containerized solid waste loading and unloading activities is summarized below:

1. The train would operate with 60 fully enclosed trailers on 60 flatcars, at gross tonnage of 4,140 tons per loaded train and 2,700 tons per empty train.
2. The train would operate with two N-ViroMotive 3GS-21B 2,100 horsepower locomotives, assuming availability and financing.
3. The train would operate six days per week, departing S. Petaluma and S. Santa Rosa Monday through Saturday and returning Tuesday through Sunday.
4. The empty train would leave Lombard, arrive at a speculative siding referred to as Haystack Siding, set-out one-half of its train, and arrive at another new and speculative siding called Todd Siding in an hour.
5. The two locomotives would leave Todd Siding and perform other freight work as required in the Corridor until they return to depart with the loaded train.
6. At Haystack Siding, the 30 cars would be broken into two cuts with 15 cars north and 15 cars south of the Landing Way crossing. Two portable ramps will be moved against each cut at Landing Way, and a small yard tractor will back up the ramps, couple into the trailers, and drive them off the train to an adjacent marshalling yard from where they would be distributed to the various Sonoma County transfer stations. The cars and ramps would remain in their positions throughout the day until the departing train arrives, with the cars having been reloaded as loaded trailers become available.
7. At Todd Siding, the 30 cars would be broken into two cuts with 15 cars north and 15 cars south of the West Robles Ave. crossing. The unloading and reloading process would be identical to that described above for Haystack Siding.

8. The loaded train would leave Todd Siding with 30 cars, arrive Haystack Siding, depart with 60 cars, and arrive Lombard.
9. The locomotives would be serviced and stored outside the SMART right-of-way, when not in use.
10. The yard tractors and portable ramps would be stored on industrial property adjacent to the right-of-way.
11. The exact location of the two new sidings is unknown at this time. Conceptually the "Haystack Siding" may be located near MPs 36.0 – 38.0 and the "Todd Siding" may be located near MPs 50.0 – 51.0.

Because the exact locations of the sidings are not known at this time, it is not possible to evaluate the potential impacts associated with the construction or placement of the specific sidings. If a contract is entered into and when the details of the loading and unloading operation are identified, the potential impacts will be evaluated in a separate environmental document.

Cumulative Analysis

Air Quality

The activities associated with the re-routing of the containerized solid waste to the proposed project loading and unloading areas and the NCRA maintenance and repair activities associated with operation of the solid waste train will be conducted in accordance with approved BMPs.

The cumulative air quality impact of these two projects will not result in a significant impact to air quality; in fact, there will be a net air quality benefit. Both projects will decrease traffic congestion and emissions by reducing the number of solid waste trucks and heavy diesel trucks on the local roadways. The proposed NCRA freight railroad project will remove up to 880 heavy diesel truck trips from the area (see Sections 3.1 and 3.10). The potential alternative routing for the county solid waste trucks could result in different local air emissions; however, overall there will be a reduction in the number of solid waste trucks on the local roadways. If the county's central landfill is shut down, solid waste trucks would have to travel further distances to transport the solid waste to a

permitted landfill with sufficient capacity. The combination of these two projects would result in a net air quality benefit to the area.

Biological Resources

As discussed in Section 3, resuming operations in undisturbed sections of the railroad will be conducted in a manner such that there will not be a significant impact as a result of noise or locomotive lights to biological resources. Maintenance and repair activities would be conducted in accordance with approved BMPs in order to avoid significant impacts to biological resources.

The construction of the sidings may have an impact on biological resources. This will be fully evaluated once the final locations of the sidings have been determined.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Cultural Resources

Construction and maintenance activities for both projects will be conducted in accordance with BMPs that have been reviewed by the SHPO and other appropriate agencies.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Geological, Soil and Seismicity

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Growth Inducing Impacts

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact. The proposed project will change only the mode of transportation for solid waste from Sonoma County, and will not facilitate additional growth of the waste hauling businesses or development in the service area.

Hazardous Materials

Construction and maintenance activities that involve the use of hazardous materials or generate hazardous waste will be conducted in accordance with approved BMPs. The cargo for both projects is non-hazardous municipal solid waste.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Land Use and Planning

Both projects are consistent with the land use policies identified in the City County General Plans as described in Section 3.7, Land Use.

Noise

The noise generated by the proposed project alone would exceed the regulatory noise thresholds. There are no known mitigations to reduce this impact to a less than significant level. Therefore, this impact is considered Significant and Unavoidable.

Public Facilities and Safety

The increased road safety as a result of the reduced traffic congestions and number of solid waste trucks and heavy diesel trucks on U.S. 101 and the local roads will result in a potential decrease of accidents associated with trucks. Solid waste trains will only carry solid waste in completely enclosed containers, therefore avoiding safety issues associated with falling debris.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Transportation

Both projects will result in decreased traffic congestion in the area. The proposed NCRA project will remove up to 880 heavy diesel truck trips from the roadways by providing an alternative means of freight transportation (see Section 3.10). This is equivalent to a 20-25% reduction in truck traffic throughout the NCRA freight train project corridor. The projects will result in a reduction of solid waste trucks on the

roadways. Waste trains that are temporarily staged on the sidings will not cross any roadways and not impact traffic. The current routes of the County's solid waste trucks may be altered, therefore, potential impacts associated with this will be evaluated during the County's environmental review process for the re-routing of the containerized solid waste project.

The cumulative impact of the two projects with the project specific mitigation measures implemented will result in a beneficial cumulative impact.

Water Resources

Neither project will result in an increased demand on the water resources in the area. The construction and maintenance activities will be conducted in compliance with approved BMPs and the construction SWPPPs. The maintenance activities of the proposed NCRA project will be within the right-of-way and will not require excavations that could impact groundwater.

The cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

4.2.3.5 Rehabilitation of the Rail Line, Lombard to Windsor

Rehabilitation involving routine maintenance and repair activities of the rail line is required before freight service can be resumed. Maintenance and repair activities are necessary to bring the rail line into conformance with the Federal Railroad Administration Class 3 standards, to address safety issues identified by local jurisdictions, and to comply with the intent of the environmental Consent Decree (ECD). A Categorical Exemption in accordance with the California Environmental Quality Act (CEQA) was issued in the Spring of 2007 to cover these routine maintenance and repair activities between Lombard (milepost 1.0) to Windsor (MP 62.9).

The routine maintenance and repair activities are located within the railroad right-of-way, conducted from the rail using rail mounted equipment and performed in accordance with NCRA's BMPs. None of the maintenance and repair activities involve any expansion of prior use and will not change the purpose or weight bearing capacity of the structures being repaired. There will be no placement of sediment within waters of the State. There will be no excavation or fill in the waters of the State and no alteration

of the streambeds. There will be no work conducted in waterways and wetlands and there will be no excavation of native soils. Grading will only involve the re-grading of existing railroad ballast.

Rehabilitation Project Summary

The rehabilitation of the line consists of routine maintenance and repair of signals that require servicing or repair from vandalism, track work involving the rail, ties, and ballast materials, culverts that are damaged or need replacement to increase capacity, and bridge work. Each task is described independently below.

Signal Work

NCRA plans on repairing and in some cases replacing 102 at-grade signals at roadway crossings. This work primarily involves the replacement of electronic and structural components of the signals. All of the signal work activities occur within the existing NCRA right-of-way, and on roadway shoulders. Excavation of soil to construct new foundations beneath some signals will occur in previously disturbed soil adjacent to existing roads. The work is conducted in accordance with the NCRA's BMPs, as applicable.

Track Work

This activity includes all work that may be associated with the track including the rail, rail ties and ballast. The work will involves rail removal and replacement, removal and replacement of deteriorated ties, grading and replacement of lost ballast and soil substructures and removal of vegetation (brushing) that has encroached within 15 feet of the centerline of the railroad. All of the work will be conducted from the rail with rail-mounted equipment or from within the railroad right-of-way or access. No work is planned in wetlands or in waters of the U.S. or state of California. NCRA's BMP's will be employed to minimize the effects of this work.

Culvert Work

Culverts of various sizes carry storm water either through or off of the railroad right-of-way. A number the culverts are in need of either repair or replacement due to damage and normal wear and tear. The culverts range in size from eighteen to forty-eight inches

in diameter. Work on the culverts will occur in the dry season but may include the need to remove vegetation, soil and other debris that affects their proper functioning. Excavation for removal and replacement of culverts will occur in already disturbed areas within the railroad right-of-way. NCRA's BMP's will be employed to control sediment and to minimize the effects of this activity.

Bridge Work

The bridges within the Russian River Division are composed of wood and and/or steel. Most of the bridges are in need of some maintenance and repair. The work is (in general) minor in nature and will involve the replacement of one or more bridge components such as decking, deck ties and timber guards, struts, bents, bracing, handrails and piles. Piles that have deteriorated will be cut aboveground or above the waterline and spliced with a replacement pile. All work will be done from the rail with rail-mounted equipment. There will be no need to work in water, construct coffer dams, or otherwise impact water or waterways. All work over water will be planned for low flow periods. In addition to the structural maintenance and repair work, electrical and mechanical repairs and maintenance of the bridges operating systems will be necessary. NCRA's BMP's will be employed at the appropriate instances to minimize the effects of the bridge activity.

Cumulative Analysis

The following provides a summary of the potential cumulative impacts between the proposed project and the rehabilitation project.

Aesthetics

Potential aesthetic impacts were evaluated as part of the Categorical Exemption, and the project was found to have no impacts to aesthetic resources. All signal, track, culvert, or bridge materials will be replaced in kind. The rehabilitation project will be completed before operations resume. Therefore, the cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Agriculture

Potential aesthetic impacts were evaluated as part of the Categorical Exemption, and the project was found to have no impacts to agricultural resources. All signal, track, culvert, or bridge materials will be replaced in kind. The rehabilitation project will be completed before operations resume. Therefore, the cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Air Quality

Potential impacts to air quality were evaluated as part of the Categorical Exemption, and the project was found to have no impacts to air resources. The rehabilitation project will be completed before operations resume. Therefore, the cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Biological Resources

Potential impacts were evaluated as part of the Categorical Exemption, and the project was found to have no impacts to biological resources. All signal, track, culvert, or bridge materials will be replaced in kind. The rehabilitation project will be completed before operations resume. Therefore, the cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Cultural Resources

Potential impacts to cultural resources were evaluated as part of the Categorical Exemption, and the project was found to have no impacts. All signal, track, culvert, or bridge materials will be replaced in kind, and no historical resources will be affected. The rehabilitation project will be completed before operations resume. Therefore, the cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Geology, Soils and Seismicity

Potential aesthetic impacts were evaluated as part of the Categorical Exemption, and the project was found to have no impacts related to geology, soils, and seismicity. The rehabilitation project will be completed before operations resume. Therefore, the cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Growth Inducing Impacts

Potential growth inducing impacts were evaluated as part of the Categorical Exemption, and the project was found to have a negligible effect on growth. Therefore, the cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Hazardous Materials

No significant mounts of hazardous materials will be used during the rehabilitation project, and no hazardous waste will be generated. The rehabilitation project will be completed before operations resume. Therefore, the cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Land Use and Planning

Potential land use impacts were evaluated as part of the Categorical Exemption, and the project was found to have no impacts to aesthetic resources. Land use remains the same. All signal, track, culvert, or bridge materials will be replaced in kind. The rehabilitation project will be completed before operations resume. Therefore, the cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Mineral Resources

The project site is not designated as an important mineral resource site on any land use plans. Therefore, the cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Noise

Noise generated by the work trains would be temporary and would occur during normal working hours. The rehabilitation project will be completed before operations resume. Therefore, the cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Public Facilities and Safety

The rehabilitation project would not significantly impact schools, parks, or the provision of fire and police protection, nor affect any public services to the extent that additional personnel or facilities would be needed. Upgrading of the signals, culverts, and bridges would increase safety at intersections and along the rail line. Therefore, the two projects may have a net beneficial cumulative safety impact.

Recreation

Neither the rehabilitation project nor the proposed freight railroad project would generate an increase in population that would result in a significant increase in the use of any parks or other recreational facilities. Therefore, the cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Transportation

Rehabilitation of the line will be conducted using rail mounted equipment. The rehabilitation project will be completed before operations resume. Therefore, the cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.

Utilities and Service Systems

Repair or replacemeny of signals, rail, and bridge materials would not result in an increase in water or utility requirements. Therefore the potential cumulative impact on utilities and service systems would be less than significant.

Water Resources

Potential impacts to water resources were evaluated as part of the Categorical Exemption, and the project was found to have no impacts. All signal, track, culvert, or bridge materials will be replaced in kind. The rehabilitation project will be completed before operations resume. Therefore, the cumulative impact of the two projects with the project specific mitigation measures implemented will not result in a significant cumulative impact.