

# Chapter 10

## ENVIRONMENTAL ISSUES

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### INTRODUCTION

The Sonoma/Marin rail corridor is a 71-mile long corridor extending from Cloverdale in the north to Larkspur in the south. This chapter summarizes the Preliminary Environmental Evaluation completed for the proposed commuter rail service in the corridor. The analysis was undertaken as the first step in the environmental review process and has led us to the following preliminary conclusions regarding the level of environmental review that would be required prior to approval of the project. Environmental issues with potentially significant impacts have been identified. These environmental issues would be evaluated in greater detail in the next phase of project implementation.

Twenty-two potential station sites and eight potential siding locations were evaluated. These station sites were derived from the 1997 *Sonoma/Marin Multi-Modal Transportation & Land Use Study* prepared by Calthorpe Associates and current Wilbur Smith Associates planning work. In early September 1999, the start-up service station sites were narrowed to the following eleven locations: Cloverdale, Geyserville, Healdsburg, Windsor, Santa Rosa, Rohnert Park, Cotati, Petaluma, Novato, Marin Civic Center, and San Rafael. The text that follows documents the environmental issues associated with all of the potential station sites as originally identified.

An environmental checklist was used as a preliminary evaluation tool to identify the environmental issues along the corridor that will need to be taken into account in the further evaluation and refinement of project alternatives. A summary of the checklist appears at the end of this chapter.

### POTENTIALLY SIGNIFICANT IMPACTS

The following is a list of the potentially significant environmental impacts that would need to be further analyzed when the project has been more specifically defined.

**Land Use and Planning** – The potential station site at Redwood Drive in Rohnert Park is designated for agricultural uses. This is a potentially significant issue only if planning for a station is reactivated at this location. Potential station sites in Novato (at Fireman’s Fund and Ignacio/Bel Marin Keys) are not designated in the General Plan. Station sites designated in the General Plan at Olive Street and north of Highway 37 have not been considered in this evaluation of environmental issues. San Rafael policies call for grade-separated rail crossings at Anderson Drive and Bellam Boulevard, which have not been evaluated. The Larkspur General Plan calls for joint-use of the Marin Airporter site by the rail transit function. Extension of the rail south of Sir Francis Drake Boulevard would be inconsistent with local plans and policies.

**Geologic** – The Mayacamas fault zone crosses the railroad tracks in two locations at Lytton, where extension of an existing siding track is proposed. In the event of a major earthquake, potentially significant impacts could occur disrupting service on the line.

**Flooding** – Segments of the rail corridor are located within the 100-year floodplain. In the event of severe flooding, portions of the rail line and stations could be subject to localized flooding resulting in a disruption of rail service. Reconstruction work on the Petaluma and Gallinas Creek bridges could result in potentially significant impacts by restricting the natural flow of floodwaters. Mitigation would be incorporated as required through the permitting process.

**Transportation** – Potential increase in traffic delays could result in degradation of traffic levels of service at rail crossings at the following intersections: Healdsburg Avenue/Mill Street intersection in Healdsburg and the Washington and D Street intersections in Petaluma. Traffic impacts could also occur at downtown intersections between Mission Street and 2<sup>nd</sup> Street in San Rafael and Anderson Drive and Bellam Boulevard in southern San Rafael, if grade separation does not occur. The potential traffic issues in San Rafael and elsewhere should be studied in detail during a subsequent environmental review stage<sup>1</sup>. Bicyclists and pedestrians could experience significant impacts if safe provisions for upgrades to unprotected pedestrian/bicycle crossings in Santa Rosa, Novato, and San Rafael are not made.

**Biological Resources/Wetlands** – The Sonoma Airport and Jennings Avenue station sites and the North and South Santa Rosa siding locations support native oak and redwood trees that could require special tree removal permits. Construction at the Geyserville stop, Jennings Avenue and Bellevue Avenue station sites in Santa Rosa, the Rainier Avenue and Lakeview Highway station sites in Petaluma, the Park siding location in Petaluma, the Fireman’s Fund station site in Novato, and the Gallinas Creek siding location in San Rafael could disturb wet meadows and may require wetland permits and agreements to mitigate impacts. The potential station sites at Civic Center Drive in San Rafael and the Larkspur Ferry Terminal in Larkspur support extensive freshwater marsh or wet meadow habitat<sup>2</sup>. Potentially significant impacts would occur if these sites were developed. The project sponsor would be required to demonstrate why these sites are the least environmentally damaging sites to comply with permit requirements. Reconstruction work on the Petaluma and Gallinas Creek bridges could result in potentially significant impacts to creek habitat unless mitigation is incorporated as required through the permitting process.

**Noise** – Sensitive noise receptors, including residential development, schools, hotels, and parks adjacent to the track in Geyserville, south of Healdsburg, Windsor, Santa Rosa, Rohnert Park, Petaluma, Novato, Ignacio, Hamilton Air Force Base, and San Rafael, would experience significant increases in noise from train pass-bys if mitigation measures were not incorporated. Mitigation would include sound walls, which were costed in Chapter 6.

**Aesthetics** – Elevated structures, for grade-separated rail crossings, considered for downtown San Rafael or Larkspur would block vistas and streetscapes. Trains stopping within 3<sup>rd</sup> and 4<sup>th</sup>

<sup>1</sup> For example, the need for an elevated structure in San Rafael will be evaluated given the number and length of trains.

<sup>2</sup> An alternate site for a Civic Center Drive location could be under the adjacent US 101 overpass. As noted previously, extension of service to Larkspur is not planned for start-up.

Streets might mitigate the need for such a structure in San Rafael. This is because, firstly, trains would not block 3<sup>rd</sup> Street at all, and, secondly, they would block 4<sup>th</sup> Street only for the time it takes to cross it. With the Commission's decision not to include service to Larkspur at start-up, no elevated structures there would be needed for the foreseeable future.

**Cultural Resources** – The existing railroad depots at Healdsburg, Downtown Santa Rosa, Petaluma, Grant Avenue, and Downtown San Rafael are designated as landmarks or are potential historic landmarks, which may be eligible for the National Register of Historic Places. Additional historic resources have been identified in the vicinity of these stations and the potential station sites at Hamilton and Larkspur. Potentially significant historical resource impacts could occur if mitigation were not incorporated into the project design.

### LESS THAN SIGNIFICANT IMPACTS OR NO IMPACTS

The following effects were determined to be either less than significant or to be mitigated to a less than significant impact due to measures incorporated into the project.

**Population and Housing** – The proposed project would capture part of an existing travel market and is not expected to generate significant new travel demand on its own. Future growth in the communities served by the railroad line would be refocused around the rail stations, consistent with local plans.

**Air Quality** – The introduction of rail service would reduce auto emissions in the corridor as alternatives to auto travel are made available. The rail technology selected would be required to meet the federal emissions standards for locomotives or non-road engines as applicable. Construction emissions would be minimized through standard pollution reduction measures imposed by the air quality management districts during the construction of projects.

**Energy and Mineral Resources** – The introduction of rail service would not conflict with adopted energy conservation plans or result in the loss of availability of a known mineral resource.

**Hazards** – Clean-up of identified hazards in the rail segment between Cloverdale and Novato has been completed or is underway. The potential for hazards exists in southern San Rafael and Larkspur, but an evaluation has not been completed. Unless major excavation occurs in this segment, significant impacts would not be expected to occur.

**Public Services** – Increased police surveillance at station sites and increased maintenance costs associated with the upgraded railroad right-of-way and the facility improvements are not expected to result in significant impacts on public services. Fire station access would need to be considered at grade-crossings near fire stations.

**Utilities and Service Systems** – The implementation of commuter rail service would not be expected to result in the need for new utility or service systems.

**Recreation** – There are nine parks located along the rail corridor. The introduction of rail service would not significantly detract from the use and enjoyment of these parks.

## ENVIRONMENTAL ISSUE SUMMARY

A listing of potentially significant impacts in the preferred alternative route appears below. The impacts are identified per route segment.

Table 10-1  
Summary of Environmental Issues

<b>Environmental Issues</b>	<b>Cloverdale to Healdsburg</b>	<b>Healdsburg to Petaluma</b>	<b>Petaluma to San Rafael</b>	<b>San Rafael to Larkspur</b>
<i>Land Use</i>		✓	✓	✓
<i>Geology/Seismicity</i>	✓	✓	✓	✓
<i>Flooding</i>	✓	✓	✓	✓
<i>Transportation</i>		✓	✓✓	✓
<i>Biological Resources/Wetlands</i>	✓	✓	✓✓	✓✓
<i>Noise</i>	✓	✓	✓	
<i>Aesthetics</i>			✓✓	✓✓
<i>Cultural Resources</i>		✓	✓	✓

✓ Potentially Significant Impacts unless mitigation is incorporated.

✓✓ Potentially Significant Impacts.