Assessment of the North Coast Railroad Authority and Viability of a Great Redwood Trail

Report to the Legislature

2020

California Natural Resources Agency

State of California
Department of Finance

CalSTA
CALIFORNIA STATE TRANSPORTATION AGENCY

DGS
GENERAL SERVICES
FACILITIES MANAGEMENT DIVISION

California
Department of
Parks and Recreation

Caltrans

DGS

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EXECUTIVE SUMMARY

North Coast Railroad Authority (NCRA) was created in 1989 to maintain and operate freight rail service between the Bay Area and Humboldt Bay. Declining industry revenue, deferred maintenance, and catastrophic storm damage shut down rail operations north of Windsor, Sonoma County, in 1998. Operations south of Windsor resumed in 2011, and NCRA continued to strive to resume rail service in the north, only to fall deeper into debt each year. (Please see the map in Figure 1 for project locations.)

Senator Mike McGuire introduced the North Coast Railroad Authority Closure and Transition to Trails Act (SB 1029, Chapter 934 Statutes of 2018), which was signed into law by former Governor Edmund G. Brown Jr. in September 2018. The Act directs the California State Transportation Agency (CalSTA), in consultation with the Natural Resources Agency, to "conduct an assessment of the North Coast Railroad Authority to provide information necessary to determine the most appropriate way to dissolve North Coast Railroad Authority and dispense with its assets and liabilities," as well as "a preliminary assessment of the viability of constructing a trail on the entirety of, or a portion of, the property, rights-of-way, or easements owned by North Coast Railroad Authority, and recommendations relating to the possible construction of a trail." Finally, the statute requires "an assessment of the options for transferring the southern portion of the rail corridor to the Sonoma-Marin Area Rail Transit District and recommendations on the specific assets and liabilities that could be transferred, including rights or abilities to operate freight rail." See page 12 and Appendix A for additional detail.

CalSTA convened a multi-agency SB 1029 Task Force (Task Force) comprised of representatives from the California Department of Transportation (Caltrans), the Natural Resources Agency, the Department of Parks and Recreation (State Parks), the Department of Finance, and the Department of General Services (DGS). The Task Force agencies conducted independent studies in their respective areas of expertise and prepared individual assessment reports focused on their findings, included as Appendices C, D, and E. These appendices are available on the CalSTA website at: https://calsta.ca.gov/subject-areas/reports.

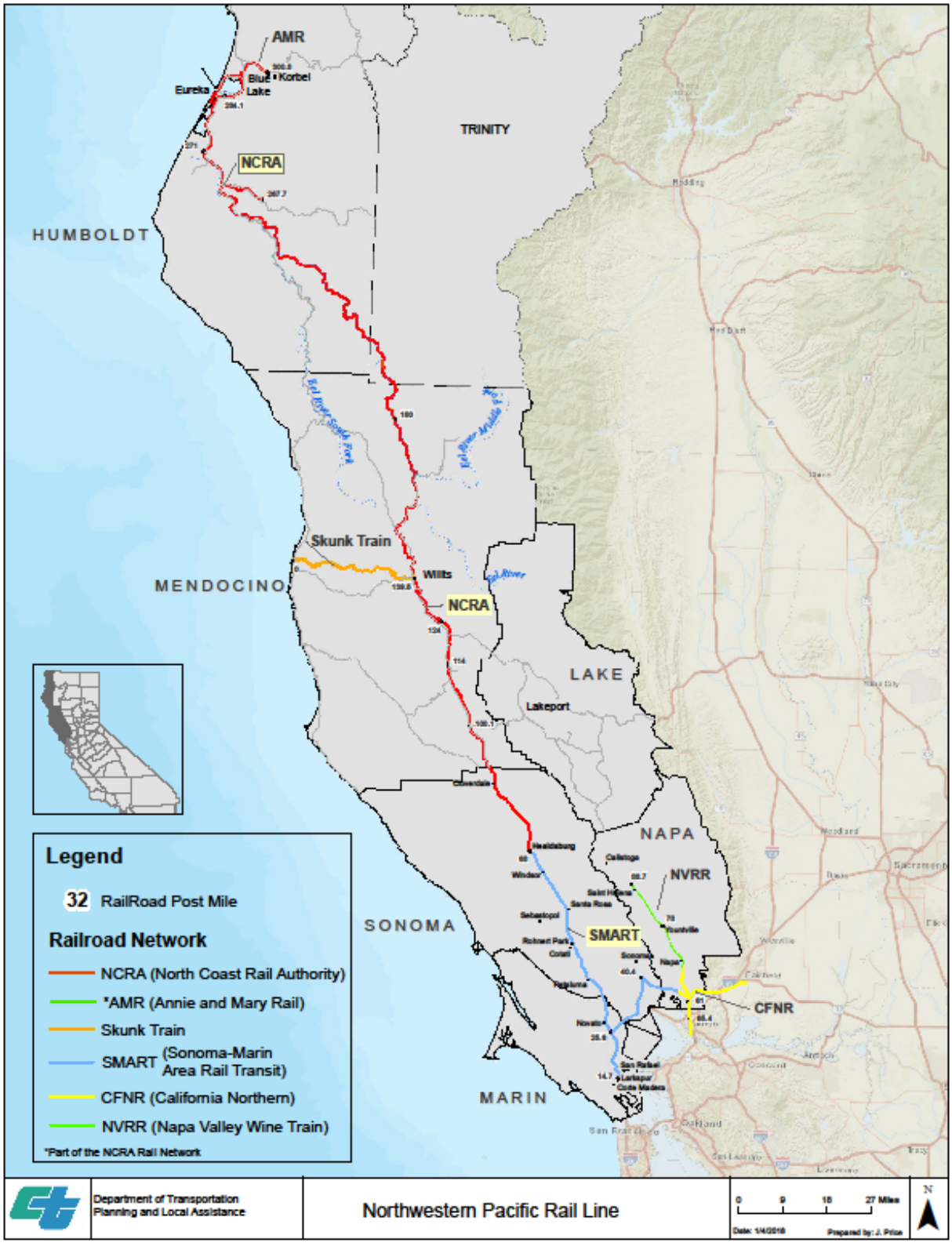


Figure 1. Current Ownership Map of the Historic Northwestern Pacific Rail Line

Report Organization

This report is presented in sections defined by the areas of concern described in SB 1029 and are an assimilation of findings from all Task Force assessment reports, which examined NCRA and the proposed Great Redwood Trail from unique perspectives.

Areas of concern discussed in this report include:

- Financial Assessment
- Property Assessment
- Railbanking Assessment
- Successor Agency Governance Options
- Rail-Trail Constructability
- Freight Rights in the Southern Section

Key Findings

The following items were identified during the assessment and have been highlighted here as significant considerations for the proposed dissolution of NCRA and development of a Great Redwood Trail.

Financial Assessment

The financial assessment was conducted by the Department of Finance, Office of State Audits and Evaluations (OSAE). Additional detail can be found starting on page 20 and in the full OSAE report (Appendix C).

Value of Assets - NCRA has a calculated value of net assets of (-) $7.2 million as of December 31, 2019.

Outstanding Debt - As of December 31, 2019, total known liabilities were $7.4 million. In addition, contingent liabilities are estimated to total at least $11 million, but many are unknown and could total additional millions of dollars. (See Appendix C for more detail.)

Contingent Liabilities – This assessment identified contingent liabilities with unknown but potentially significant costs that must be factored into any dissolution plan for NCRA. These include but are not limited to: staff pensions; unidentified environmental contamination; removal of abandoned rail equipment in the Eel River; levee repairs; stabilization or removal of structures; and possible future litigation.

Property Assessment

The property assessment was conducted by OSAE, DGS, and State Parks. Their findings are discussed in detail beginning on page 29 and in the agency's individual reports (see Appendices C, D, and E).

Pro Rata Share of Proceeds - NCRA's property, rights-of-way, and easements were purchased with state and federal funds totaling $141 million. In accordance with governing law, Funds Transfer Agreements between the State of California (State) and NCRA require that all rights-of-way and other property acquired with public funding must remain dedicated to public transportation uses *in perpetuity*. If property or equipment are declared excess, disposed of, or taken out of public transportation use, the State and Federal Highway Administration have options, including: taking title to the property; directing its *pro rata* share to other eligible public transportation projects (pending CTC approval for state funds); or requiring proceeds from the fair market sale be returned or credited to the State, in the proportionate funding participation by State and other non-recipient generated public funds. For the right-of-way from Willits, Mendocino County, to Humboldt Bay the proportionate share is 100-percent state funds, and Willits to Healdsburg, in Sonoma County, is 10-percent state, 90-percent federal. On a recent right-of-way sale in Ukiah, Mendocino County, NCRA retained the 90-percent federal share of proceeds. Additional study would be needed to determine if proceeds from liquidation would be enough to satisfy the outstanding debt while also allowing state and federal programs to recoup their investments.

Licenses and Permits - As an "active" railroad, NCRA is governed and regulated by the federal Surface Transportation Board (STB), the Federal Railroad Administration, the California Public Utilities Commission, and various resource-permitting agencies. For the rail line north of the Sonoma-Mendocino county line to be dismantled, all three government agencies must be consulted and involved in the process.

Title Searches, Reversionary Clauses, and Liens - Liquidation of the corridor will require a detailed examination of individual title reports. This assessment has identified more than 2,800 parcels that will need to be reviewed on a case – by – case basis for reversionary clauses and possible liens prior to disposition for a non-rail use.

Lease Agreements and Encroachments - Existing lease agreements must be assessed individually based on the underlying property status. These vary in conditions and length of the term.

Railbanking Assessment

The railbanking assessment was conducted by State Parks and is described in detail starting on page 24 and in Part II of Appendix D.

Legal Process - Railbanking is a legal process administered by the STB by which unprofitable or unused rail corridors can be converted to trails for recreational or transportation purposes. The process begins when a railroad company files legal notice it plans to abandon the line and a trail manager files a request to railbank it within 30 days. Due to the short timeframe a trail manager should to be identified prior to abandonment. Another railroad company could disrupt the railbanking process if it wishes to use the railroad corridor for trains.

Future Railroad – Railbanking preserves the corridor for future railroad use.

Reversionary Clauses – These clauses are commonly found in railroad easements and return ownership of abandoned railroad property to underlying property owners. These are generally not triggered by railbanking (which is a "rail" use) but must be reviewed on a case-by-case basis due to variations in language.

Successor Agency Governance Options

Six typical trail management governance structures were analyzed for potential trail governance. Of these six structures, four were considered options for the Great Redwood Trail and were analyzed in more detail. This assessment concluded that a central governance structure, as a successor agency, is best suited to most efficiently meet the railbanking requirements and to manage and maintain a trail that crosses multiple jurisdictions. This successor agency should own the entire corridor, have a clear reporting structure, and have access to a consistent, reliable funding stream. This organization/agency could either develop, manage, and maintain the entire length of the corridor, or partner with various public and private entities for these services at specific locations along the trail. A full discussion of the options and case studies begins on page 41 and is included in Part II of Appendix D.

Rail-Trail Constructability

The Rail-Trail Constructability and Feasibility assessment was conducted by State Parks and looked at physical conditions, cultural resources, historic structures, accessibility, constraints in the Eel River Canyon, active transportation route opportunities, and ease of construction. A full discussion of the issues can be found starting on page 54 and in Part I of Appendix D. Key highlights of these findings include the following:

Planning-level Cost Estimates - Trail development of the entire 252-mile corridor is estimated to cost nearly $750 million, or about $3.1 million per mile, in 2020 dollars, and in excess of $1 billion, or about $4.6 million per mile, in 2030 dollars. These costs are in addition to the known and contingent liabilities described above and would be incurred over many years based on project phasing and priorities. These cost estimates do not include unknown, but potentially significant, environmental remediation costs that may be required prior to project construction. The significant costs and long-term maintenance challenges are related mostly to major stabilization of slopes; rebuilding or replacement of deteriorated rail infrastructure; and potentially rerouting around major obstructions.

Physical Constraints - Throughout the entire rail corridor, but more concentrated in the Eel River Canyon, physical constraints that influence trail feasibility include: geomorphic challenges (landslides, high-risk slopes); large right-of-way encroachments (particularly if they are legally authorized); failing infrastructure (bridges, trestles, culverts, and tunnels); abandoned equipment; and previous contamination or hazardous materials sites that may require remediation. In addition, the presence of wetlands and special-status species; historic structures: areas of archaeological sensitivity; and tribal lands may present significant constraints to trail development.

Major Opportunities - Most of the corridor is conducive to trail construction and problem areas are in discreet, identifiable locations. In the Eel River Canyon, for example, it is estimated that 75 percent to 85 percent of the corridor is in good physical condition for trail construction. Trail design options could reduce construction and environmental mitigation costs; thereby improving feasibility. If fully developed, the Great Redwood Trail would provide a tourist attraction and active transportation commuter route. It is estimated to generate $24 million in annual local economic activity, reduce 1,580.43 metric tons of carbon dioxide, and increase walking and biking by 1,384,915 new trips annually.

Potential Environmental Remediation, Mitigation, and Liability

Environmental remediation, mitigation, and liability costs are estimated at $4 billion based on a precursory analysis of existing conditions visible in the corridor; prior environmental studies, databases, and consent decrees; cost comparisons; and knowledge of current regulation. It includes an assessment of project-level environmental studies and wetland mitigation, which will vary depending on the project design. It also estimates remediation of known hazardous waste contaminants as part of a larger trail project. A detailed discussion can be found starting on page 64 and in Appendix F.

NCRA has an outstanding consent decree requiring environmental remediation at station sites throughout the corridor. Cost for the remediation effort was estimated in 2002 at $4.3 million to $6.9 million. There are additional liabilities due to abandoned rail equipment, including rail cars, that are left along the line and in the Eel River. NCRA has received legal notice from at least one local jurisdiction that it must remove abandoned rail equipment, in the City of Eureka, but this effort was halted due to worker exposure to hazardous material. The equipment remains onsite. Finally, there are unconfirmed potential costs and obligations regarding the storage of liquefied petroleum gas in Schellville, Sonoma County, which is in the southern section proposed for transfer to Sonoma-Marin Area Rail Transit District (SMART).

If the Great Redwood Trail project moves forward and the railroad corridor is converted to a trail, wetland mitigation and hazardous waste remediation will be required. The level of effort and therefore, cost, varies greatly depending on the chosen project design and site-specific characteristics not yet identified through environmental studies. Based on the project phasing developed in State Parks' report (Appendix D), Caltrans' North Region Division of Environmental developed a cost estimate for environmental liability focused on these two aspects of the project, including some environmental studies. The planning-level estimate for wetland mitigation is $103 million. Hazardous waste was identified at 39 locations based on previously documented reports. The remediation estimate assumed that all ballast (gravel in railbed) would be required to be removed and cleaned off-site and that only 50 percent of the track would be easily accessible from the road, with a cost estimate of $3.9 billion to $4 billion for full remediation of the entire corridor. If the trail project does not move forward, or if the ballast does not require removal, this liability cost estimate will be reduced. (See Appendix F)

Freight Rights in the Southern Section

The highest and best use of the NCRA right-of-way and freight operations easement on the southern portion of the rail corridor (beginning with mile post 89 at the Sonoma-Mendocino county line) is a transfer to SMART for passenger and freight rail operations. It is also well suited to development of rail-with-trail segments as part of the Great Redwood Trail. Section 17 of SB 1029 appropriated the sum of $4 million to SMART for the acquisition of freight rights and equipment from North Western Pacific Railroad Company (NWPCo), NCRA's contracted freight operator, to ensure efficient provision of goods movement requirements in the corridor in the context of growing passenger service. In addition, the Budget Act of 2019 appropriated $2 million dollars to SMART for safety upgrades and maintenance upon acquisition of a freight contract. The Task Force acknowledges that SMART will need funding to adequately maintain

the additional right-of-way and freight operations. SMART, NWPCo, and NCRA have concurred with this arrangement and the agreements to execute the transfer are in progress. A detailed discussion of freight rights starts on page 71.

Scenario Analyses

Final Task Force recommendations distill findings from the individual Task Force assessments into five alternative scenarios. Scenarios 1, 2, and 5 consider the financial and policy implications of dissolving NCRA, while scenarios 3 and 4 leave NCRA intact. Scenarios 2 and 3 also explore the financial and policy implications of converting the former railroad to the Great Redwood Trail, a multi-use "active transportation" corridor, as proposed by SB 1029. Scenario 1 liquidates the right-of-way, scenario 4 maintains NCRA's *status quo*, and scenario 5 contemplates purchase of the right-of-way by another railroad company.

The five scenarios considered include:

Scenario 1: NCRA is dissolved, and its right-of-way is liquidated

Scenario 2: NCRA is dissolved, and its right-of-way is converted to a trail

Scenario 3: NCRA is not dissolved, and its mission is amended

Scenario 4: NCRA maintains *status quo*.

Scenario 5: A new railroad company buys out NCRA

Dissolution of NCRA

Dissolution of NCRA requires legislation because a dissolution plan was not included in its enabling legislation and a process has not been previously established. Scenarios 1, 2, and 5 include dissolution as part of the analysis. Dissolution considerations are discussed beginning on page 78 and include the following:

- NCRA's outstanding debt;
- Ongoing lease agreements, encroachments, licenses, and permits;
- Environmental remediation and potential ongoing liability; and
- NCRA's role in railbanking.

Scenario 1 includes liquidation of the right-of-way and must also consider the following:

- Liquidation of the corridor prevents future railroad use (pages 78 and 83);
- The cost of title reports must be planned for;

- Reversionary clauses will be triggered (see page 35);
- Existing lease agreements and contracts may interfere with liquidation plans; and
- If the State requires sale proceeds returned (see page 32) and additional costs to the seller are incurred by real estate due diligence environmental analyses (see page 81), liquidation may result in a negative net value.

Scenario 2 includes conversion of the right-of-way to a trail and must also consider the following, as discussed in detail starting on page 84:

- A trail manager must be identified, and effective trail governance established, before rail abandonment commences;
- Railbanking costs and timeframes per STB regulations must be planned for;
- A reliable funding source for trail development must be identified;
- Environmental mitigation costs will vary based on trail design and will need to be reassessed; and
- Effective stakeholder input must be incorporated into the process.

Scenario 5 includes the purchase of NCRA by a new railroad company and must include the identification of a railroad company with the resources to rehabilitate the railroad line. This is discussed in detail starting on page 89.

NCRA is not Dissolved

Scenarios 3 and 4 maintain NCRA's governance of the rail corridor.

Scenario 3 changes NCRA's mandate from owning and operating a railroad to owning, constructing, and maintaining a trail in the rail corridor. Repurposing NCRA by amending its mandate to focus on trails is discussed in more detail starting on page 86 and would need to consider the following issues:

- NCRA would be 1) the railroad owner and would need to file a notice of abandonment for the railroad with the STB, and 2) the trail management successor agency, which would need to apply to railbank the corridor with STB before proceeding with the trail development process.
- It would still need to address the issues discussed above, including outstanding debt; lease agreements and encroachments; licenses and permits; and environmental liability.
- A reliable source of revenue would be required to cover agency operations under the revised mandate, including additional staff expertise for a trail management agency would need to be identified.
- NCRA is a quasi-governmental entity which lacks formal public oversight, and has resulted in a lack of transparency, public mistrust and significant debt. Structural change to avoid repeating past problems is

recommended. Specifically, NCRA should be identified as a local agency, state agency, transportation district, or private organization and new reporting requirements with clear oversight responsibilities should be created.
- Staff with trail management experience would need to be hired.

Scenario 4 maintains the status quo and makes no changes to NCRA or the railroad corridor. Based on results of this assessment, key considerations are discussed in more detail starting on page 88 and include:

- It is anticipated that current conditions are not conducive to NCRA meeting its existing mandate to rehabilitate the railroad north of Windsor and its regular annual revenue cannot support agency operations combined with its current debt load.
- Liquidation of NCRA's assets is not likely to cover current outstanding debts, deferred maintenance, and continuing property management responsibilities, and NCRA may be forced into bankruptcy or immediate dissolution. In such an event, NCRA's right-of-way is likely to fall to the Department of General Services.
- Environmental liabilities may persist.

Next Steps

Statutory changes would be required to dissolve NCRA and set a clear path forward for the corridor. It would be beneficial for management of the corridor if follow-up legislation clarified whether the right-of-way should be liquidated, sold to another railroad company, or converted to the Great Redwood Trail. If the Great Redwood Trail option is preferred, the legislation should also identify or create a successor trail management agency (or amend NCRA's mandate) with a clearly defined governance structure and oversight mechanism, a reliable revenue source to support agency operations, and establish a process for public stakeholder engagement in the next phase of the project. Finally, resources to support NCRA agency operations through the dissolution process, with ongoing CalSTA oversight, should be considered.

SB 1029 requires NCRA to seek approval from the California Transportation Commission (CTC) for any sale, easement, or lease executed after August 1, 2018. Caltrans continues to monitor NCRA's contracts, activities, and provide technical assistance, including liaising with CTC as necessary.

Conclusion

NCRA's right-of-way includes significant and costly challenges. The agency's debts threaten its financial viability, and all options for resolution are expensive. The Legislature stepped in to protect the failing railroad in 1989 when it created NCRA and funded its right-of-way acquisitions. The CTC supported NCRA when it allocated transportation funds for rail rehabilitation. If NCRA is left to disband on its own, it is likely that NCRA's assets and liabilities will ultimately fall to DGS, which handles abandoned property. Railbanking the corridor would allow for interim trail use, preserve the corridor for future railroad use, and create an attractive tourist destination as well as a scenic non-motorized commuter route.

Acronyms

This assessment report uses the following abbreviations, acronyms, and common names.

- CalSTA, California State Transportation Agency
- Caltrans, California Department of Transportation
- CTC, California Transportation Commission
- DGS, Department of General Services
- NCRA, North Coast Rail Authority
- NWPCo, Northwestern Pacific Railroad Company
- NWPRA, Northwestern Pacific Railroad Authority
- OSAE, Department of Finance, Office of State Audits and Evaluations
- RRIF, Railroad Rehabilitation & Infrastructure Financing
- SMART, Sonoma Marin Area Regional Transit
- State, State of California
- State Parks, California Department of Parks and Recreation
- STB, Surface Transportation Board

Figure 2. NCRA Corridor, Southern Section

STATUTORY REFERENCE & PURPOSE

This assessment report is submitted to the California Legislature (Legislature) in compliance with Government Code section 13978.9, which requires the California State Transportation Agency (CalSTA), in consultation with the Natural Resources Agency, to conduct an assessment of North Coast Railroad Authority (NCRA) to provide information necessary to:

1) determine the most appropriate way to dissolve NCRA and dispense with its assets and liabilities including the debts, liabilities, contractual obligations, and litigation; assets, including property, rights-of-way, easements, and equipment; and freight contractor lease, including the contractor's assets and liabilities, to the extent that information is available;

2) assess the feasibility of converting the railroad corridor to a multi-use trail including an assessment of governance structure options for a successor agency that would assume ownership and management responsibilities from North Coast Railroad Authority;

3) assess options for railbanking portions of the railroad corridor, feasibility, and process of railbanking; and

4) assess the options for transferring the southern portion of the rail corridor to the SMART including material assets and liabilities, as well as rights and abilities to operate freight rail.

An excerpt of the applicable Legislation is included in this Assessment Report as Appendix A.

HISTORY OF NCRA AND THE STATE OF CALIFORNIA

The historic Northwestern Pacific Railroad begins at the Ferry Building in San Francisco, mile post 0.0, and runs north to Humboldt County where it splits, circling west around Humboldt Bay and east past the City of Blue Lake to Korbel, a small historic logging settlement in the Redwoods of Humboldt County — a total distance of approximately 316 miles. (See Figure 1, page 2) The Northwestern Pacific line was built in the late 1800s to haul redwood lumber and passengers between Humboldt County and the San Francisco Bay Area. It was in regular operation by a series of private owner-operators until the 1980s when the timber industry began to decline. In 1983, Eureka Southern Railroad, a private enterprise, which owned the northern section (Willits to Humboldt Bay) sought authority to abandon the rail line under 49 U.S.C. Section 10903 from the Interstate Commerce Commission[1]. The Commission denied the request in 1984, and Eureka Southern Railroad filed Chapter 11 Bankruptcy on December 15, 1986. The railroad, and liquidation of its assets, then fell under the jurisdiction of the US Bankruptcy Court and its trustee, Philip M. Arnot[2].

Figure 3. Section of the NCRA Railroad in the Eel River Canyon

To preserve the rail corridor, the California Legislature enacted the North Coast Railroad Authority Act, Government Code sections 93000, et seq. (Statutes of 1989, Chapter 1085). The Act authorized the newly created public entity to provide passenger and freight railroad service in Humboldt, Trinity, Mendocino, Sonoma, and Marin Counties with specific focus on the Eureka Southern Railroad in Humboldt and Mendocino Counties and the option of extending service into Del Norte County. To facilitate this, the Legislature authorized the use of state and

[1] The Interstate Commerce Commission was abolished in 1995 and several of its functions, including the governance of railroads, were transferred to the Surface Transportation Board.
[2] In Re Eureka Southern Railroad Inc., 1987

federal funds to begin purchasing the line, one segment at a time. The details of these purchases and types of funds can be found in Appendix B, *Public Investment in the NCRA Rail Corridor*.

The first purchase, which took place in 1992, included a portion of rail and all assets owned by Eureka Southern Railroad under the purview of the bankruptcy trustee. This section of rail, which extended from Willits north to Korbel and around Humboldt Bay, used state Proposition 116 funds (1990) exclusively for the right-of-way purchase and made NCRA the sole owner of freight and passenger rights. (See the map in Figure 1, Page 2)

Three additional right-of-way purchases were brokered in 1995 and 1996 on the southern portion of Northwestern Pacific line with ownership shared between NCRA and a Joint Powers Authority, North Western Pacific Railroad Authority (NWPRA), which would eventually transfer all its holdings to SMART. The "Willits," the "Healdsburg," and the "Lombard" Segments extended public ownership of the railroad from Willits, Mendocino County, south to Novato, Marin County, and from Ignacio, Marin County, east to Lombard near the Napa River in Napa County and national rail interchange. Figure 4 on page 16 depicts the right-of-way ownership delineation lines, with the red segment under NCRA ownership and the blue segment under SMART's. The two entities have further developed operational easements and maintenance agreements in their shared territories.

After purchasing the Eureka Southern Railroad in 1992, NCRA operated freight service and a short-lived passenger rail service before severe storm damage and deferred maintenance compelled the Federal Railroad Administration to close the entire NCRA railroad from Arcata to Schellville for public safety reasons[3] in 1998. Not only were there landslides and collapsed tunnels, but there were also railcars in the Eel River (where they continue to reside in 2020), and staff were not adequately trained to safely handle operations. The railroad remained closed until 2011 when the Emergency Order was lifted for Windsor south to Ignacio and east to Lombard, for freight service only.

After 23 years with no operable railroad north of Windsor, Senator Mike McGuire introduced Senate Bill 1029 (SB 1029), the *NCRA Closure and Transition to Trails Act*. SB 1029 was signed into law (Chapter 934, Statutes of 2018) by former Governor Edmund G. Brown Jr. on September 29, 2018.

[3] Emergency Order 21, Notice No. 1 on November 25, 1998

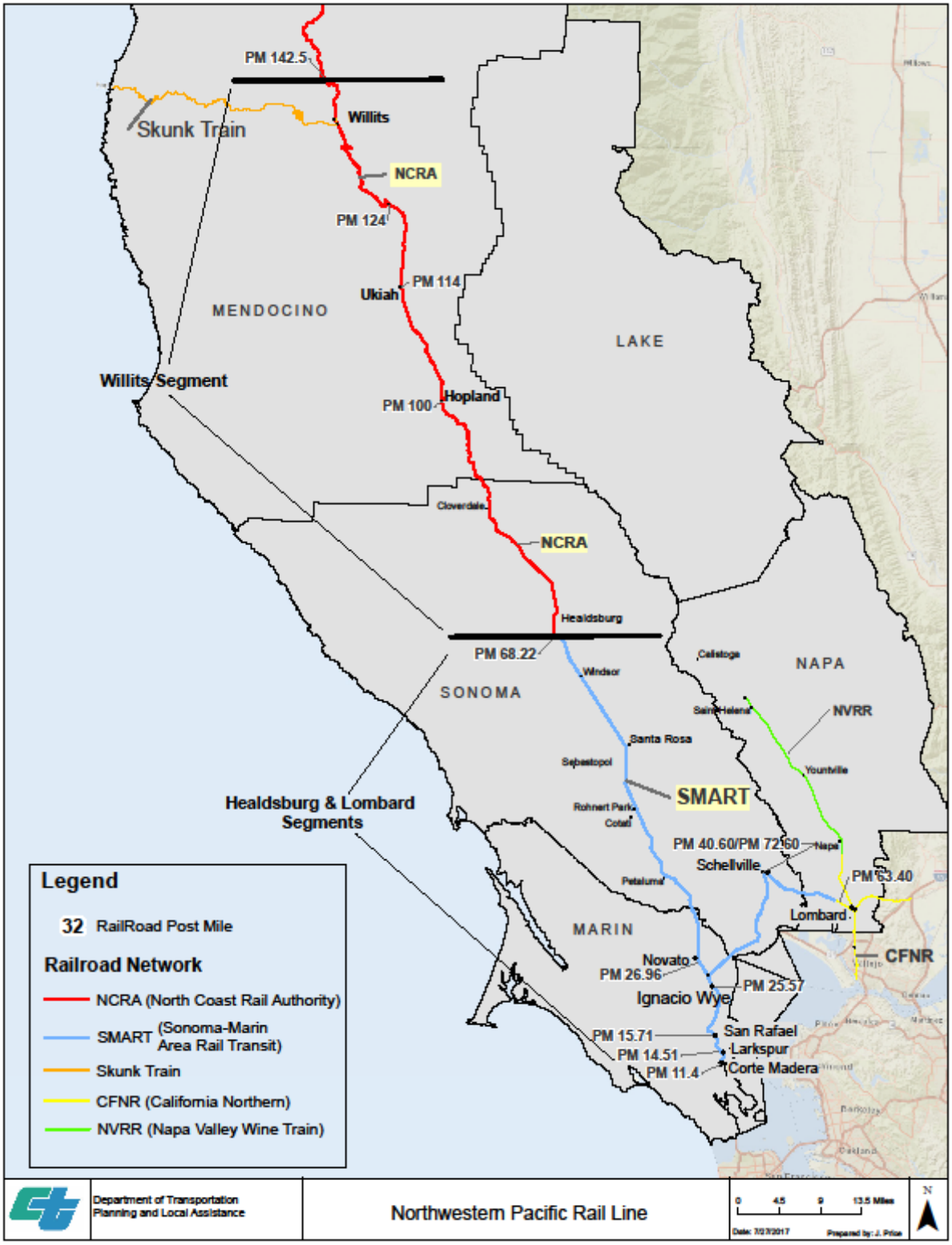


Figure 4. Map of Northwestern Pacific Railroad - Southern Section

State Oversight

When the Legislature created NCRA, it did not designate NCRA as a state or local agency and did not appropriate funding for its operations. Since its inception, NCRA has covered its expenses from rail revenues; state grant funding; public and private loans; loan forgiveness; proceeds from lease agreements; and leasing or sale of assets.

NCRA's quasi-governmental status has complicated its relationship with the state and local jurisdictions. As an independent special district, it has claimed to be a "state agency," a "local agency," and when it has been beneficial, a "railroad," thereby qualifying itself periodically for a variety of different funding mechanisms and environmental exemptions. Aside from the California Public Utilities Commission, which exercises state jurisdiction over rail operations, NCRA has no formal state oversight built into its governance structure. Caltrans does not have prescriptive or enforcement jurisdiction over NCRA, and oversight activities have been limited to fiduciary responsibilities associated with grant funds allocated by the CTC and administered by Caltrans.

As a result, Caltrans has provided monitoring and auditing for state-funded activities of NCRA. After a 1998 post-project audit conducted by Caltrans' Office of External Audits and Investigations[4], NCRA received the designation of "High-Risk Grantee" and the CTC began requiring 'special conditions' to be included with each subsequent release of funds. These conditions required enhanced oversight by Caltrans and more rigorous reporting by NCRA. Subsequent audits have not removed the "High-Risk Grantee" designation.

Public Investment in the NCRA Corridor

Between 1990 and 2011, a total of $124 million of state and federal funds were invested in the NCRA corridor to restore freight rail service. These funds were used to purchase the entire right-of-way from Lombard to Humboldt Bay; to rehabilitate 62 miles of track (including 56 crossing signals, 50,000 crossties, and 50,000 tons of ballast); emergency levee repairs in Schellville and Humboldt Bay; repair 43 rail bridges and three movable bridges; install quiet zones in Novato; to briefly cover NCRA agency funds and outstanding debt; to settle litigation; and to address environmental contamination left behind by the historic private rail

[4] With the passage of Senate Bill 1, The Road Repair and Accountability Act of 2017, Caltrans's Office of External Audits and Investigations was reorganized. The new Independent Office of Audits and Investigations is led by a Governor appointed Inspector General and is vested with the authority to maintain a full-scope, independent, and objective audit and investigation program.

operators. However, the economic, environmental, and social challenges NCRA faced proved insurmountable for the resumption of freight rail service in this corridor, which has led to the current effort and assessment for use of NCRA's right-of-way as a multi-use path.

Current investment in the SB 1029 Assessment and associated dissolution activities includes $17.8 million. A full description of state and federal funds used in this corridor can be found in Appendix B, *Public Investment in the NCRA Rail Corridor*.

Table 1. Summary of Public Investment in NCRA Rail Corridor

Purpose	Amount
Right-of-Way and Equipment Acquisition	$44,800,000
Rail Rehab/Capital Projects	$48,744,364
Project & Environmental Studies	$12,677,000
Debt, Admin, Local Match	$17,310,550
SB 1029 Assessment & Dissolution	$17,800,000
TOTAL PUBLIC INVESTMENT	**$141,331,914**

Northwestern Pacific Railroad Company (NWPCo)

Following an open bidding process, NCRA's Board of Directors approved NWPCo as its new freight operator on September 13, 2006, and executed an Operating Agreement later that month.

NWPCo is a private enterprise created in June 2006 and should not be confused with the prior owner-operator, North Western Pacific Company L.L.C. (NWPY); the historic name of the rail line, Northwestern Pacific Railroad (NWP); nor the Joint Powers Authority and SMART predecessor described previously on page 15, NWPRA.

Following execution of the Operating Agreement, NWPCo and NCRA entered into a series of complicated contracts that helped finance rehabilitation of the southern portion of the line and lift the Emergency Order 21 from Windsor, south; it also left NCRA severely in debt to NWPCo and contractually obligated for up to 99 years with no guaranteed lease payment revenue[5]. These contracts and financial arrangements are detailed on page 23 and Appendix C, *OSAE Calculated Value of Net Assets Report*.

[5] Unless and until NWPCo's revenues exceed $5,000,000 for freight operations on the line, it owes no annual lease payment to NCRA.

FINANCIAL ASSESSMENT

Scope of Work

OSAE's responsibilities and objectives for its component assessment report were to 1) assess NCRA's debts, liabilities, contractual obligations, and litigation; 2) assess NCRA's assets, except for the estimated values for equipment and real properties with property rights; and 3) assess NCRA's freight contractor lease, including the contractor's assets and liabilities, to the extent that information is available. The OSAE assessment did not include the estimated values for equipment, real properties with property rights, and contingent (including potential environmental) financial liabilities. Instead, the Task Force teams collaborated to compile lists of equipment and contingent liabilities based on the information available and verified the existence of the equipment whenever possible. As a result, the calculated value as of December 31, 2019, presented on the following pages excluded values for these items.

In conducting the assessment and determining the calculated value, OSAE focused on NCRA's business transactions from July 1, 2016, to December 31, 2019, and expanded this period when necessary to the extent the information was available. OSAE interviewed individuals from NCRA, including NCRA's board members, Caltrans, SMART, and NWPCo. OSAE reviewed NCRA's and NWPCo's accounting records and other available documents; reviewed working papers of the independent auditors of NCRA and NWPCo; obtained third-party confirmations and representation on financial and legal information and equipment conditions; and visited select NCRA depots to verify equipment. Because not all records were available and NCRA was able to provide only limited information on NCRA activities, OSAE's determination of calculated value is based on certain assumptions, as cited in the report.

OSAE's complete *Calculated Value of Net Assets Report* is included as Appendix C.

Net Calculated Value of NCRA

Based on the calculation procedures performed by OSAE; facts and circumstances as of the calculation date; and assumptions made, the calculated value of NCRA's net assets as of December 31, 2019, was a total debt owed of $7,239,933. This calculated value excludes capital assets (equipment and real properties) and contingent liabilities. The current market value of these assets has

not been calculated or considered here. Table 1 summarizes the calculation results.

Table 2. Calculated Value of Assets and Liabilities as of Dec. 31, 2019

Description	Calculated Value
Cash	$ 104,857
Accounts Receivable, net of Allowance for Bad Debt	$ 41,378
Other Current Assets	$ 22,453
Total Assets	**$ 168,688**
Railroad Rehabilitation & Improvement Financing Loan	$ (2,403,899)
Debts owed to NWPCo	$ (3,321,721)
Professional Services Payables	$ (1,000,657)
Employment Related Liabilities	$ (235,365)
All Other Payables	$ (446,979)
Total Liabilities	**$ (7,408,621)**
Total Calculated Value	**$ (7,239,933)**

Financial Assets

The following financial assets are variable, and the totals included in this report are confirmed only through December 31, 2019. NCRA continues to be an operational organization with daily agency activities, and these confirmed totals will need updating if NCRA is dissolved. NCRA's major assets are briefly described below; please refer to the full *Calculated Value of Net Assets Report* in Appendix C for additional detail.

Cash

Valid and Supported Balance $104,857

NCRA's cash is pooled with the Sonoma County Treasurer, which has been maintaining and managing NCRA's bank accounts and acting as NCRA's disbursing agent since 2001. The assessment validated cash transactions greater than $5,000 between July 1, 2016, and December 31, 2019, by reviewing associated agreements and invoices.

Accounts Receivable

Valid and Supported Balance $41,378

Accounts receivable consist of uncollected property lease income and other service fees. Based on OSAE's review of income transactions for the period between July 1, 2016, and December 31, 2019, and the associated lease

agreements and invoices, NCRA's primary income sources included revenue from leasing rail cars, properties, and cellphone towers' facilities.

Other Current Assets

Valid and Supported Balance $22,453

NCRA's other current assets confirmed total includes prepaid insurance expenses and small deposits made in 2006 and is valid as of December 31, 2019.

Outstanding Debt and Contractual Obligations

NCRA's debt obligations as analyzed in the OSAE report are valid as noted below as of December 31, 2019. Activity on the accounts after December 31, 2019, has been noted as updates in the description but have not been confirmed in the total calculated value presented by OSAE. For additional detail, please see the full Calculated Value of Net Assets Report in Appendix C.

RRIF Loan

Recorded Balance $2,403,899
Valid and Confirmed Balance $2,403,899

The Federal Railroad Administration granted NCRA and NWPCo a loan, as co-borrowers, from the Railroad Rehabilitation & Improvement Financing (RRIF) Program in November 2011.

Under the loan terms, the Federal Railroad Administration agreed to lend NCRA and NWPCo up to $3.18 million for allowable project costs. The loan bears an interest rate of 2.96 percent per annum and is due and payable in full 25 years after the date of the drawdown. NCRA-owned rail cars and equipment (identified previously as assets) were pledged as collateral to secure the loan.

Update after December 31, 2019:

- NWPCo has made two quarterly payments of $45,115 each.
- CalSTA has encumbered funds to settle the remaining RRIF Loan balance; as part of the transfer of freight rights from NWPCo to SMART, south of the Sonoma-Mendocino county line.

Debts Owed to NWPCo

Recorded Balance $3,992,534
Calculated Value Total $3,321,721

Incorporated in June 2006, NWPCo is a freight carrier operating 62 miles of rail between Lombard and Windsor. NWPCo and NCRA entered into an Operating Agreement in September 2006 for the resurrection of operations along the Northwestern Pacific Railroad Line between Willits and Healdsburg, including NCRA's freight easements between Healdsburg and Lombard.

The Operating Agreement had an initial term of five years, with options to extend. In September 2011, NWPCo sent a Notice of Action to extend the agreement term by 20 years. Under the agreement, NWPCo is required to remit annual lease payments in the amount of 20 percent of net income commencing in the first year after NWPCo has generated positive net income exceeding $5 million. In June 2011, the Operating Agreement was amended to require NWPCo to remit $25,000 monthly lease payments. The lease payment requirement was waived, and the obligation was terminated upon the execution of the Memorandum of Understanding – FRA Loan.

Since September 2006, NCRA and NWPCo have maintained a close financial and operational relationship. While NCRA struggled to become financially sustainable, it incurred significant debt through continued borrowing from NWPCo. Specifically, NCRA entered into eight agreements, seven amendments, and one informal financing arrangement with NWPCo to fund NCRA's operations. It also incurred a trade payable obligation. As of December 31, 2019, OSAE's calculated value of NCRA's debts owed to NWPCo totaled $3,321,721. A detailed discussion can be found in the full OSAE report (Appendix C).

Calculated Value for Legal Obligations – Judgments/Settlement Claims

Recorded Balance $2,155,198
Calculated Value Total $0
Updated Balance $658,183+

OSAE categorized legal obligations such as legal judgements and settlement claims as Legal Liabilities in its *Calculated Value of Net Assets Report* in Appendix C. For purposes of this discussion, Legal Liabilities are referred to as legal obligations – judgements/settlement claims.

OSAE identified three long-term legal obligations – judgments/settlement claims liabilities, two of which could not be verified. The third liability was settled in April 2019 with Friends of the Eel River and Californians for Alternates to Toxics

regarding their lawsuit over NCRA's Russian River Division Environmental Impact Report (EIR). CalSTA used funds appropriated in the 2019 Budget Act to settle the Russian River Division EIR lawsuit debt of $1,915,803.29 in January 2020. Although this payment was made after December 31, 2019, it was included in the calculation to determine the calculated value.

Update after December 31, 2019:

On April 29, 2020[6], NCRA settled one lawsuit OSAE identified as a contingent liability (see Table 3). According to the stipulated judgement against NCRA, an outstanding balance of $658,183 is owed to MCM Construction and interest will accrue at a rate of 7 percent per annum from May 5, 2020, until paid in full. In September 2019 MCM Construction filed a complaint for breach of contract and violation of prompt payment statutes, alleging NCRA owed a total of $500,000 for work performed on the Ukiah Depot courthouse project. In addition to the 7-percent post-judgment interest and opposing party's attorney's fees, NCRA is required, pursuant to Public Contract Code, to pay 2 percent interest on retention and 10 percent interest on progress payments.

Professional Services Payables

Recorded Balance $1,002,852
Confirmed Total $1,000,657

NCRA maintains two regular staff members (Executive Director and an Executive Assistant). All other staff are on-call contractors. As of December 31, 2019, NCRA owed two of its contractors a total of $1,000,657 for services rendered.

American Rail Engineering, Inc.

NCRA entered into a professional services contract with the American Rail Consultants in January 2007 for engineering and other supporting services.

The assessment noted NCRA's unpaid invoices balance of $410,365 materially agrees with American Rail Engineering, Inc.'s, confirmation and is valid and supported. However, an adjustment of $5,699 is needed to increase interest owed to $189,903 based on American Rail Engineering, Inc.'s, confirmation and OSAE's recalculation.

Outstanding balance owed to American Rail Engineering, Inc., as of December 31, 2019, is $600,268.

[6] MCM and NCRA reached settlement on April 29, 2020. The Mendocino County Superior Court entered the settlement into judgment on May 5, 2020.

Update after December 31, 2019:

American Rail Engineering, Inc., has an active contract for Professional Services that it continues to provide to NCRA. Outstanding invoices for work performed during FY 2019-20 have been brought current using NCRA lease revenue and CalSTA funds from the Budget Act of 2019[7], which appropriated $8.8 million for "expenses related to dissolving NCRA, including operations, maintenance, and the retirement of outstanding debt." Outstanding invoices for services provided by American Rail Engineering, Inc., prior to FY 2019-20 do not qualify for payment from this funding source and will continue to accrue interest until satisfied.

Christopher Neary

Christopher Neary served as NCRA's legal counsel until February 2019, when Sonoma County became NCRA's legal counsel. Based on OSAE's review, NCRA's recorded balance owed to Christopher Neary should be reduced by $7,894, due to an incorrectly recorded invoice and a duplicate monthly retainer recorded for September 2017. As of December 31, 2019, the calculated value for amounts owed to Christopher Neary is $400,389.

Mr. Neary is no longer under contract with NCRA, and once this debt is settled, additional liability is not anticipated.

Employment Related Liabilities

Recorded Balance $218,734
Confirmed Total $235,365

Net Pension Liability

NCRA participated in the Miscellaneous Plan and the Public Employees' Pension Reform Act Miscellaneous Plan, both of which are defined benefit retirement plans administered by the California Public Employees' Retirement System (CalPERS). Based on OSAE's analysis, the balance of $212,650 is confirmed as of December 31, 2019, and will vary due to other factors that impact net pension liability. In addition, NCRA may incur unfunded termination liability if it were to terminate its retirement plans with CalPERS.

Salaries and Benefits Payable

NCRA's general ledger included $22,715 in salaries and benefits payable as of December 31, 2019. Based on review of the accounting records and financial statements, OSAE determined the calculated value for salaries and benefits payable is based on NCRA's general ledger balance of $22,715 as of December 31, 2019.

[7] AB 74 (Ting, Chapter 23, Statues of 2019), Item No. 0521-101-0001

All Other Payables

Recorded Balance $1,037,172
Confirmed Balance $446,979

Balfour Beatty Rail Inc.

NCRA recorded a $6,637 balance owed to Balfour Beatty Rail, Inc., for unpaid invoices and $296,036 interest, totaling $302,673 as of December 31, 2019. OSAE made several attempts to obtain confirmation of these balances from Balfour Beatty Rail, Inc., and its successor company, but received no response. As such, OSAE was unable to validate the balance and the calculated value does not include the amounts owed to Balfour Beatty Rail, Inc.

TransDynamics and Golden Age Rail Equipment Corporations

NCRA incurred an obligation of $510,000 to TransDynamics Corporation and Golden Age Rail Equipment Corporation for the purchase of various rail equipment in 1997. The general ledger listed an unpaid balance totaling $288,708, including $124,000 principal and $164,708 in interest. TransDynamics Corporation has been dissolved, and a successor could not be found. Likewise, Golden Age Rail Equipment Corporation could not be located. Therefore, OSAE was unable to validate the debt and the calculated value did not include the $288,708 unpaid balance and interest.

Unearned Rent Revenue

Unearned rent revenue comprises payments received under property and operating lease arrangements in advance of the period earned. Revenue is recognized on such lease arrangements on a *pro rata* basis over the lease term. NCRA recorded $235,690 unearned rent revenue as of December 31, 2019. OSAE validated this balance. Therefore, the $235,690 unearned rent revenue balance was valid and supported, and OSAE based its calculated value on the general ledger balance for unearned rent revenue as of December 31, 2019.

All Other Vendors

NCRA recorded other payables of $210,101 as of December 31, 2019. OSAE increased this amount by $1,188, to $211,289, through verifications with respective vendors. These debts are owed to numerous small vendors because of regular business practices; this amount will vary as NCRA continues to operate through the 2020-2021 and subsequent fiscal years.

Contingent Liabilities

Contingent liabilities summarized in Table 3, below may occur depending on the outcome of an uncertain future event. Estimated potential liability amounts listed as "Unknown" may require further analysis by specialized consultants. This list is

not all inclusive and additional liabilities may be identified if NCRA is dissolved. Please see the full OSAE *Calculated Value of Net Assets Report* in Appendix C for additional detail. Environmental remediation liabilities are described below and discussed further in the *Environmental Liabilities* section starting on page 64.

Table 3. Contingent Liabilities

Description	Estimated Potential Liability Amounts
Potential Environmental Remediation Costs	
Estimated costs for future rail ops, clean-up, and remediation activities to comply with the Environmental Consent Decree settled in July 1999.	$4,347,000 - $6,926,000[8]
Abandoned rail cars and equipment in the Eel River and other sites.	Unknown
Potential legal issues and removal costs of rail equipment in Eureka	Unknown
Potential safety improvements needed for the hazardous material storage of LPG cars stored in the Schellville Depot.	$5,200,000 - $7,200,000
Other existing and probable hazard materials and contaminants.	Unknown
Potential Repair, Maintenance, and Structural Removal Costs	
Costs for a falling trestle, weed abatement, and a collapsed tunnel.	Unknown
Potential removal costs related to illegal structures.	Unknown
Costs for one building at the Ukiah Depot and three in the Willits yard.	Unknown
Costs related to rail debris identified by State Parks' consultants.	Unknown
Potential Liabilities Resulting from NCRA's Business Practices and Property Rights	
Potential interest owed to Christopher Neary as of July 31, 2019.	$193,660
Estimated settlement for MCM Construction litigation[9]	$536,026
Potential liabilities related to a football field on the Willits yard.	Unknown
Potential liabilities for NCRA waiving competitive bidding for contracts.	Unknown
Unfunded termination liability related to NCRA's pension plans with CalPERS as of June 30, 2018.	$759,027 - $846,259
Future management fees for FEC Real Estate Service.	$40-$50,000/yr.
Defending encroachments.	Unknown
Potential Liabilities Related to Third-Party Rail Equipment Owners	
Costs for relocating rail equipment owned by two third-party owners.	Unknown

[8] Estimate pursuant to the 2002 Capital Assessment report, not represented in present dollar value. Remaining obligations of the Environmental Consent Decree not assessed as of December 31, 2019.

[9] MCM litigation was settled in May 2020. Please see page 24 for more detail.

PROPERTY ASSESSMENT

Scope of Work

The Department of General Services, Asset Management Branch, Real Estate Services Division's (DGS) responsibilities and objectives for this assessment were to 1) assess NCRA's property, rights-of-way, and easements; 2) assess options for transferring the southern portion of the rail corridor to SMART; and 3) estimate market rate values for equipment and real properties.

DGS, helped identify and aggregate NCRA real property data along its 316-mile rail corridor. DGS reviewed recorded and unrecorded real property asset data provided by NCRA; its property manager FEC Real Estate Services LLC; SMART; CalSTA; the California Department of Tax and Fee Administration (CDTFA, formerly BOE) railroad valuation maps; County Assessor maps and data; County Surveyor mapping; information obtained from ParcelQuest Parcel & Property Data; and material provided by NWPCo. More than 2,800 right-of-way parcels and their associated property rights were identified and compiled in an electronic itemization and tabulation Excel spreadsheet available on the project webpage: https://calsta.ca.gov/subject-areas/reports

Ownership data was arranged in sequential order running the length of the rail corridor from south to north. Data fields represented in the spreadsheet include specific references to each of the acquisitions identified as part of the original assemblage of the NCRA right-of-way corridor and include the related preliminary report or policy of title insurance; right of way corridor valuation map; engineering survey stations; regional location; mile post; grantor; grantee; conveyance document type (fee, easement, lease, or other agreement); document date, recording book, and page; acreage; and remarks from the Property Schedules found on the valuation maps. Electronic links to the preliminary reports or policies of title insurance, grant deeds, and valuation maps are embedded within the electronic spreadsheet and are available on the project webpage: https://calsta.ca.gov/subject-areas/reports

County Assessor maps along the 316-mile rail corridor were also assembled sequentially, aggregated from south to north in an Adobe Acrobat file format. Where needed, the maps were augmented to include approximate location of the railway corridor. This digital file is available on the project webpage: https://calsta.ca.gov/subject-areas/reports

NCRA's previous property manager, FEC Real Estate Services LLC, provided the Task Force with all its leases, licenses, permits, and other agreements related to FEC's management and mitigation of encroachments affecting NCRA's corridor. These agreements affect property owned in fee by NCRA located north of the Sonoma-Mendocino county line (mile post 89), some of which are income generating and have been reported in the OSAE *Calculated Value of Net Assets Report* in Appendix C.

Collectively, the data and documents compiled are intended to be utilized by SMART and NCRA, or its successor agency, during the proposed conveyances and are anticipated to provide efficient and cost-effective benefits to the buyer, seller, and title company.

Equipment, Rights-of-Way, and Other Capital Assets

NCRA's capital assets primarily consist of land, buildings, track structures, heavy equipment, rolling stock, motor vehicles, and unused signal equipment. DGS compiled the inventory of parcels, while Ascent Environmental gathered data on track structures and freight rail equipment along the line. OSAE determined the existence and completeness of NCRA's own inventory of equipment, including heavy equipment, rolling stock, motor vehicles, and unused signal equipment.

Because the inventory of equipment and property was conducted concurrently by the Task Force agencies, reconciling the lists and determining market value for each item was not possible during the study period. For these assets to be liquidated during a dissolution process, the fair market value will need to be determined at that time. The following equipment and capital assets were identified during this assessment:

Equipment — Market Value Unknown

During its assessment OSAE identified 306 pieces of equipment and miscellaneous materials (e.g. rail ties, culverts, etc.), which are detailed in OSAE's *Calculated Value of Net Assets Report* in Appendix C. Items of interest include the following:

- OSAE confirmed 143 pieces of equipment owned by NCRA through observations or third-party confirmation. This included six pieces of heavy equipment and 33 rail cars used as collateral to secure the Federal Railroad Administration RRIF Loan. The 33 rail cars were purchased with a FEMA grant in 1996 and are leased to the Boston Transit Group, of which OSAE confirmed the existence and operating status. The same group of equipment (heavy equipment and rail cars) also served as collateral to the Bridge Financing Agreement, the Marin Consent Agreement, and the

Reopening Project Agreement to secure debts owed to NWPCo, as discussed in OSAE's report. On March 27, 2019, NWPCo filed documents with the Surface Transportation Board asserting its rights to the 33 rail cars, along with the Boston Transit Group lease and lease proceeds therefrom, pursuant to the Marin Consent Agreement. If NWPCo (or the other creditors) exercises its lien on this equipment, NCRA would lose its largest and most reliable source of revenue, a total of almost $12,000 per month.

- Thirty-eight pieces of equipment observed during site visits belonged to third parties or unknown owners. The 38 pieces do not include various liquefied petroleum gas rail cars and Skunk Train rail cars owned by third parties.
- The location and ownership of 125 pieces of equipment could not be determined by OSAE during its assessment. The team identified these pieces of equipment by obtaining equipment-related information from photo albums, internet searches, and available documents. Due to the age and quality of the information reviewed, OSAE determined that the 125 pieces could include equipment no longer owned by NCRA. Additionally, in the absence of identification numbers for the equipment, the 125 pieces may include the 38 pieces described above.

During its field review of the NCRA right-of-way, the State Parks team documented 13 locations throughout the rail corridor where abandoned rail equipment, structures, or railroad debris were observed, See Table C-7 in Appendix C for detail; the locations can be found in Figure 2.6-1 in the Map Book portion of Appendix C. Items of interest include the following:

- rail cars (e.g., cranes, excavators, horse trailers),
- a communications tower,
- crossing debris,
- railroad track switches,
- grease boxes,
- displaced culverts and culvert debris,
- scattered metal debris and pieces,
- residential buildings (such as hunting cabins abandoned homes), and
- failed tunnel portals.

Property, Rights-of-way, and Easements — Market Value Unknown

NCRA's real property, whether owned in fee or held as a railroad easement, was purchased with state and federal funds. (See Appendix B for details on funding program, purpose, and dollar amounts.) The funds transfer agreements

associated with these transportation programs and state bond funds require that any right-of-way acquired remain in public transportation use *in perpetuity*. If the right-of-way is sold or taken out of public transportation use, the proportionate funding participation by the State and other non-recipient generated public funds must be returned or credited to the State. The *pro rata* share is based on fair market value, not necessarily sale price. In lieu of repayment, the *pro rata* share may be dedicated exclusively to a CTC-approved public transportation purpose. The State's *pro rata* share is as follows:

- All right-of-way acquired north of Willits was purchased with 100 percent Prop 116 funds and therefore, 100 percent of proceeds would be returned to the state Public Transportation Account or dedicated to a state-approved public transportation purpose.
- All right-of-way acquired south of Willits and east from Ignacio to Lombard was purchased with a mix of 10 percent state Transit Capital Improvement funds and 90 percent federal Q-funds. Therefore, not less than 10 percent of proceeds would be returned to the state Public Transportation Account or dedicated to a state-approved public transportation purpose. Federal Highway Administration has not sought recovery of the federal share of funding.
- All right-of-way acquired south of the Sonoma-Mendocino county line and east from Ignacio to Lombard is subject to the 90-percent/10-percent proportional share split described above. However, the right-of-way is expected to be transferred to SMART in accordance with Section 17 of SB 1029 (McGuire, 2018) and not available for liquidation if NCRA is dissolved.


NO
MOTOR
VEHICLES

RAILBANKING ASSESSMENT

Description

Railbanking is the legal process by which an unused rail line preserves its right-of-way status as a rail line and allows for an interim use, such as a multi-use trail, when the right-of-way is *not* being utilized to operate rail. If a railroad wishes to convert the trail back into a railroad, the right-of-way has retained its status with the STB as a rail line and the conversion is a straight-forward legal matter.

Procedures for railbanking the NCRA rail corridor were researched utilizing resources from the Rails-to-Trails Conservancy and the STB. Highlights of that process are discussed below, and detailed information can be found in Appendix D, *Great Redwood Trail Feasibility, Governance, and Railbanking Report*.

Process

The railbanking process consists of three basic steps, as outlined below.

Step 1: Railroad Files Notice to Begin Abandonment Proceedings

The opportunity to railbank is triggered when a railroad owner formalizes its intention to divest a rail line, or portion of one, by initiating abandonment proceedings with the STB[10]. Within 30 days after the abandonment filing, qualified trail managers may express interest in railbanking the line by filing with the STB. If a freight rail operator is willing to assume responsibility, it has priority over a railbanking proponent.

Step 2: Trail Manager Files Public Use Condition and Interim Trail Use Request

The potential trail manager must submit all filings within the required timeframes, include a map delineating the proposed trail by mile post, and acknowledge its willingness to assume full legal and financial responsibility for the corridor. Any entity that takes on the role of a trail manager must file a statement indicating its willingness to assume full responsibility for: 1) Managing the right-of-way, 2) Any legal liability arising out of the transfer or use of the right-of-way, and 3) The

[10] The Surface Transportation Board is an independent federal agency that is charged with the economic regulation of various modes of surface transportation, primarily freight rail. Created on January 1, 1996 by the ICC Termination Act of 1995, the Board is the successor to the former Interstate Commerce Commission (1887-1995) and was established as a wholly independent federal agency on December 18, 2015.

payment of any and all taxes that may be levied or assessed against the right-of-way.

Step 3: Railbanking Negotiations

Once the potential trail manager has filed a railbanking request, the railroad owner must confirm with the STB that it consents to the proposal. Upon STB approval, the parties then have one year to negotiate the terms of the transition, including, but not limited to, right-of-way transfer through sale, easement, or lease; cost; equipment transfer or construction and maintenance responsibilities, etc.

Once the railbanking process has been completed and ownership of the right-of-way transferred to the trail manager, trail planning and construction can begin. The railroad owner will have the opportunity to remove any tracks, ties, or other property during the negotiation period.

Reversionary Clauses

Railroad alignments in the United States in general, and California in particular, were mostly established in the late 1800s by means of federal legislation, land grants, voluntary sales, and eminent domain. Sales contracts, grant deeds, and railroad easements often included reversionary clauses, which means that fee interests revert to the grantor (or descendants) if the right-of-way ceases to be used for rail purposes. Railbanking is considered a rail purpose because it maintains the integrity of the alignment for future use. *Railbanking therefore ends the abandonment process and avoids the activation of reversionary clauses.* There is also an argument under the shifting public use doctrine that continued use of the corridor for transportation may be enough to avoid reversion.

The alternative to railbanking is abandonment via formal process with the STB, which is usually initiated by the railroad but can be started adversely by others. In abandonment proceedings, the right-of-way is made available to other railroad companies to keep the line operational. If no rail companies are willing to take over operations, reversionary clauses may be triggered. Reversionary clauses vary, so an examination of each contract, easement, and deed would be necessary to determine the likelihood of reversion upon abandonment with STB.

Preservation of Future Rail Options

Based on the experience of NCRA and its predecessors, the costs of preserving the historic NWP rail line north of Healdsburg as a freight railroad outweigh the benefits. Absent a large economic draw on the north coast, such as a resurgence

in the redwood forest products industry or development of the Humboldt Port, it does not make economic sense to invest further public funds into preserving and rehabilitating a freight railroad currently.

Railbanking provides a unique opportunity to use the historic NWP corridor as a public-use, active[11] transportation route, while it continues to be preserved as a rail line for future railroad use. If at some point in the future a large economic draw is developed, a railroad company would have the ability to restore the corridor to rail use by petitioning the STB.

This assessment examined railbanking the northern portion of the NCRA right-of-way as well as the non-railbanking alternative.

Option 1: Railbank the Corridor

If NCRA is dissolved and the right-of-way is designated as a public active transportation corridor, railbanking the corridor is vital to maintaining a successful project. It will preserve the contiguous corridor in its entirety, allow for an interim trail use, and be accessible for future railroad purposes if necessary.

With 252 miles proposed as the Great Redwood Trail, it will be necessary to establish a trail management agency with enough resources to handle the legal process of railbanking while assuming full legal and financial responsibility for the corridor, including, but not limited to, maintenance of the existing right-of-way (such as weed abatement and emergency repairs); maintenance of existing and future contractual obligations; and physical conversion of the railroad corridor to a multi-use path.

Option 2: Do Not Railbank the Corridor

During its compilation of parcel data, DGS identified more than 2,800 parcels in the NCRA rail corridor. Each parcel deed has the potential of containing a reversionary clause and will need to be assessed on an individual basis, if the right-of-way is not preserved as an active railroad or railbanked.

Parcels owned in fee could be sold or retained for use as a trail. Parcels held by easement would likely revert to the underlying property owner, creating breaks in the corridor. If the corridor is intended to be used as a trail, the trail manager would either negotiate a sale price with the underlying property owner or

[11] According to the Centers for Disease Control and Prevention, "active transportation" is any self-propelled, human-powered mode of transportation, such as walking or bicycling. Physical inactivity is a major contributor to the steady rise in rates of obesity, diabetes, heart disease, stroke, and other chronic health conditions in the United States.

condemn at fair market value, adding cost to the project and potentially leaving gaps in the trail that would be expensive to close.

This option would also terminate all future railroad opportunities. Without the protection of railbanking, any use other than as a rail line could constitute abandonment of the railroad, and property owners would have the right to invoke their reversionary clauses. Property owners with fee simple, who own their property outright, would be able to use or dispose of their property in any manner permitted by law.

Figure 5. Aging Railroad Trestle in NCRA Corridor

SUCCESSOR AGENCY GOVERNANCE OPTIONS

Scope of Work

The planning, construction, operation, and maintenance of the Great Redwood Trail in its entirety would likely be a multi-generational effort. Although the primary purpose of this section is to identify potential governance structures for the immediate next steps for the Great Redwood Trail project, this section also recommends looking beyond these steps to identify a long-term management solution for the trail (see SB 1029 Section 2[a][4][A]).

The rail corridor would require certain environmental remediation efforts before and during construction of a trail (see Chapters 2 and 3 of the Trail Feasibility Assessment in Part I of Appendix D). After construction, the Great Redwood Trail would require a comprehensive operations and maintenance plan, as well as a reliable annual operating budget to maintain acceptable trail standards. Identifying the owner and operator of the trail at this early stage would help provide an adequate governance structure to manage the complex future operational and maintenance needs of the trail.

State Parks' *Great Redwood Trail Feasibility, Governance, and Railbanking Report* in Appendix D examined six typical trail management governance structures including:

- Single Government Organization
- Nonprofit Organization
- Cooperative Agreement
- Joint Powers Authority (JPA)
- Commission
- Special District

The governance evaluation for the Great Redwood Trail measured these common trail management structures against the criteria developed for the trail. These criteria examined how well each governance structure could potentially manage the corridor over multiple generations, considered the existing policy field, and the lessons learned from NCRA. Based on this analysis, two criteria — classification and multi-jurisdictional trail — were identified as critical to success.

Because a successful trail governance structure for the Great Redwood Trail must also assume financial and legal responsibility of the corridor, some of the common trail management governance structures identified above, such as a cooperative agreement or nonprofit organization, may not have the capacity to own and manage the corridor alone. As a result, only three of the common

management governance structures were found to be applicable to the Great Redwood Trail project. These include:

- State ownership,
- JPA ownership, and
- Local and nonprofit organization ownership.

A fourth model considers a continuation of the status quo, in which NCRA continues to own the right-of-way but removes railroad operations from its mandate and instead, focuses on trail management. While this option was analyzed and identified as a potential solution, it is not a strong candidate as a trail management agency due to NCRA's existing limitations, including its lack of clear reporting structure, limited financial capacity, and narrow focus.

Analysis Criteria

When conducting its analysis, the State Parks team considered a number of critical elements such as the existing governance structure of NCRA; the ability of a governance structure to railbank and manage the corridor, including environmental remediation, trail construction, and long-term planning; the ability of the governance structure to operate within the policy field in which it is established; and its interactions with numerous concerned stakeholders, such as jurisdictional partners, business interests, and the public.

Measurable criteria were created that examined the ability of governance structures to fulfill the specified tasks and responsibilities of a trail manager.

The following two criteria were identified as critical and are the basis for analysis of all potential governance structure options. If an option did not meet these criteria, it was not considered viable.

1. **Classification:** Identified what type of entity was being proposed. Classifications include local and state agency; multi-agency; joint powers authority; nonprofit; and special districts. The classification is important to determine the agency's legal status and reporting structure. NCRA does not have a clear classification, which made oversight of its operations challenging.

2. **Conducive to Multi-Jurisdictional Trail:** Identified whether the governance structure being analyzed would be conducive to building and maintaining a trail that spans multiple jurisdictional boundaries. All governance structures considered for the Great Redwood Trail meet this criterion.

The following additional, measurable criteria were created to identify typical governance structures that may also be appropriate for this corridor. These included:

- **State Risk**: Measured the potential level of risk and liability to the State.
- **Timeframe for Implementation**: Measured how long the trail would take to implement given the strengths and weaknesses of the proposed governance structure being analyzed.
- **Existing Staff Expertise and Resources:** Measured whether an existing entity would have staff with trail expertise and capacity to manage and maintain the trail; recognizing that the establishment and operation of a new entity would require additional administrative and overhead costs.
- **Trail Consistency:** Measured the ability to build and consistently maintain the trail. Decentralized governance structures or structures without stable funding sources may have limited ability to implement or maintain the trail in a consistent manner.
- **Potential Funding Consistency**: Measured the availability of stable funding sources for trail planning and design, development, and operations and maintenance. Governance structures that relied on membership fees or donations may result in unequal distribution of resources along the corridor.
- **Long-Term Operations & Maintenance Costs:** Measured the level of funds required to operate and maintain the trail.
- **Maintenance Capabilities**: Measured the capacity for conducting maintenance along the trail.

Figure 6. Wild and Scenic Eel River Canyon

Ownership Models

To successfully implement and maintain a potential future Great Redwood Trail, a trail manager must be identified with the ability and capacity to guide the overall vision of the trail; identify funding opportunities and administer funds; coordinate with partner agencies and organizations; oversee planning, design, and construction; manage contractors; and oversee operations and maintenance. The trail manager would also need to railbank the corridor to ensure that it is preserved for public transportation *in perpetuity*. The trail manager that takes on the railbanking process would take on potentially significant liability.

The following ownership models have trade-offs with respect to State risk; timeframe for implementation; access to potential funding sources; staff expertise and capacity; trail consistency and quality; and long-term operations and maintenance costs.

OPTION 1: State Ownership

In this management structure, a single agency manages the transportation corridor. Because the NCRA railroad corridor passes through multiple local agency jurisdictions, the potential for a single local agency to be the manager of the entire trail is complicated.

A state agency could provide strong expertise, which may facilitate quicker and higher quality implementation of the trail. However, it would also create the highest risk to the State in terms of liability and cost and may be subject to competing state efforts.

Great Redwood Trail: Roles and Responsibilities

State ownership of the Great Redwood Trail would vary depending on whether the designated agency is an existing or a newly created agency. While an existing state agency may have the organizational structure and expertise to manage the Great Redwood Trail, it would require substantial additional staffing, equipment, and funding resources to oversee planning, design, construction, and environmental remediation efforts and effectively operate and maintain the trail. It could, however, partner with local jurisdictions to manage trail implementation and maintenance, and with non-profit organizations for advocacy and fundraising efforts.

Role, Responsibility, and Liabilities of the State

In a state-ownership option, the State would be directly involved in all aspects of trail implementation, operations, and maintenance. The State would also, in turn, be responsible for any existing rail infrastructure and associated liabilities along the corridor, which may result in significant increased costs of hundreds of millions of dollars to state taxpayers, potentially even before implementation and operation of the trail. However, not all costs would necessarily fall on the State, as some could be accounted for through innovative financing solutions as well as private, federal, and local sources.

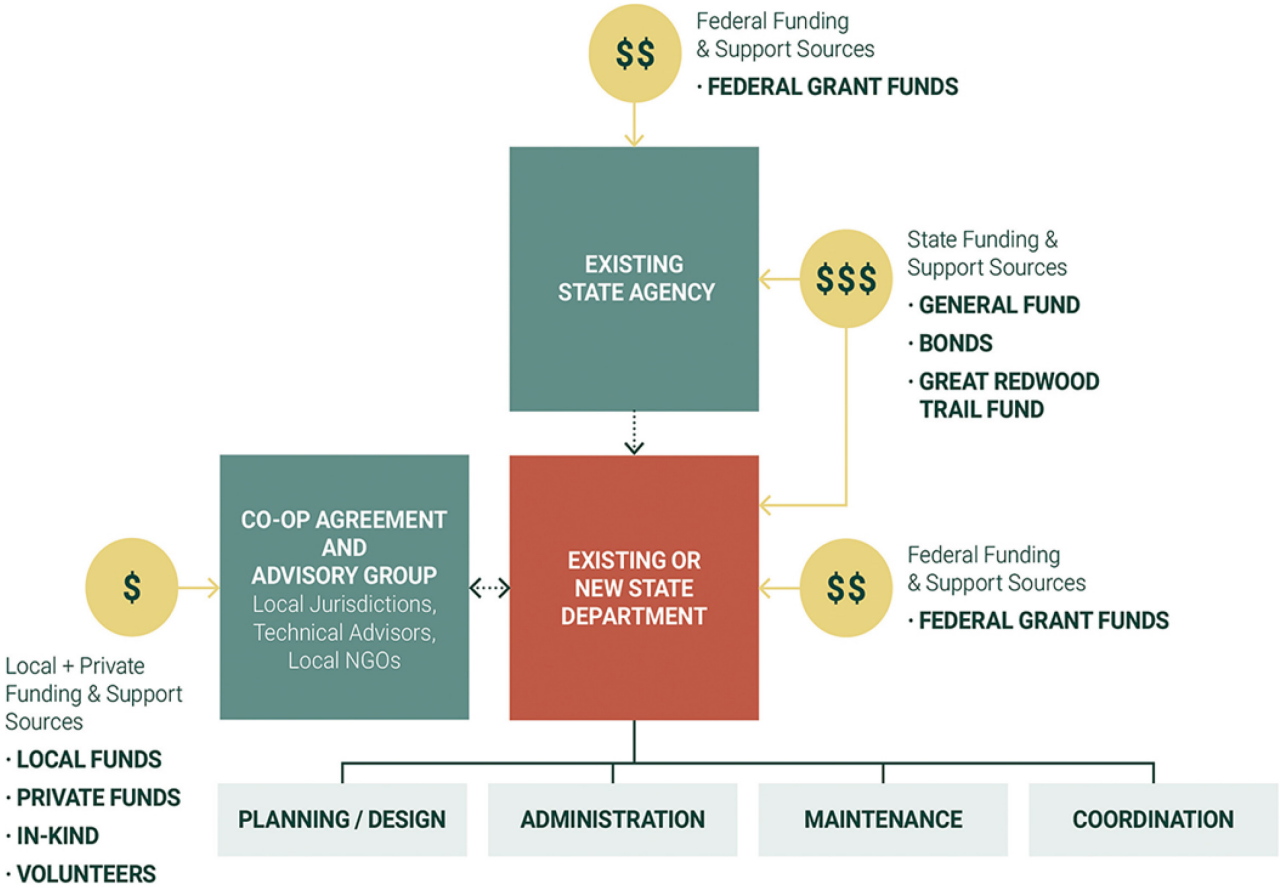
Great Redwood Trail: Funding Stream

To provide funding for trail planning, operations, and maintenance, the State could collect revenue generated through trail user fees, rent from utility companies that have located their infrastructure (cell phone towers, fiber optic cable, water lines, telephone lines etc.) within the rail corridor right-of-way, and lease agreements from encroaching neighbors. This revenue is not expected to cover support staff costs; environmental remediation and mitigation; capital projects; and future maintenance. Additional study is needed to determine the estimated funding gap between projected revenue and annual trail management expenses.

Supplemental revenue could be obtained through state and federal appropriations and/or grants. Local agency and nonprofit partners could provide local funds, in-kind support, and volunteers to supplement state and federal funds.

See Figure 8 for the organizational diagram and Part II (Section 6) of Appendix D, *Great Redwood Trail Feasibility, Governance, and Railbanking Report* for additional detail.

Figure 7. Stranded Rail Car and Equipment in NCRA Corridor



Potential Level of Funding

$	$$	$$$
LOW	MEDIUM	HIGH

*Potential Example Agency or Department

Other Entities Providing Funding and Oversight

	Money	Policy	Oversight
Federal			
Federal Highway Administration	●		
National Park Service	●		
State			
CA Legislature	●	●	
California Transportation Commission	●		●
California Department of Finance	●		
California State Transportation Agency	●	●	●
Natural Resources Agency	●	●	●
Local & NGO			
Local Counties & Cities	●		
Local NGOs	●		

Figure 8. State Agency Organizational Chart

OPTION 2: Joint Powers Authority

A Joint Powers Authority (JPA) is an entity that allows its member agencies to jointly exercise common powers. The structure allows for one entity to oversee a trail crossing multiple jurisdictions and is typically funded by its member agencies or can pursue donations and grants as well as issue bonds. Because it requires creating a new entity, a JPA governance structure for the Great Redwood Trail would include initial administrative and other overhead costs.

This structure would enable agencies to formally partner by creating a new legal entity to oversee trail implementation and maintenance. The JPA would own the corridor in fee or easement; manage trail planning and implementation; and ultimately, manage trail operations and maintenance.

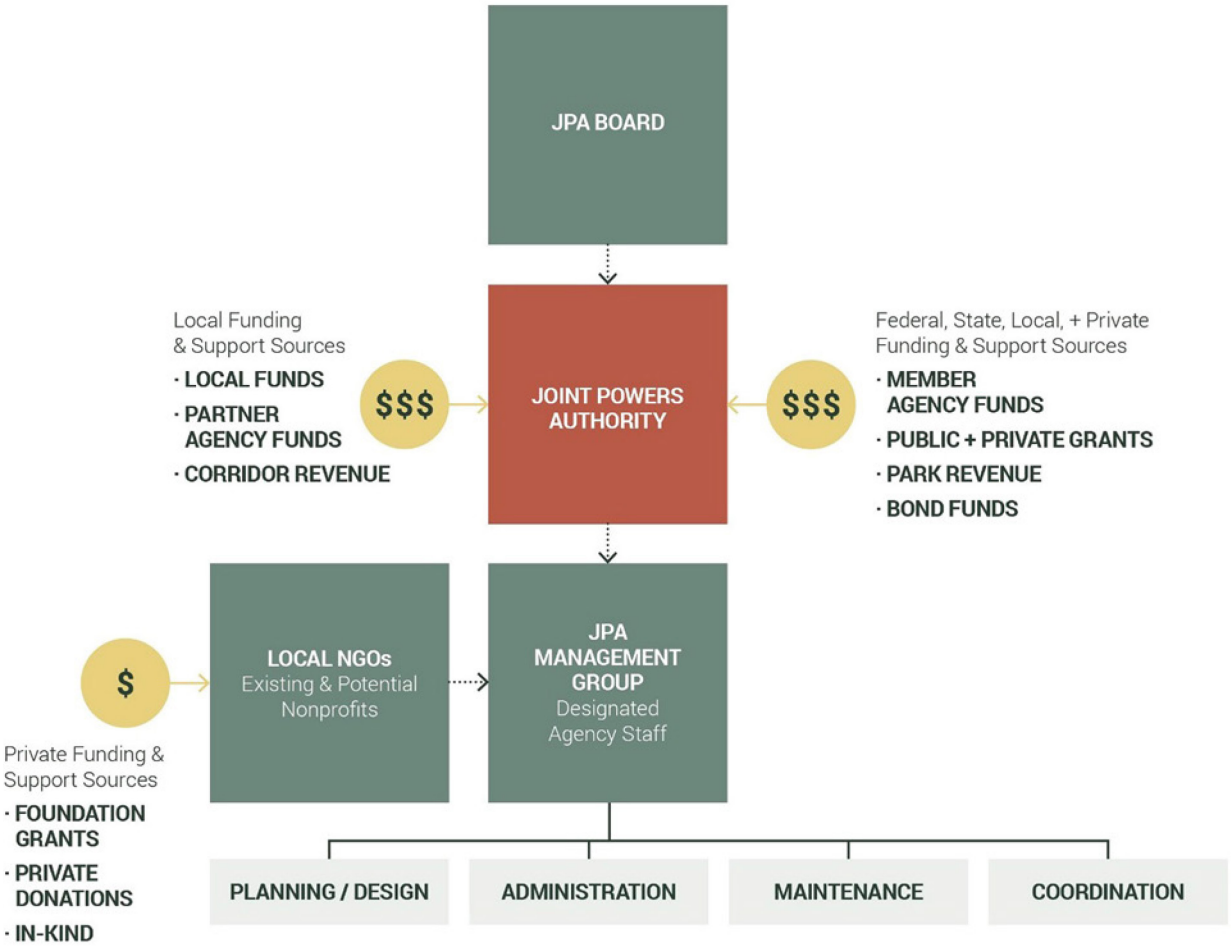
Great Redwood Trail: Roles and Responsibilities

For the Great Redwood Trail, the JPA option is considered a local-only option made up of the local counties and cities. It could, however, also be established using local and state agencies. Anticipated member agencies could include local counties, such as Humboldt, Trinity, Mendocino, Sonoma, and Marin, and local cities, including Blue Lake, Arcata, Eureka, Fortuna, Rio Dell, Willits, Ukiah, Cloverdale, Healdsburg, Windsor, Santa Rosa, Rohnert Park, Petaluma, and Novato.

The JPA should be overseen by a Governing Board of Directors consisting of appointed Directors from each member agency and could include a Governor-appointed ex-officio member to provide state-wide representation. Member agencies would appoint or hire staff to manage the various responsibilities of the corridor, which, based on a review of other case studies, is estimated to be up to ten staff members including a full-time trail coordinator, planning and engineering staff, administrative staff, and program management staff.

Role, Responsibility, and Liabilities of the State

The State could play a role in the JPA by appointing an ex-officio member to sit on the JPA's board, but it is not required. The JPA, rather than the State, would own the corridor in fee or in easement; would be responsible for implementing the trail; and would assume all liability and risk associated with the trail. If a state agency were to be part of the JPA, the State would be responsible only for its portion of the Joint Powers Agreement, not the corridor itself. This would limit state investment and risk in trail development and operations.



Potential Level of Funding

$	$$	$$$
LOW	MEDIUM	HIGH

Other Potential Entities Providing Funding and Oversight

	Money	Policy	Oversight
Federal			
Federal Highway Administration	●		
National Park Service	●		
State			
CA Legislature	●	●	
California Transportation Commission	●		●
California Department of Finance	●		
California State Transportation Agency	●	●	●
California State Coastal Conservancy	●		
Natural Resources Agency	●	●	●
Local & NGO			
Local Counties & Cities	●		
Local NGOs	●		

Figure 9. Joint Powers Authority Organizational Chart

Great Redwood Trail: Funding Stream

The JPA could receive annual funds from each of its member agencies; state and federal grant funds; and corridor user-fee revenue. It could also partner with a nonprofit to provide additional funds through private donations. Finally, the JPA member jurisdictions could request their local tax base to vote on a special ballot measure and commit a portion of local sales tax revenue.

See Figure 9 for the organizational diagram and Part II (Section 8) of Appendix D, *Great Redwood Trail Feasibility, Governance, and Railbanking Report* for more detail.

OPTION 3: Nonprofit and Local Jurisdiction Ownership

A nonprofit can draw funding from a large pool of sources, including private funding, and provides flexibility with program development, advocacy, and communications. However, it typically does not have the authority of an elected body or landowner and lacks a dedicated funding source without assistance from local, state, or federal funding mechanisms. Smaller nonprofits may not have the resources required to manage a corridor of this magnitude without support from another entity.

Great Redwood Trail: Roles and Responsibilities

A trail manager for this project could be found within an existing nonprofit organization that is passionate about the Great Redwood Trail or it may be a new nonprofit created to oversee trail implementation.

The nonprofit would guide the overall vision and implementation of the project and partner with various local agencies to build and maintain different sections of the trail. The nonprofit would be led by an Executive Director and overseen by a Board of Trustees and an Advisory Board consisting of representatives of both the local and state levels. It is estimated that additional staff would be needed for regional operations, programs, communications, membership and fundraising, and administration.

The nonprofit organization would be responsible for coordinating trail planning and design; implementation; and programming. Local jurisdictions such as the counties and cities would own the right-of-way and oversee trail construction, operations, and maintenance.

In this option, the trail manager duties would be shared among different entities. The nonprofit organization would provide a strong centralized structure in terms of trail planning, coordination, and implementation. However, because

nonprofits generally do not have a stable funding source; the expertise required to operate and maintain a trail; or the capacity to assume the risk associated with owning the right-of-way, ownership, operations, and maintenance are left to local jurisdictions.

Although Option 3 provides an opportunity to receive funds from a wide array of sources, it would likely have less consistent funding than Options 1 and 2 and could result in a longer timeframe for trail implementation and less trail consistency.

Role, Responsibility, and Liabilities of the State

To efficiently railbank the corridor, it would be beneficial for the State to consider managing the railbanking process with one centralized trail manager to initially assume the right-of-way and to ensure all legal requirements are met. The State would also be liable for the corridor during this temporary period. Specifically, any entity that takes on the role of a trail manager must file a statement indicating the willingness to assume full responsibility for 1) managing the right-of-way, 2) assuming any legal liability arising out of the transfer or use of the right-of-way, and 3) paying any and all taxes that may be levied or assessed against the right-of-way.

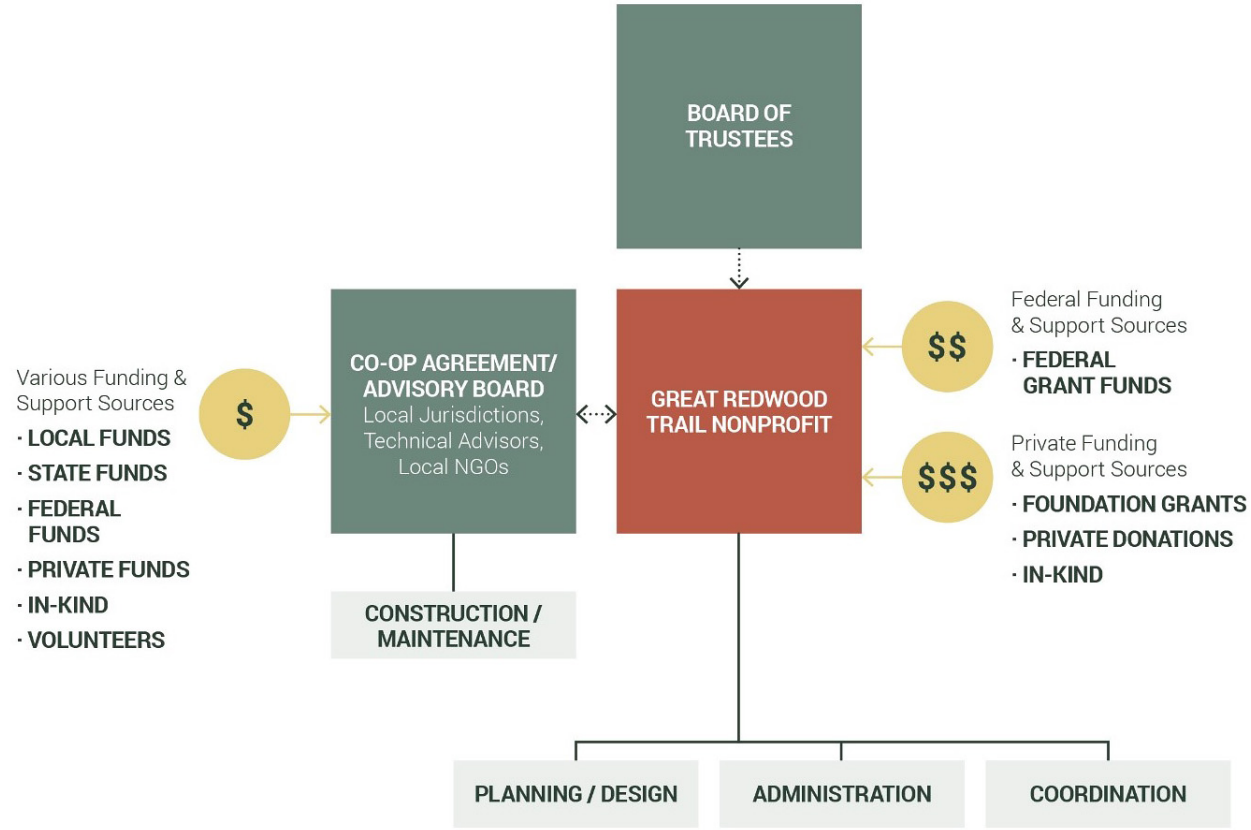
The State may have some oversight over the nonprofit to the extent that state representatives serve on the Advisory Board.

Great Redwood Trail: Funding Stream

In addition to private funds, the nonprofit could also seek local, state, and federal grants.

Local jurisdictions could contribute local funds, corridor user-fee revenue funds, and local sales tax revenue and could apply for federal and state grant funds for trail construction, operations, and maintenance.

See Figure 10 for the organizational diagram and Part II (Section 10) of Appendix D, *Great Redwood Trail Feasibility, Governance, and Railbanking Report* for additional detail.



Potential Level of Funding

$	$$	$$$
LOW	MEDIUM	HIGH

Note: All trails are owned and managed by local agencies

Other Potential Entities Providing Funding and Oversight

	Money	Policy	Oversight
Federal			
Federal Highway Administration	●		
National Park Service	●		
State			
CA Legislature	●	●	
California Transportation Commission	●		●
California Department of Finance	●		
California State Transportation Agency	●	●	●
California State Coastal Conservancy	●		
Natural Resources Agency	●	●	●
Local & NGO			
Local Counties & Cities	●		
Local NGOs	●		

Figure 10. Nonprofit and Local Jurisdictional Organizational Chart

OPTION 4: NCRA Status Quo

Organizational Structure

NCRA's structure and authority are codified in the Public Utilities Code. NCRA's organizational structure is shown in Figure 12 on page 52. Although it was established as a public agency, it was not designated as a state or a local agency and as such did not have a clear reporting body from its beginning. NCRA is subject to STB and Federal Railroad Administration jurisdiction at the federal level.

NCRA's staff includes an executive director and an administrative assistant. The County of Sonoma provides legal counsel and accounting support to NCRA for a fee. In addition, NCRA also has on-call contracts with a resident engineer and transportation planner. While staff-level decisions are made by the executive director, major decisions require board approval and pursuant to SB 1029, the CTC. (See page 12.)

The Board of Directors is made up of nine members: two representatives each from Humboldt, Mendocino, Marin, and Sonoma Counties and one city representative.

Funding

NCRA's regular revenue comprises individual payments for encroachment permits, lease agreements, and the commercial rental of 36 boxcars. In FY 2019- 20 NCRA's budget anticipated $381,080 and in FY 2020-21 NCRA budgeted $361,115 in locally derived revenue. Budgeted annual agency expenditures for baseline operations for FY 2019-20 and FY 2020-21 exceeded NCRA's revenue by almost $300,000 each year. NCRA does not have a dependable source of outside funding to supplement this revenue.

State project funding that NCRA received in the past was appropriated by the Legislature, approved and allocated by the CTC, and administered by Caltrans. These funds were project specific and not a regular source of funding for the agency. Local funds are collected and overseen solely by NCRA.

Some local entities utilize NCRA right-of-way without paying a fee, instead covering operations and maintenance of a section of the corridor. For example, the City of Ukiah holds a license agreement with NCRA that enables it to construct and maintain a multimodal rail-with-trail path within NCRA's corridor in the city limits. The City utilizes its own resources to provide maintenance and weed

abatement along its path within NCRA's right-of-way and charges NCRA for additional weed abatement services outside of the multimodal path footprint.

Existing Management Challenges

The primary NCRA management challenges are summarized below.

1. NCRA was not designated as a local or state agency when it was established and as a result, was not provided with a clear reporting body. Because it has not clearly been subject to a regulating authority, there has been little oversight over its decision-making and financial transactions.

2. NCRA does not have sustainable funding to support its operating expenses. The decline of the timber industry reduced demand for railroad operations and ultimately led to the railroad's bankruptcy under private ownership prior to NCRA. Without a thriving industry behind it to drive demand, the complexity of the corridor meant that without a sustainable funding source NCRA could not maintain railroad operations. NCRA was created to assume financial and legal responsibility of the bankrupt railroad but was not provided with adequate funds to meet its mandate. As a result, NCRA has been unable to hire and retain qualified staff and has been forced to contract out work. These on-call contracts have ultimately proven to be overly expensive and have limited NCRA's ability to manage the existing right-of-way, address concerns along the corridor, and make improvements to failing infrastructure.

3. Because NCRA's board is made up entirely of local representation, it has historically made decisions that mostly benefit local interests. While the board has worked to protect the right-of-way as a singular transportation corridor, it has done so primarily for local economic interests.

Considerations for the Great Redwood Trail

Because NCRA has long struggled financially due to a lack of available funding and low revenue stream, it has acquired significant debt. If NCRA were to be transformed into a new trail agency, the new agency would retain this debt, complicating environmental remediation efforts, trail development, and maintenance. Disposing of this debt and transferring NCRA's assets to either an existing entity or a new trail agency created for the purpose of developing the Great Redwood Trail would provide a governance structure that could efficiently manage these tasks.

Funding for NCRA as a Trail Manager

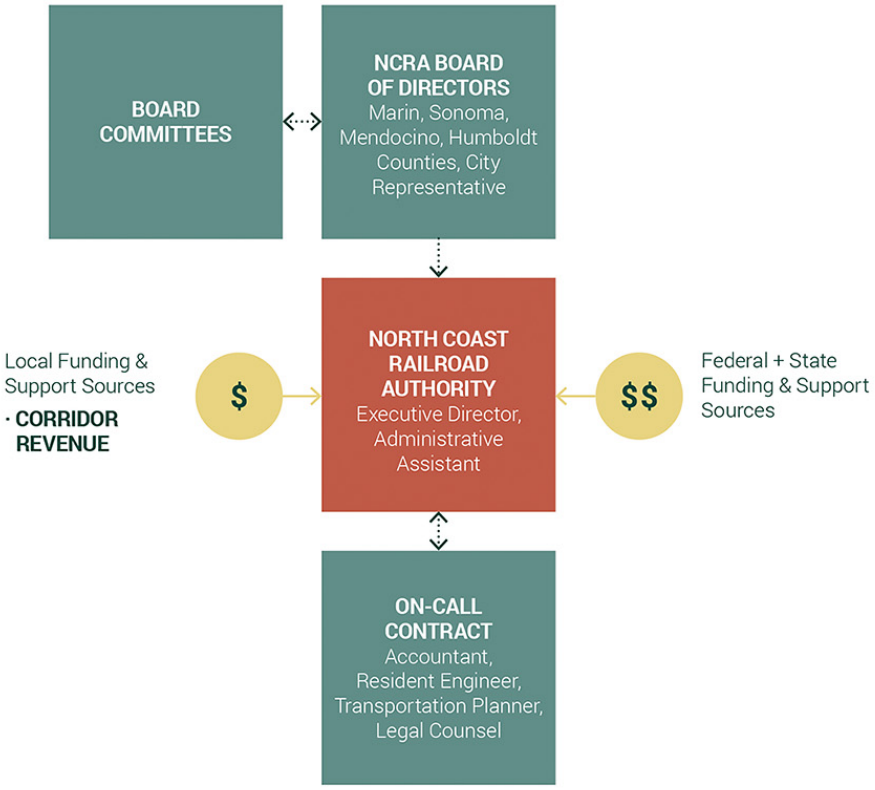
Most local funds that NCRA receives are for rail equipment that NCRA rents out to other companies. This revenue source would likely not be available to a future trail manager because the equipment may be sold, or collected as collateral on outstanding debts, during the dissolution of NCRA. In addition, there are numerous existing encroachments on NCRA right-of-way that are not currently approved by NCRA and therefore, no fees are collected by NCRA. The trail manager for the Great Redwood Trail should review all unapproved, unpaid encroachments and charge an annual fee for any that may remain.

One potential source of expanding revenue for NCRA, could be from existing and future utility lines that utilize the corridor.

Other Liabilities

There are additional environmental constraints associated with the corridor for which the trail manager would be liable and which the chosen governance structure should be equipped to handle. These constraints include, but are not limited to, infrastructure, such as bridges, tunnels, culverts; other structures in need of repair; and areas with hazardous materials that may require environmental remediation. These environmental constraints are detailed starting on page 54 and in Chapters 2 and 3 of Appendix D, Part I.

Figure 11. Deferred Maintenance in NCRA Corridor



Potential Level of Funding

$	$$	$$$
LOW	MEDIUM	HIGH

Other Entities Providing Funding and Policy Guidance

	Money	Policy
Federal		
Federal Highway Administration	●	
Federal Railroad Administration		●
Surface Transportation Board		●
State		
CA Legislature	●	●
California Transportation Commission	●	●
Caltrans	●	●

Figure 12. NCRA Organizational Chart

RAIL-TRAIL CONSTRUCTABILITY

Scope of Work

State Parks' assessment examined the viability and constructability of a trail developed on the entirety, or a portion of, the property, right-of-way, or easements owned by NCRA. This effort included, among other things, an analysis of physical contraints, environmental remediation requirements, and planning level cost estimates. The study methodology and findings are briefly described below; detailed information can be found in Appendix C, *Great Redwood Trail Feasibility, Governance, and Railbanking Report.*

Methodology

SB 1029 divided NCRA's corridor into "northern" and "southern" sections. This assessment set the delineation line for the Great Redwood Trail at mile post 87, two miles south of the Sonoma-Mendocino county line. If the southern section is transferred to SMART, the southern two miles (mile posts 87 - 89) of the trail would be in SMART's right-of-way.

The northern section was evaluated for repurposing a 252-mile portion of the rail right-of-way into a trail, by means of a rail-to-trail conversion where rail service would cease and the rail corridor would become a public multi-use path. The corridor evaluated extends from Healdsburg in Sonoma County to Blue Lake, northeast of Arcata in Humboldt County, passing through the cities of Healdsburg, Cloverdale, Ukiah, Willits, Fortuna, Rio Dell, Eureka, Arcata, and Blue Lake, and dozens of unincorporated communities. (See Figure 13.)

Figure 13. Rail-with-Trail and Rail-to-Trail Sections

The southern section, from Healdsburg to Cloverdale, was evaluated for the potential of a rail-with-trail, where a rail facility and trail would share the corridor; consistent with SMART's existing rail-with-trail operations south of Healdsburg and SMART's plans to develop passenger service to Cloverdale in the future. (See Figure 13.)

The NCRA rail corridor was further divided into five major sections. (See Figure 14) Analysis of the trail sections included an assessment of the rail corridor right-of-way in its current state, i.e., its "existing condition." Rail infrastructure and other features were inventoried along with known environmental constraints, known cultural sites, soil stability, and ease of public access. Potential trail development types were analyzed for constructability given the segment's physical condition and proximity to urban centers, and "feasibleness" was determined based on a ranking of all the criteria. Costs were developed on a high-level preliminary basis for planning purposes only. Actual cost is variable and will change depending on details of the project design, environmental remediation requirements, and market rate of construction materials.

Several methods were used to gather information about the existing condition of the rail corridor, including searches of publicly available data sources and review of existing reports related to the corridor. To help inventory and assess the condition of existing structures (such as bridges and culverts) and features along the rail corridor, small teams conducted field assessments from Healdsburg to Arcata and the Carlotta, Samoa, and Korbel branches of the rail corridor.

Great Redwood Trail Feasibility

The potential trail corridor contains significant feasibility challenges in certain locations, particularly in remote segments within and close to the Eel River Canyon. Key constraints include segments with steep, unstable slopes that destabilize hundreds and occasionally thousands of feet of the corridor; existing right-of-way obstructions that in some locations fully block the corridor; former rail infrastructure (i.e., bridges, trestles, tunnels, and major culverts) that have been dilapidated or destroyed by years of deferred maintenance; and the significant cost of developing a public trail.

Despite these constraints most of the 252-mile corridor is generally intact with good physical conditions for trail construction. State Parks' assessment confirmed that the corridor's gentle grades lend themselves to interregional non-motorized trail use. If fully developed, the Great Redwood Trail could create an outdoor recreation opportunity and commuter corridor that would connect Northern California communities with the Bay Area.

Figure 14. Trail Assessment Corridor Sections

User Demand Projections

As expected, high trail-use estimates occur in segments within or near urban communities or towns along the corridor. Likewise, trail use through the more remote segments (generally between the cities of Willits and Ferndale) is anticipated to be low and oriented toward serious, long-distance cyclists and hikers, or perhaps occasional day-use by visitors driving to remote access points for short hikes.

Parts of the rail corridor already have fully developed rail-with-trail segments constructed adjacent to the rail bed. These are in more-populated areas, such as around Humboldt Bay near the cities of Arcata and Eureka, and continue to support regular, daily use. Only one developed segment, the Ukiah Rail Trail in Ukiah, has received a formal Great Redwood Trail designation.

Estimated trail use demand in the southern section of the rail corridor indicates the trail would experience substantial high-volume non-motorized use, including commuters and recreational users of all ages and abilities. This is expected to occur in Sonoma County where rail-with-trail could be implemented and near the larger communities, such as the cities of Ukiah and Willits in Mendocino County. Likewise, trail use demand projections are strong in the far northern part of the NCRA rail line; the corridor between the cities of Ferndale and Fortuna; and the corridor between the cities of Eureka and Arcata around Humboldt Bay.

Physical Constraints

The major constraints within the rail corridor that most influence trail feasibility include geomorphic challenges (landslides, high-risk slopes), large right-of-way encroachments (particularly those that are authorized and leased by NCRA), failing infrastructure (bridges, trestles, culverts, and tunnels), and previous contamination or hazardous material sites where remediation is required. In addition, the presence of wetlands and special-status species, historic structures, areas of archaeological sensitivity, and tribal lands also may present significant constraints to trail development.

The presence of wetlands and special-status species in the corridor may influence the time and cost to implement the trail if extensive permitting, corridor re-routes, or compensatory mitigation are required.

Cultural Resources

Identification and designation of potential archaeological and tribal cultural resources along the corridor would require cultural records research and regular

and consistent coordination with tribal representatives. If cultural resources are present and avoidance or mitigation measures are needed, the project may require a longer schedule and result in higher overall costs.

Historic Structures

The presence of historic structures along the corridor is a minor benefit in the opportunity and constraints analysis because the resource offers an opportunity for interpretive signs and public education. There are, however, possible challenges associated with permitting and zoning requirements for historic sites. If building renovations are needed, for instance, the process for obtaining relevant permits and approvals may pose a challenge to trail development. In addition, historic buildings can pose liabilities associated with safety hazards, if they are in poor condition. While these constraints would not be insurmountable, they would substantially increase the cost of trail construction and maintenance, which could result in schedule delays and higher overall cost.

Remote, Hard to Access Corridor

Development of the long center sections generally starting in the vicinity of the City of Willits and then continuing north through Trinity and northern Mendocino Counties to the area near the City of Ferndale in Humboldt County would involve significant environmental remediation and construction costs. Combined with low trail use demand projections, these remote sections may be difficult and financially challenging to fully develop with construction and maintenance costs expected to be high. Appropriate trail types for steep, sometimes unstable terrain should be emphasized in these sections, such as narrower, soft-surface recreational trail facilities instead of a hard-surface trail (Class I).

Significant costs and long-term maintenance challenges are related mostly to major stabilization of slopes; rebuilding or replacing deteriorated rail infrastructure; and possible rerouting around major obstructions. Rerouting can reduce costs in some locations, compared to replacing infrastructure, but can also result in additional costs to obtain access rights for the public access trail.

Eel River Canyon

The Eel River Canyon poses unique challenges and opportunities. It has some of the greatest constraints in the corridor, including difficult geophysical conditions and dilapidated, unmaintained infrastructure. It is isolated and rugged, and the slopes are unstable. The substantial costs of construction and long-term maintenance in this highly dynamic landscape are noteworthy. Abandoned rail

cars and other rail debris are also present in this section, including in the river. However, approximately 75 percent to 85 percent of the NCRA rail corridor through the Eel River Canyon is in good physical condition for trail construction. This section of the trail offers some of the most spectacular views of the entire corridor, including the scenic values reflected in its Wild and Scenic River designation.

Due to its designation as both a federal and state Wild and Scenic River[12], rigorous environmental protective measures would need to be incorporated into the trail design and construction. Trail development may also consider inclusion of river restoration opportunities, such as removal of collapsed rail infrastructure and rail cars from the river, enhancing the value of the trail and therefore its potential feasibility. At this preliminary assessment stage, it is unknown whether environmental restoration would be a requisite part of trail development, which would need further investigation to be determined. Due to access challenges, the costs to remove abandoned rail debris would be high. Recognizing the complexity of this section of the corridor, an alternative narrow, soft-surface trail may be readily developed and maintained over time, compared to a Class I hard-surface trail.

Interregional Active Transportation Route

If fully developed, the Great Redwood Trail would become an interregional trail providing outdoor recreation and active transportation experiences. It would connect a major urban metropolitan area, the northern extent of the Bay Area, with the natural and scenic resources of the landscape along the North Coast to Humboldt Bay.

Most Feasible Trail Segments

With limited physical, environmental, and cultural constraints; access to nearby communities with potential non-motorized users; and low construction costs; the following sections of the rail corridor are identified as the most feasible to develop:

- Rail-with-trail sections in Sonoma County,
- Trail segments near towns and urban communities (including Willits and Ukiah) in Mendocino County,

[12] The National Wild and Scenic Rivers System was created by the Wild and Scenic Rivers Act of 1968 (Public Law 90-542[1]), enacted by the U.S. Congress to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations.

- Humboldt County segments from Ferndale to Korbel, and around Humboldt Bay.

Rail-with-Trail Segments

- This southern section from Healdsburg (mile post 68.22) to Cloverdale (mile post 87), included in the transfer of freight rights to SMART, is well suited for rail-with-trail development. The corridor width in this section varies between 50 feet and 100 feet; can accommodate rail-with-trail infrastructure; and has no major physical, environmental, or cultural constraints. Trail development in this segment will be the responsibility of SMART and could be implemented in conjunction with SMART's plans to develop passenger service to Cloverdale. This section would be recommended for priority project planning, design, and environmental review as possible next steps, if trail planning proceeds.
- Development of rail-with-trail along a stretch of the rail corridor surrounding Humboldt Bay is preferred. Local jurisdictions have already constructed rail-with-trail multi-use paths to the north and south of the bay, and the County of Humboldt has plans to construct the final rail-with-trail segment in the middle, closing the north-south gap. In addition, the rail corridor is currently used by the Timber Heritage Association for recreational rail operations (speeder crew car rides) in Eureka and Samoa. Additional proposals for a tourist excursion train and rail bikes have been discussed. Continuing to develop the rail-with-trail option around Humboldt Bay could expand the recreational and active transportation opportunities in the region and enhance economic opportunities.

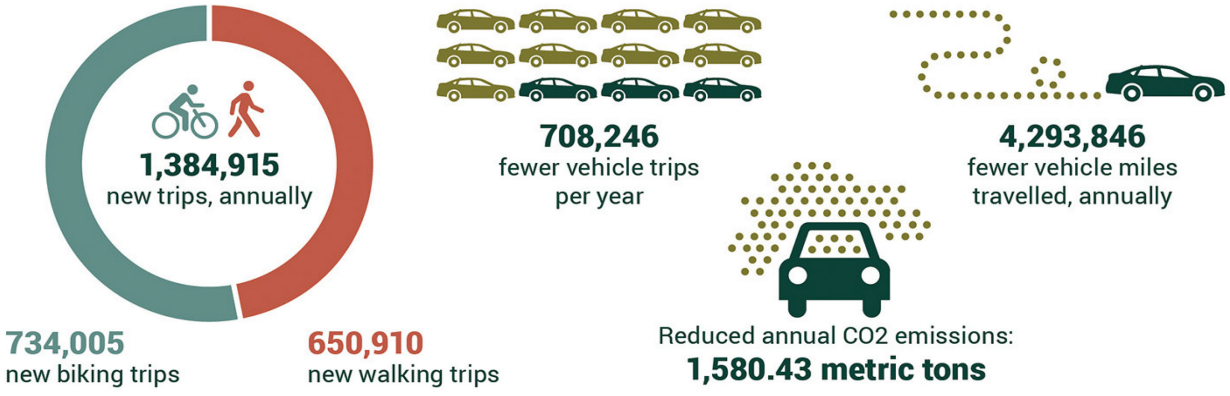


Figure 15. Economic and Social Benefits of a Fully Developed Trail

Economic and Public Health Benefits

If the trail were fully developed, it is projected to spur economic activity in the region and generate roughly $24 million in local revenue annually. Public health benefits include reduced vehicle trips and vehicle miles traveled; a reduction of 1,580.43 metric tons of carbon dioxide emissions; and an increase of 1,384,915 walking and biking trips annually. (See Figure 15)

Trail Cost Estimates and Project Phasing

Planning-level cost estimates are based on assumptions about the planned trail facility and general cost factors applied to the associated infrastructure. Cost estimates are provided by corridor segment and by project priority, as well as for the entire corridor, and have been rounded to the nearest hundred dollars.

While an overall corridor cost estimate is provided, the total cost for fully developing the corridor would not be incurred all at once. Trail development is expected to be long-term, and costs would be spread over the course of decades, depending on project phasing and fund availability. The costs described below do not include estimates of environmental remediation efforts that may be required prior to construction. As previously discussed, remediation costs may be substantial.

Project Phasing

Based on a review of the inventoried trail features and results of the condition and user demand assessments, development of the rail corridor has been divided into four logical phases. (See Figure 16.) These phases include projects that are grouped by their level of difficulty for development and anticipated trail demand, and include near-term, mid-term, and long-term implementation priorities. While these project phases represent priority projects when looking at the entirety of the corridor, the phases are not binding and can be modified as needed.

Figure 16. Project Phasing

Full-Development Project Cost Estimates

While cost is not considered to be a measure of the technical feasibility of trail development, it is the main factor in determining whether and to what extent the trail can be built. This section presents cost estimates by project phase to illustrate how the trail could be developed over time, limiting the amount of investment required at any one time. For more detailed discussion see Chapter 5 of Appendix D, Part I, *Great Redwood Trail Feasibility, Governance, and Railbanking Report*.

Planning-level costs for trail development of the entire 252-mile corridor are estimated at:

- $749,259,900 in 2020 dollars
- $900,685,200 in 2025 dollars
- $1,082,713,500 in 2030 dollars

Cost estimates were also calculated for each of the four project phases (segments grouped into near-term, mid-term, and long-term phases) described above. Total cost for each phase is a sum of the estimated budgets for each trail segment included in that phase. These cost estimates are organized by trail typology and include construction costs; planning and management costs; contingency; and escalation.

Phase 1 has an estimated total cost of $190,974,700 in 2020 dollars and $275,967,000 in 2030 dollars. It includes 62 miles of urban trail, 24 small access points, and seven large access points. Route design alternatives could result in cost reductions of nearly $11 million.

Phase 2 has an estimated total cost of $296,230,500 in 2020 dollars and $428,065,900 in 2030 dollars. It includes 48 miles of urban trail, 13.7 miles of rural trail, and five small access points. Route design alternatives could result in cost reductions of nearly $56 million.

Phase 3 has an estimated total cost of $194,628,100 in 2020 dollars and $281,246,200 in 2030 dollars. It includes 62 miles of rural trail, seven miles of urban trail, and 11 small access points. Route design alternatives could result in cost reductions of nearly $19 million.

Phase 4 has an estimated total cost of $67,826,500 in 2020 dollars and $98,012,400 in 2030 dollars. It includes 22 miles of urban trail and four small access points, including one new long-span bridge. There are no route design alternatives.

Cost estimates are based on potential trail types that were applied to specific conditions along the corridor for cost estimating purposes with planning, design, management costs, and contingencies included. Percentages were used to estimate the planning, design, and management costs for the corridor, which include survey, technical studies, and engineering design; environmental analysis, documentation, and permitting; project administration; construction management; mobilization; and design services during construction. A 30-percent contingency amount was added to account for unknown factors that may influence the overall cost of the trail. The State Parks assessment estimates environmental costs of the trail as a soft cost or percentage of the construction costs. The cost to remediate environmental liabilities in remote locations (such as rail cars in the Eel River) has the potential to be extraordinary, and project-level costs have not been estimated. A detailed discussion of environmental liabilities begins on page 64, and additional studies would be needed to further refine all costs.

Potential reroutes of the trail outside of the rail corridor and onto surface roads to bypass areas with major geologic challenges or failing infrastructure provide opportunities to reduce costs. Potential reroutes were identified that could result in an estimated $86 million in cost reductions.

For a full description of the assessment findings, trail segment feasibility results, and planning level cost estimates, please refer to Appendix D, Part I, Great Redwood Trail Feasibility, Governance, and Railbanking Report.

Figure 17. NCRA Corridor, Southern Section

ENVIRONMENTAL LIABILITY

The NCRA railroad corridor pre-dates both the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) by roughly 100 years and contains environmental waste contaminants deposited along the corridor which have been passed down through generations to its current owner, NCRA.

To understand the environmental issues, it is helpful to clarify terminology. In this report, the following terms are used:

- Remediation – This term is often used to describe the process of cleaning to its purest, natural form a site that has been found to have environmental contaminants.
- Mitigation – This term is used in reference only to projects and is a required element of NEPA and CEQA. It attempts to lessen the environmental impact of an infrastructure project by taking a separate action that would benefit the environment. A project could be required to both remediate and mitigate.
- Liability – In this project context, liability is referenced for legal risk, financial risk, and environmental remediation risk. Unless otherwise specified, liability is the assumption of responsibility for the risk, without necessarily having identified all possible risks. In the context of environmental liability, NCRA or its successor agency may be held responsible for the remediation (or the cost of remediation) of the rail corridor for known contaminants and contaminants discovered later. Environmental studies on portions of the NCRA corridor have been conducted and referenced in Appendix F. This process has identified many environmental hazards as an aggregate, but project-level studies will identify specific concerns and may result in additional cost. If NCRA or its successor refuses to accept this liability (where applicable), it could result in litigation.
- Planning-level cost estimates – Projects such as the Great Redwood Trail begin as ideas, which are then examined with enough detail to get a rough idea of the level of effort and cost required to bring the idea to fruition. This assessment report is that first flush, precursory examination; all costs, including environmental liability, are estimates from that high, planning-level vantage point. These cost estimates are then used to develop an overall budget and schedule for the life of the project. Planning-level estimates give project managers an idea of the economy of

scale the project will need, but there is too much variation in the estimate for it to be a completely accurate number.

- Project-level cost estimates – As the project moves forward and detailed environmental studies and design work are conducted, the planning-level cost estimates are amended and narrowed down to increasingly accurate, project-level cost estimates. These more-realistic estimates can be used to establish project budgets and seek funding.
- Preliminary analysis – As described with planning-level cost estimates, projects begin with a first look to determine if there are enough resources and strong enough justification to continue pursuing the project. The preliminary environmental analysis for this assessment examined existing reports and databases for known environmental concerns, in addition to information gathered by a field crew that walked the length of the corridor. This preliminary analysis allowed State Parks to determine areas of concern needing additional study. If the trail project moves forward, more-formal NEPA/CEQA studies and documentation will be necessary.
- Hazardous waste material – This term includes any industrial by-product or discarded commercial product that is potentially harmful to the environment or people and other living organisms because it is ignitable, corrosive, reactive, or toxic. In the NCRA corridor, this is anticipated to be mostly abandoned, decaying rail equipment and chemical contaminants that leaked or were dumped along the corridor during regular operations.

Preliminary Analysis

NCRA has conducted project-level environmental remediation when required, but has not conducted a thorough, corridor-wide, environmental remediation effort. To accurately assess the level of contamination for the entire 252-mile corridor proposed for trail conversion, additional focused study will be required.

This assessment effort conducted a preliminary analysis for high-level, policy planning purposes only. Environmental studies, findings, and cost estimates included here represent a preliminary examination of the existing conditions visible in the corridor during field visits; literature reviews of prior environmental studies, databases, and consent decrees; cost comparisons with similar projects; and knowledge of current environmental regulation placed on state agencies conducting projects in this region.

Because of the level of uncertainty surrounding environmental liability through the corridor, it was assessed by 1) OSAE in the financial analysis (page 20 and

Appendix C), 2) State Parks in the trail feasibility analysis (Appendix D), and 3) Caltrans in a separate memo prepared for discussion purposes with the Task Force (Appendix F). An effort was made to complement other teams' studies, but there are some areas of overlap in the cost estimates. A comprehensive environmental study of the whole corridor is necessary to remove overlapping costs and narrow them down to corridor-wide project – level estimates.

Environmental liability assessed by State Parks includes planning – level soft costs for trail construction and general environmental studies, with some hazardous waste removal, but does not include potential wetland mitigation or detailed hazardous material clean – up (which Caltrans' addressed) or a number of other contingent liabilities (which OSAE analyzed). As part of its analysis, State Parks' assessment rolled environmental planning into its full – development planning – level cost estimates as described on page 61. These costs address only the 252-mile portion of NCRA's corridor currently proposed for use as the Great Redwood Trail (Healdsburg, Sonoma County to Korbel and around Humboldt Bay, in Humboldt County).

OSAE identified areas of concern for potential liability due to environmental conditions. Cost estimates for these are itemized in Table 3 on page 27 and described in detail below. These items are applicable to NCRA's entire 316 – miles of right-of-way, including the portion proposed to be transferred to SMART. Caltrans' memo based its analysis on full build-out of the 252-mile trail corridor used in State Parks' report, including both the rail-to-trail and rail-with-trail portions, and follows the project phasing recommended by the State Parks analysis (page 61 and Appendix D).

Financial Liability

Many NCRA depots and maintenance facilities along the rail line may need environmental clean-up, regardless of the corridor's future use. The following list of potential liabilities was identified by OSAE during its assessment and additional detail can be found in Appendix C, *Calculated Value of Net Assets Report*.

Environmental Consent Decree

NCRA contracted with an environmental professional services firm to assess NCRA's level of compliance with the requirements, laws, and regulations pursuant to the Environmental Consent Decree and to develop a plan for regulatory approval for compliance. The estimated costs associated with future rail operations, clean-up, and remediation activities ranged from $4.3 million to

$6.9 million according to the assessment report dated July 2002 (see table 3, page 27). These costs have not been updated to 2020 market rates. It is unknown to what extent NCRA has fulfilled all obligations pursuant to the Environmental Consent Decree as of December 31, 2019.

Eel River

Although no legal claims have been identified, additional liability may exist for environmental related issues involving abandoned rail cars and equipment in the Eel River and other sites. As described in table 3 on page 27, costs are unknown and need additional study to accurately estimate cost of removal. For more detail, please see Appendices C and D.

Figure 18. Rail Cars and Collapsed Tunnel in Eel River Canyon

Local Jurisdiction Complaints

NCRA received a legal notice from the City of Eureka in December 2014 stating that the presence of rail equipment in Eureka's yard constituted a public nuisance under Eureka's Municipal Code. The City of Eureka required NCRA and a private party to remove all rail equipment from the Eureka yard. OSAE research and communication with the private party equipment owner indicated that the equipment was not removed as of December 31, 2019. This may result in monetary sanctions against NCRA. Further, in July 2015, a northern California news article reported that work to remove trains from the Eureka yard (known as the "Balloon track") was stopped due to workers becoming sick from exposure to contaminants. This may also present legal exposure to NCRA, or a successor agency. As described in table 3 on page 27, costs are unknown and need additional study to accurately estimate cost of removal. For additional detail, please see Appendix C.

Liquified Petroleum Gas

NCRA faces unconfirmed potential costs and obligations associated with safety improvement of the hazardous material storage of liquefied petroleum gas cars stored in the Schellville Depot.

This potential liability was identified in a complaint against NCRA filed on May 28, 2019, with Sonoma County's Permit and Resource Management Department, Code Enforcement Division. Costs associated with the safety improvements may range from $5.2 million to $7.2 million according to the September 2019 complaint. (See table 3, page 27.)

Based on the Letter of Intent between NCRA, NWPCo, and SMART entered on February 15, 2017, NCRA agreed to assume all risks and fully indemnify, defend, and hold SMART harmless with respect to any claim, damage, or liability resulting from transporting hazardous materials on the tracks and/or storing liquefied petroleum gas at the Schellville Depot. This section of right-of-way is proposed to be transferred to SMART, as discussed beginning on page 71. For additional information, please see Appendix C.

Environmental Remediation and Mitigation

Caltrans' North Region Division of Environmental Planning utilized State Parks' draft report as the basis for its analysis of the corridor. Caltrans approached this analysis from the perspective of a state agency required to comply with state and federal regulations and examined the environmental liability issues that could be anticipated for the Great Redwood Trail if the trail conversion project moves forward. Two main areas of concern for this corridor were identified: wetland mitigation and hazardous material remediation. These areas of concern were analyzed for planning-level costs, resulting in an overall environmental liability of $4 billion for full-development of the 252 – mile trail corridor. This cost is dependent on project design, level of remediation required, and market costs at time of construction. Additional studies are required to get an accurate and detailed cost estimate. Caltrans' assumptions are described below, and costs are itemized by State Parks' trail development phases in Table 4. Further information on Caltrans' assumptions can be found in its memo (Appendix F).

Wetland Mitigation

Wetland mitigation estimates are based on Caltrans knowledge of the North Coast region and the NCRA corridor specifically. The cost estimate of $103 million relied on data gathered and reported in the State Parks' draft Great Redwood Trail Feasibility Study to determine locations where mitigation is likely to be

required. Wetland mitigation liability may be lessened if the trail project does not progress and the right-of-way continues to exist in its current form.

Hazardous Material Remediation

Hazardous waste remediation focused on the potential contamination of an aquifer used for drinking and the possibility of soil and sediment contamination. Chemicals of concern include PCE, Arsenic, PCP, TPHs, heavy metals, petroleum (diesel, gasoline, and waste oils), chromium, PAHs, solvents, benzene, ethylbenzene, toluene, xylene, chlorinated hydrocarbons, non-petroleum hydrocarbons, pesticides, fumigants, dioxin/furans, heating oil, copper, lead, nickel, PCBs, and distillates. These chemicals are common contaminants for this type of land use and were identified in previous studies of the corridor.

Caltrans assumed that full remediation of the rail bed would be required before public trail construction could begin. This makes up the bulk of the cost estimate because if Caltrans were to undertake the trail project, the project would be subject to code requirements and would likely require removal of all ballast (aka gravel) from the railroad bed on the entire 252-mile corridor. The ballast would be treated as hazardous waste (if the railway ballast contains the concentrations of lead and arsenic typically found in ballast), which would require transportation to a cleaning facility and disposal. The trail proponent may be able to mitigate these costs if the resource agencies overseeing toxic substances and hazardous waste were to allow the ballast to remain in place, covered with clean soil or another hard surface treatment (aka "capping" the rail). Costs were estimated based on total removal of ballast for the entire 252-mile corridor.

Figure 19. Abandoned Debris in the Eel River Canyon

A second major cost assumed in this estimate relates to the accessibility of heavy equipment and whether it (and waste debris) could be delivered by truck or would require being airlifted to/from the site. Costs are provided for accessible and inaccessible areas. When calculating costs for ballast and tie removal, it was assumed that 50 percent of the project limit was accessible, and 50 percent was not.

For a full explanation of assumptions used, and a detailed breakdown of items included in the estimate, please see Appendix F.

Table 4. Caltrans Environmental Liability Cost Estimate for the NCRA Corridor

Item	Cost Estimate (Low)	Cost Estimate (High)
Wetland Mitigation	$103,566,500	$103,566,500
Hazardous Waste Remediation	$3,960,342,000	$4,007,700,500
Whole Corridor Environmental Liability TOTAL	**$4,063,908,500**	**$4,111,267,000**
Per Mile Environmental Liability TOTAL	**$16,255,634**	**$16,445,068**

Figure 20. Deferred Maintenance of Tunnel in NCRA Corridor

FREIGHT RIGHTS IN THE SOUTHERN SECTION

Section 17 of SB 1029 appropriates the sum of $4 million to SMART for the acquisition of freight rights and equipment from NWPCo to ensure efficient provision of goods movement requirements in the corridor in the context of growing passenger service. NWPCo has agreed to accept this payment provision but is under no obligation to SMART or the State if another buyer were to make an offer before the transaction agreement is executed.

If the State does not take advantage of this unique opportunity, future capital costs to extend and increase passenger service in the context of a different freight operator may be prohibitive, putting expansion of passenger service on the existing corridor at risk. Using the SB 1029 appropriations to facilitate the acquisition is likely to result in significant cost savings.

Rail Network Connectivity

The California Legislature created SMART in 2002 to operate passenger rail service in the Sonoma-Marin region. This publicly owned rail transit agency operates passenger rail from the Larkspur Ferry Terminal to the Sonoma County Airport and plans to extend its service north to Cloverdale. In addition, SMART owns railroad rights-of-way east from Novato through Ignacio to the Napa Junction at Lombard and has long-term plans to provide passenger rail service to alleviate congestion on State Route 37 (SR 37), a vital regional connector route between Marin and Contra Costa Counties and the Central Valley, that experiences high demand for business, freight, and recreational travel during weekday peak and weekend off-peak hours. SR 37's western terminus begins at its intersection with US 101, just north of Ignacio, and heads east, where it terminates at Interstate 80 in northern Vallejo.

The State has explored developing the east-west corridor for passenger rail transit to alleviate major congestion on SR 37. Caltrans' Traffic Concept Report for SR 37[13] describes long-term planning strategies that include considerations for multi-modal facilities and public transit options to help achieve the operational concept for the corridor. In addition, the 2018 California State Rail Plan[14] identified this corridor as a significant gap in the statewide passenger rail service network. Finally, SMART conducted a study in 2019 in partnership with CalSTA and

[13] https://hwy37.ucdavis.edu/files/upload/resource/TCR%2037-FINAL-SIGNED.pdf
[14] https://dot.ca.gov/programs/rail-and-mass-transportation/california-state-rail-plan

Caltrans to determine the feasibility of rehabilitating existing rail infrastructure for passenger service between Novato and Suisun City. Currently, there is no full-corridor public transportation service in the corridor, and development of the rail network will help to fill this transit gap for the region.

The 2018 California State Rail Plan also identified the State's interest in the Novato - Napa line as a key segment required for the development of a SMART passenger rail link to Napa and Solano counties. Service goals as identified in the plan are intended to deliver service on strategic interregional corridors that provide critical connections for economic mobility and equitable access to jobs, housing, and medical facilities. The SMART corridor is a critical link for the region and state. Therefore, the 2018 California State Rail Plan set the following service goals:

- By 2022: Establish integrated express bus services to connect the communities north of Windsor with SMART and to connect the Napa Valley with intercity services in Solano County and Martinez.
- By 2027: Provide integrated regional rail service from Larkspur to Cloverdale, increasing the utility of the service and providing a rail link between northern Sonoma County and North Coast communities, including integrated express bus services between Napa County and Suisun-Fairfield.
- 2040: Provide half-hourly peak and hourly off-peak service between Cloverdale and Larkspur and hourly service between Suisun City and Novato, with timed connections to service between Cloverdale and Larkspur.

The acquisition of freight rights in the SMART corridor would secure a significant interregional transportation corridor and close a critical gap in the statewide rail network, as identified in the 2018 California State Rail Plan and the SMART Feasibility Study. The acquisition will foster a rail connection between the Solano and Sacramento regions to the North Bay Area and provide resiliency and redundancy along the congested and flood-prone SR 37 corridor.

Operational and Capital Investment Efficiencies

A public transit agency owning both the passenger and freight rights consolidates control of the corridor. Split ownership of rights on the corridor not only increases operational costs for the public transit provider but can also cause delays and otherwise degrade performance. Because SMART does not own the freight easement, it cannot ensure that it receives a financial benefit from the freight operations on its track to offset increased maintenance costs. This arrangement

limits the ability of the passenger operator to efficiently operate a service that is convenient and attractive to passengers.

Currently, the right-of-way between Healdsburg and the Sonoma-Mendocino county line is owned by NCRA. Depending on how NCRA is dissolved and its assets disposed, this arrangement could cause complications for SMART. Common railroad industry practice when a publicly owned passenger service operator does not own the underlying right-of-way is for the host railroad to charge fees above and beyond maintenance and rehabilitation, as well as the cost of any requested improvements in the corridor. Often, the public agency incurs additional costs to pay for projects the host railroad wants completed, regardless of relevancy to the passenger improvements, and regardless of whether the freight operator will make significant use of the improvements. This is specifically relevant to the cost of capital investments that will be needed as SMART extends north to Cloverdale. With SMART owning the freight rights as well as the passenger rights, investments in infrastructure can be tied directly to their immediate usefulness for both freight and passenger movement, and not be invested in prematurely.

Increasingly, the State is moving towards access agreements, whereby the State, the operator, or another public entity pays the host railroad an access fee for dedicated time slots in the host's operations schedule. This is likely to reduce overall project delivery cost but still require payment to a third party. Additionally, there are delays in delivering projects through a host railroad as all modeling and service improvements must be approved by the host railroad. The proposed transfer of freight rights and right-of-way from NCRA to SMART in the southern section insulates the passenger rail service from this additional cost. Likewise, it helps to solidify its role on the east-west corridor and protect against future conflicts.

Emergency Response

Exclusive ownership of the railroad corridor, including all associated rights-of-way and operations (freight and passenger) by a public passenger rail agency such as SMART would provide increased flexibility and sustainability for the railroad owner and operator. Passenger and freight railroads have different operating characteristics and passengers require on-time performance and useful schedules, whereas a small freight operation can be planned around the passenger schedule. By transferring all rights and ownership to SMART, SMART can better manage the railroad to prioritize on-time-performance and adapt schedules to meet changing market demands. Importantly, on the east-west corridor, SMART's exclusive ownership will also strengthen its important emergency

response role in transporting key personnel and meeting evacuation needs during public emergencies. SMART has been a critical part of the region's emergency response to wildfires in the North Bay in the past. It is anticipated that exclusive ownership of the railroad tracks and rights will provide necessary redundancy, resiliency, and emergency support for future climate change impacts, such as flooding and fire, or other emergency freight or passenger transportation needs.

Secondary Benefits

SMART has established a successful public-private partnership with a broadband internet utility provider. Through this partnership, the utility can economically install fiber optic cable and SMART receives additional funding for rail rehabilitation. Full build-out of the SMART system promises to deliver broadband internet along with passenger rail service to rural communities in the northern part of Sonoma County. The current COVID-19 crisis has demonstrated that internet access is as important for daily life as any other utility. Development of the SMART passenger rail service would be a cost-effective way to deliver physical mobility together with broadband internet to rural Californians.

Assets, Rights, Liabilities, and Abilities to be Transferred

SMART owns the real property from Corte Madera north to Healdsburg and east from Ignacio to the Napa Junction in Lombard, as well as passenger rights as far north as Willits. NCRA owns the real property from Healdsburg north to Humboldt County and the freight rights for both sections of right-of-way. (See Figures 1 and 4, on pages 2 and 16, respectively)

Using state funds, SMART will acquire the freight rights in the active SMART corridor and the east-west freight-only corridor between Ignacio and the Napa Junction (aka Napa River), near Lombard. It will also acquire, through a quit-claim deed from NCRA, both the real property and freight rights between Healdsburg and the Sonoma-Mendocino county line.

As described in the *Background* section of this report, NCRA contracts its freight rights to NWPCo, which is an active, low-volume, short-line, privately held, railroad company. NWPCo has agreed to transfer its rights to SMART, thereby transferring its 99-year lease with NCRA and ceasing its operations as a private rail enterprise south of mile post 89.

SB 1029 amended Public Utilities Code Section 105095 to give SMART the authority to provide both freight and passenger rail service. In May 2020, its Board of Directors adopted a Resolution to acquire the NWPCo freight contract and

manage its freight customers. During this transition period the following actions will, or have already, occurred.

1) SMART will enter into a Baseline Agreement with CalSTA that outlines the deliverables of the freight rights acquisition and provides for the transfer of funds to SMART.

2) SMART will enter into an Asset Transfer Agreement with NWPCo to solidify the terms of the agreement and describe assets, rights, responsibilities, and liabilities to be transferred.

3) NWPCo will formally transfer its freight operations to SMART. This is to include management of the existing freight customers; all freight equipment and railcars; maintenance responsibilities for the railroad right-of-way and crossing signals; and coordination responsibilities with local, state, and federal jurisdictions.

4) NWPCo will formally transfer its freight license, issued by the STB, to SMART for the designated right-of-way.

5) NCRA's Board of Directors adopted a Resolution in May 2020, to approve the transfer of freight rights for the entire SMART corridor south of Healdsburg and the transfer of real property between Healdsburg and the Sonoma-Mendocino county line to SMART.

6) SMART will conduct its own market and feasibility studies to explore continued and/or expanded freight service in its corridor.

While SMART is acquiring a private enterprise with the ability to generate revenue, it is also accepting additional responsibilities and costs. As a public agency, the passenger service operator will have the right to expand its freight customer base and use the profits from freight operations to help cover long-term maintenance costs on the entire rail line, including the freight and passenger portions of the right-of-way. Short-term maintenance, however, will require initial funding.

Measure Q, the voter-approved local ordinance that funds and governs SMART activities within the Counties of Sonoma and Marin, provides funding for the design, construction, implementation, operation, financing, maintenance and management of a passenger rail system and a bicycle/pedestrian pathway connecting the 14 rail stations from Cloverdale to Larkspur. It does not contemplate an east-west passenger rail service, and therefore, cannot fund activities in the Novato to Suisun City corridor without additional funding.

Maintenance activities on the freight-only right-of-way from Novato to the Napa River near Lombard are contractually assigned to NWPCo as its only active rail

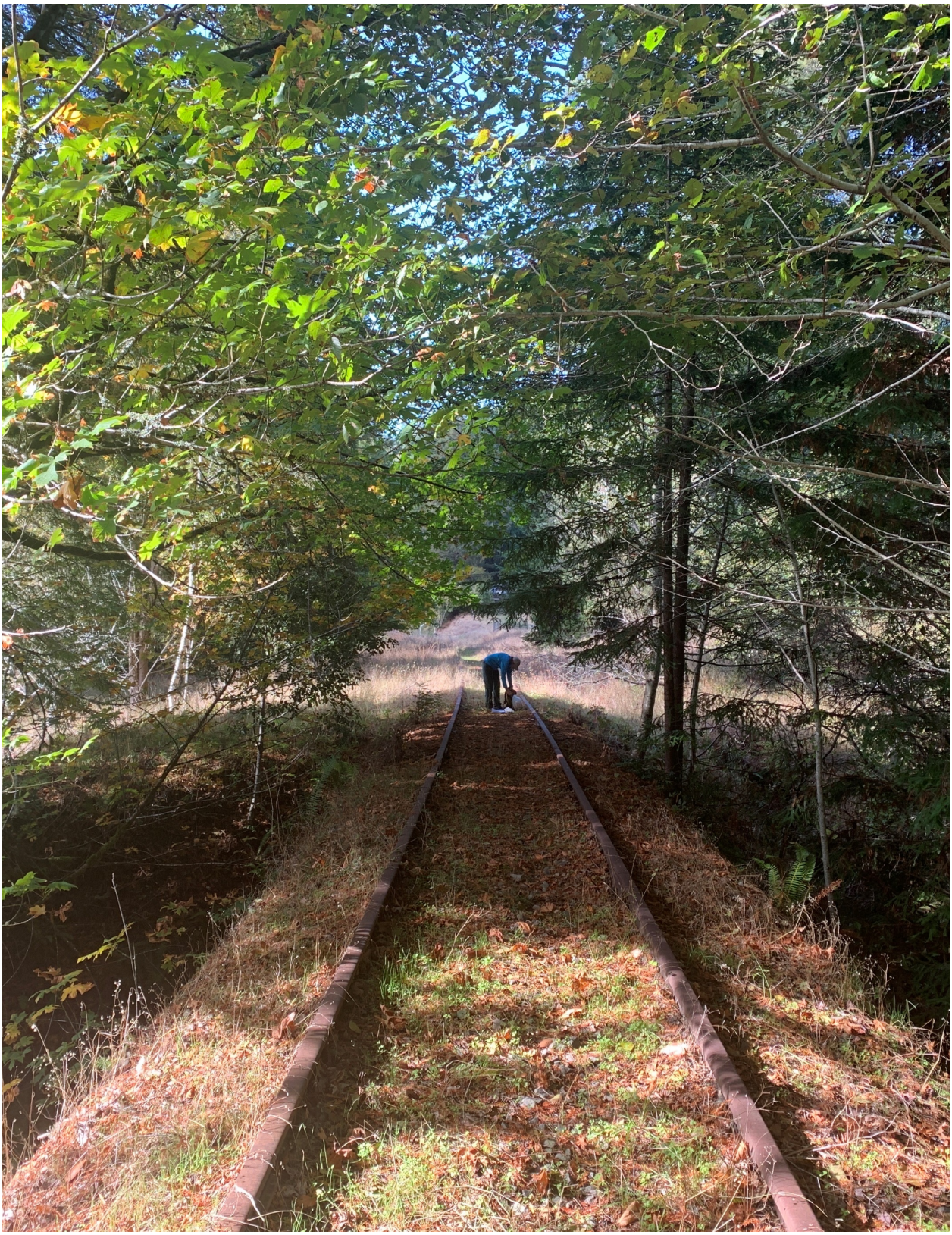
operator, and some repairs have been deferred. While SMART is acquiring the NWPCo business, it is also assuming responsibility for an aging infrastructure needing an estimated $10.5 million in one-time track and signal maintenance repairs and an estimated $450,000 in annual flood, fire, track, and signal maintenance, as well as potential safety repairs.

Cost

As previously described, Section 17 of SB 1029 appropriates $4 million to SMART for the purchase of freight rights from NWPCo. In addition, the Legislature appropriated $2 million[15] in Assembly Bill 74, Budget Act 2019-20 to CalSTA for SMART to be used on safety upgrades and maintenance upon acquisition of a freight contract.

Assembly Bill 74, Budget Act of 2019-20 also appropriates $8.8 million for expenses related to dissolving NCRA, including operations, maintenance, and the retirement of outstanding debts. CalSTA was given discretion over the use of those funds and plans to use $2.4 million to retire the Federal Railroad Administration RRIF Loan. Settling this outstanding debt will release both NCRA and NWPCo, as co-borrowers, from their ongoing quarterly payment obligation to the Federal Railroad Administration.

[15] Item 0521 – 101 - 0001 in Assembly Bill 74, (Ting) Budget Act of 2019



SCENARIO ANALYSES

This section describes five plausible scenarios considered by the Task Force during this assessment and lists other alternative options for further exploration.

Scenario 1: NCRA is dissolved, and its right-of-way is liquidated

Scenario 2: NCRA is dissolved, and its right-of-way is converted to a trail

Scenario 3: NCRA is not dissolved, and its mission is amended

Scenario 4: Do nothing

Scenario 5: A new railroad company buys out NCRA

It is important to note that these scenarios address the northern portion of the NCRA rail line, from the Sonoma-Mendocino county line north to Humboldt Bay and Korbel. The southern portion, including real property and freight rights south of the Sonoma-Mendocino county line and east from Ignacio to Lombard is proposed to be transferred from NCRA to SMART, as described previously in this report.

Considerations for Dissolution of NCRA

Scenarios 1, 2, and 5 contemplate dissolution of NCRA. If one of these options is chosen, it will be necessary to address the following issues.

Outstanding Debt

As of December 31, 2019, total known liabilities were $7.4 million. In addition, one outstanding lawsuit was settled by NCRA in May 2020, which will accrue interest until it is paid. NCRA does not have a revenue stream to cover these debts.

Liquidation

Liquidating NCRA's real property and equipment to pay off these debts requires consideration of the following.

1. All property was purchased with state and federal funds. The Funds Transfer Agreements governing those purchases contain language which requires the property to remain in public transportation use or Title IV projects *in perpetuity*. Alternatively, in the event of sale or other alienation of the property, the State and Federal Highway Administration may demand a return of their *pro rata* share of fair market value or may permit their *pro*

rata shares of fair market value be redirected towards other eligible projects. Generally, south of Willits, the State's share is 10 percent and north of Willits is 100 percent. When NCRA has sold excess property in the past, the CTC has sought reimbursement while the Federal Highway Administration has not. See page 32 for details.

2. This assessment did not include an appraisal or market analysis of the potential revenue that could be generated from the liquidation of assets or of the portion of proceeds that could be retained after the State has been reimbursed. Therefore, additional study would be needed to determine if this revenue would be enough to satisfy the outstanding debt, while also allowing state and federal government programs to recoup their investments.
3. This assessment effort did not include acquisition of individual property title reports and therefore, this assessment report does not have documentation of property liens. However, it is anticipated that liens exist on certain parcels, and in its review of contracts, OSAE did identify equipment that was offered as collateral by NCRA. Specifically, this equipment includes 33 rail cars that are the source of NCRA's most reliable revenue for agency funding.

Conversion to Trail

If the property is used for public transportation purposes and the corridor is converted to a trail, the successor agency will likely not assume all the outstanding debts of the dissolved rail entity. (Some liabilities, such as environmental, may remain with the right-of-way.) Absent available funding, a dissolving agency such as NCRA with outstanding debt will likely be forced into bankruptcy. This option is discussed in more detail with Scenario 4, beginning on page 88.

Lease Agreements and Encroachments

With the transfer of real property and freight rights south of the Sonoma-Mendocino county line, SMART will assume responsibility for maintaining any lease agreements that may exist at the time of NCRA's dissolution. Lease agreements on the 252-mile corridor that spans Humboldt, Trinity, and Mendocino Counties, however, will require legal review.

NCRA maintains approximately 127 paid property lease agreements. These include encroachments from neighboring properties or municipalities that may use excess NCRA land or at-grade-crossings. They also include permanent utility leases, such as AT&T phone lines, PG&E power lines, and cell towers. While NCRA established some leases on its own, it did contract with a professional property

manager, by the name of FEC, for several years. This contract requires payment to FEC of 30 percent of all fees collected on leases negotiated by FEC on NCRA's behalf. The lease payments from all sources constitute NCRA's main source of local funding.

In addition, there are unpermitted encroachments that NCRA has not pursued or abated. Appendix D, *Great Redwood Trail Feasibility, Governance, and Railbanking Report* describes encroachments encountered during field assessment of the corridor, and a list of permitted encroachments was provided by NCRA. This assessment did not cross reference the lists. Dissolution activities will require identifying, addressing, and enforcing property boundary lines.

Liquidation

If NCRA's right-of-way is liquidated at the time of its dissolution, existing lease agreements will need to be assessed on an individual basis depending on the underlying property status. Property that is owned in fee may be offered to the leaseholder to purchase. Property that is owned as a railroad easement may revert to the underlying property owner, who will need to assume or cancel existing lease agreements.

Conversion to Trail

If NCRA's right-of-way is converted to a trail, these agreements will transfer to the successor agency for continued administration and could be a source of minimal agency funding.

Licenses and Permits

As an "active" railroad, NCRA is governed and regulated by the Surface Transportation Board, the Federal Railroad Administration, the California Public Utilities Commission, and various resource-permitting agencies. If the rail line north of the Sonoma-Mendocino county line is dismantled, either to be liquidated or converted to a trail, all three government agencies must be consulted and involved in the process.

- The STB is an independent federal agency charged with the economic regulation of various modes of surface transportation, primarily freight rail. For a railroad to dissolve, it must also file a legal petition for abandonment through the STB[16]. The process is lengthy and involves a public comment period where shippers, receivers, and others have an opportunity to oppose the petition for abandonment. NWPCo currently has fewer than ten regular shippers that it services, and all freight is moved on the southern portion of rail line owned and

[16] In accordance with 49 CFR Part 1152.

managed by SMART. The freight license on the northern portion of the line would need to be addressed as part of the abandonment process and may be denied by the STB.

- The Federal Railroad Administration issues, implements, and enforces railroad safety regulations; invests in rail corridor development and rehabilitation; and is involved in railroad research and technology development.
- The California Public Utilities Commission is the state agency that oversees rail safety in California. The oversight it provides can be broken down into three areas: 1) Railroad Safety; 2) Rail Transit Safety; and 3) Rail Crossing Safety.

Environmental Liability

The NCRA rail corridor contains several types of environmental liabilities which may have to be addressed regardless of a future rail or trail project. As discussed in the *Environmental Liability* section of this assessment report, starting on page 64, overall environmental liability is estimated to be around $4 billion.

While removal of abandoned equipment and rail cars is a high priority for all scenarios considered, the level of subsurface remediation needs more investigation than could be performed during this assessment. It is important to note when considering dissolution of NCRA that the sale of right-of-way containing hazardous material may be complicated and costly and may not relieve NCRA of the liability.

Liquidation

To sell property in California when environmental contamination is a known possibility, a due diligence assessment should be done. Based on the assessment, 39 locations along NCRA's right-of-way were identified to as containing hazardous material. In addition, there may be future locations discovered which, like the known sites, will need further examination and possible remediation prior to liquidation. As the prior property owner, NCRA may be held liable for the cost to remediate contaminants, which may result in a negligible net profit from the sales.

Conversion to Trail

While the station sites identified in the Environmental Consent Decree will need to be remediated, and abandoned equipment removed from the Eel River and along the line, a full remediation may not be required along most of the corridor. Full remediation includes removal, cleansing, and disposal or return of ballast from the railbed. Areas where the track remains intact may not need full remediation and may be capped (covered with soil) instead. More-detailed project design and environmental studies will determine the exact level of contamination and

remediation required for the proposed use. Please see the *Environmental Liability* section starting on page 64 for more detail.

Transitional Administration

Given NCRA's tenuous financial circumstances, it has been contemplated that NCRA may dissolve immediately and its holdings transferred to an interim agency for administration and to manage the liquidation or railbanking process. This option may complicate rather than simplify matters because of NCRA's outstanding debt, potential environmental liability, known and unknown litigation, and numerous lease agreements. Therefore, if NCRA is dissolved, it would be prudent to have a plan in place to address all outstanding issues as well as to manage, liquidate or transfer its assets.

Scenario 1: NCRA is Dissolved, Right-of-Way is Liquidated

In addition to the dissolution considerations described above (outstanding debt, lease agreements and encroachments, licenses and permits, and environmental liability), there are conditions unique to liquidation that must be considered.

Future Rail Opportunities on North Coast Will Be Dissolved Along with NCRA

Acquisition of a contiguous corridor that has low sloping grades, meandering curves conducive to railroads, and connects the Bay Area with Humboldt Bay was difficult in the 1880's due to private property ownership and existing development. Contemplating the possibility of recreating this corridor at some point in the future is daunting. If the NCRA right-of-way is liquidated, the likelihood of acquiring a similar corridor for any use is expected to be astronomically more expensive, time consuming, and complex than retaining the existing corridor.

This policy decision will have far reaching effects for future freight and passenger rail, as well as the current proposed interim use as an active transportation commuter and recreational path.

Title Searches & Reversionary Clauses

If the corridor is liquidated, a detailed examination of individual title reports will be necessary. Based on the DGS assessment, there are more than 2,800 parcels that will need to be reviewed for reversionary clauses prior to disposition. This is discussed in detail on pages 29 and 35.

Sale of Property Owned in Fee

As previously discussed on page 32, fair market value proceeds from the sale of property and equipment purchased with public funds must be returned to the State in the *pro rata* proportion used in the original acquisition (or directed to eligible public transportation projects) and may result in a negative net value when assets are liquidated.

Existing Lease Agreements and Contracts

NCRA maintains many long-term lease agreements and contracts with public utilities, local jurisdictions, private property owners, and other railroads. These agreements may be transferrable to the new owner and will need to be assessed on an individual basis. There may be zoning restrictions enacted by local jurisdictions to protect existing permitted infrastructure (i.e. constructed rail-with-trail segments, and public utilities) that could limit legal uses of the liquidated right-of-way. Federal regulations may govern the assignment or transfer of contracts, depending on their substance. Specific contract review and concomitant research is necessary to resolve this issue.

Impacts on the State

Rail Connectivity

Liquidation of the NCRA right-of-way would eliminate freight and passenger railroad service possibilities in the existing rail corridor through Humboldt, Trinity, and Mendocino Counties from the Bay Area to Humboldt Bay. Liquidation would eliminate a contiguous transportation route that could serve multi-modal purposes, such as an active transportation commuter path and recreational trail, as well as a possible alternate parallel route to US 101 in the region.

Cost to State vs Cost to Local Jurisdictions

Because It is not clear if NCRA is a "local" or "state" agency, or a "special district" it becomes difficult to determine which jurisdiction would manage liquidation of the right-of-way. Liquidation is further complicated because NCRA is a regional railroad with federal oversight under the Federal Railroad Administration and the Surface Transportation Board.

If the right-of-way were to convert to local control, as it does for other local agencies or special districts, the state Government Code provides for the management under The Cortese-Knox-Hertzberg Local Reorganization Act of 2000 (Government Code Section 56036, et seq.). This statute defines a "district" as "an agency of the state, formed pursuant to general law or special act [*id est* Cal. Gov. C. § 93020 et seq.], for the local performance of governmental or

proprietary functions within limited boundaries and in areas outside distinct boundaries when authorized… pursuant to (Government Code) Section 56133[17]".

Because Local Agency Formation Commissions (LAFCO) are organized by county, all four counties with NCRA right-of-way (Humboldt, Mendocino, Trinity, and Sonoma) would have to participate. The individual LAFCOs would need to coordinate and either 1) reach a consensus that one county would take the lead management role or 2) Balkanize the alignment, which would complicate any attempt to railbank.

Alternatively, if a state-legislated railroad with federal oversight dissolves, management is likely to fall back on the State. Generally, DGS takes on management of abandoned state-owned right-of-way. Considering the length of the railroad and complicating factors, this would be a significant new responsibility for DGS.

Scenario 2: NCRA is Dissolved, Right-of Way Converted to a Trail

In addition to the dissolution considerations described above (outstanding debt; lease agreements and encroachments; licenses and permits; and environmental liability), there are conditions unique to conversion to a trail that must be addressed.

Designating a Successor Entity and Determining Effective Trail Governance

Before railbanking and converting the right-of-way to a trail can be pursued, a trail manager must be identified. As described in the *Governance Structure Options* section starting on page 41, the trail management entity, or successor agency, must have enough resources to: 1) handle the railbanking process; 2) maintain the 252-mile corridor, including weed abatement and emergency repairs; 3) maintain existing lease and contractual agreements; and 4) work with local, state, and federal agencies to properly study, remediate, and construct the trail.

As NCRA's organizational structure has shown, the successor entity will need financial support if it is to be successful in its ongoing mission to convert the rail to trail. Please refer to Appendix D, *Great Redwood Trail Feasibility, Governance, and Railbanking Report* for additional details.

[17] Cal. Gov. C. § 56036(a)

Railbanking Process and Transfer of Assets/Liabilities to a Successor

Due to the property ownership complications described earlier, specifically the reversionary clauses, NCRA's right-of-way will need the additional protections afforded a railbanked corridor and financially viable successor agency before it is converted from a rail to a trail corridor. If this step is missed, the corridor is anticipated to lose significant gaps in ownership to underlying property owners, and the proposed trail would abruptly end at the property line or be forced to find alternate routes around the obstructions. Trail proponents would be met with additional complications and cost, while out-of-way travel would significantly increase for trail users, including commuters. Please see Appendix D, *Great Redwood Trail Feasibility, Governance, and Railbanking Report* for additional details.

Environmental Hazards of Converting a Railroad to a Trail

Trail design is a significant factor in determining the level of environmental remediation required. Allowing members of the public to walk on former railroad grades and infrastructure may expose them to potential environmental hazards that they would not be exposed to otherwise. If the rail corridor is converted to a trail, a master planning process would include developing preliminary plans and design leading to the initiation of environmental studies. The environmental hazards identified in this assessment (*Environmental Liability,* starting on page *64)* are based on previous studies and observed conditions during field visits. Further detailed assessments will be necessary for each section of trail.

Trail Master Planning, Stakeholder Involvement, and Cost

Before additional environmental studies or trail conversion can take place, NCRA's successor agency will need to develop a thorough trail master plan. This – 1-year to –3-year process will allow trail proponents to work with stakeholders on identifying opportunities and constraints; establish project development partnerships; and develop an overall theme for the trail; or sections of the trail. It must also identify a funding source to cover the expenses associated with trail development and eventual trail construction. See Appendix D, *Great Redwood Trail Feasibility, Governance, and Railbanking Report* for additional detail.

Impacts on the State

Rail Connectivity

Scenario 2 proposes to stop all railroad services north of the Sonoma-Mendocino county line. Rail has not operated in this section of the corridor for 25 years, so rail connectivity concerns that currently exist will continue. It would be beneficial to

the state's rail network in the long-term to preserve and maintain NCRA's right-of-way through the railbanking process for future railroad use when it becomes economically viable to rehabilitate freight and/or passenger rail in the region.

Public Health and Greenhouse Gas Emissions

Currently, trains are not running in the corridor or emitting greenhouse gases on the northern segment of NCRA's rail line. Therefore, conversion of the rail to a trail will have a negligible impact on air emissions. However, the trail would have public health benefits. As an easy-access multi-use commuter and recreational trail, this active transportation corridor is estimated to attract approximately 1.4 million annual trail users, or 3,800 daily users. Please see the discussion *Economic and Public Health Benefits* on page 60 and Appendix D, for additional detail.

Cost to State vs Cost to Local Jurisdictions

As discussed previously in the *Governance Structure Options* Section starting on page 41 and in more detail in Appendix D, *Great Redwood Trail Feasibility, Governance, and Railbanking Report,* the organizational structure chosen for the trail management agency will determine costs to the State versus costs to local jurisdictions. For Scenario 2, which is to convert the rail to a trail, it is important for the project's success to establish a strong, fiscally viable, successor agency that has the staff resources to meet its mandate.

Scenario 3: NCRA is Not Dissolved, and its Mission is Amended

Another potential scenario involves amending the legislative mandate to allow NCRA to railbank its own right-of-way and convert it to a trail. See the discussion starting on page 49 and Appendix D, *Part II*, for a detailed discussion of NCRA's existing governance structure.

In this scenario, NCRA is both the railroad owner *and* the trail management successor agency. NCRA would need to file abandonment of the railroad with the STB and then proceed with the Railbanking process. While the Task Force found no legal issues to preclude NCRA from taking this action, it did identify the following issues to address for a successful trail development project.

Staff Expertise

During the year and a half that this assessment was being conducted, NCRA's Board of Directors underwent a complete overhaul, with new members having knowledge or experience with trails rather than railroad and freight industries.

Staffing has also undergone some changes, with NCRA's long-time legal counsel being replaced with County Counsel from Sonoma County.

NCRA maintains two full time staff (Executive Director and Administrative Assistant) with additional support from on-call contractors (accountant, engineer, legal, property management etc.). See Appendices B and D for more detailed information on the finances and existing governance structure of NCRA.

For a trail management agency to successfully railbank and implement a trail in NCRA's corridor, it would need to hire staff with expertise in environmental studies, public outreach, master trail planning, and trail construction. While much of the specialized work could be contracted out, it is estimated that NCRA would still require in-house staff with subject matter knowledge to adequately manage the contracts and oversee the effort.

However, NCRA's existing local revenue may not be sufficient to support the necessary skilled and professional staff. (See page 49 for additional information.)

Capital Project Funding

With a new mandate focused on trails, NCRA could qualify to apply for capital project funding that it has not had access to in the past. Because NCRA will be a new grantee to these state and federal programs, it is anticipated that NCRA would need to submit to pre- and post- award audits. NCRA previously received a designation of "High-Risk Grantee" by Caltrans Office of External Audits and Investigations and would need to demonstrate effective financial management to be competitive for capital funding.

Other Issues

As described in the first two scenarios, NCRA, the trail manager, would need to address the following:

1. Outstanding Debt
2. Lease Agreements and Encroachments
3. Licenses and Permits
4. Environmental Liability

Structural Adjustment of NCRA

As described in Part II, Appendix D, *Great Redwood Trail Feasibility, Governance, and Railbanking Report,* NCRA's creation left its staff with the challenge of rehabilitating an aged and decrepit railroad with no dedicated funding source.

The result was an ineffective, quasi-governmental agency that limped along on a shoestring budget for nearly 30 years.

If NCRA is expected to shift gears and take on a new trail management mandate, it is vital that NCRA be restructured to avoid the management and oversight problems discussed starting on page 49 and in Appendix D, Part II. A restructured NCRA should 1) clarify the type of entity it is (local, state, private, special district etc.); 2) identify a source of funding to satisfy all outstanding debt; 3) identify a reliable funding source to adequately cover ongoing staffing and maintenance needs; and 4) identify potential sources of capital project funding. Any public fund involvement should include an oversight agency, be auditable, and assist NCRA to lift its "High-Risk Grantee" designation from Caltrans.

Scenario 4: NCRA Maintains Status Quo

If NCRA is not dissolved, sold, or converted to a trail manager, it is reasonable to assume that NCRA could be forced into bankruptcy. With a calculated net value of (-) $7.2 million, a lack of revenue generating options, a growing list of potential litigants, and a shifting political environment, it is not likely that NCRA will continue to survive on its own.

A Chapter 9 bankruptcy filing could allow NCRA to retain its assets. However, it would need to establish itself as a "municipality" as defined in federal Bankruptcy Code 11 U.S.C. §101(40). Alternatively, a Chapter 11 filing for corporations may require an organizational restructuring and liquidation of assets, in which case, the rail corridor, and the State's investment ($102 million over the last 30 years), could be lost through liquidation by the trustee. A bankruptcy lawyer should be consulted for more detailed information.

Creditors affected by a bankruptcy proceeding are described in the *Financial Assessment* section starting on page 20 and detailed in Appendix C, *OSAE Calculate Value of Net Assets Report*. For the most part, debt holders are independent contractors and small, disadvantaged businesses, with one exception; the Federal Railroad Administration RRIF Loan. While the State is not a co-borrower on the loan, it is not advisable to allow the loan to default.

Deferred maintenance along the corridor would continue to challenge local jurisdictions. Weed abatement, for example, is often conducted by cities and counties on NCRA's right-of-way to reduce fire hazard and vagrancy, which NCRA is billed for after the fact.

Local jurisdictions in Humboldt and Mendocino counties are actively planning and building rail-with-trail segments on NCRA right-of-way. Several segments

have been completed within the last few years and more are close to construction. As described on page 59, it is anticipated that within the populated areas around Humboldt Bay, and within the cities of Ukiah and Willits, local jurisdictions will continue to implement rail-with-trail projects.

Finally, environmental rehabilitation at station sites and in the Eel River Canyon are expected to continue being unaddressed.

Scenario 5: New Railroad Buys Out NCRA

NCRA could sell its right-of-way to a private rail operator. However, with no strong economic draw on the north coast, the associated environmental liability, and costs to rehabilitate the line, the probability of a private railroad company acquiring NCRA is low. The Task Force did not analyze this scenario and no interested parties reached out during the assessment period.

Figure 21. Overgrown foliage

Figure 22. Scenic Eel River Canyon

CONCLUSION

This assessment examined NCRA's known assets and liabilities to inform the Legislature and provide alternatives for dissolving the railroad, dispensing its assets, addressing its liabilities, and examining the constructability of a Great Redwood Trail on the NCRA alignment.

OSAE conducted a *Calculated Value of Net Assets* assessment (Appendix C) by examining NCRA's financial and inventory records; reviewing existing contracts, lease agreements, and legal settlements; and estimating contingent liabilities where possible. OSAE concluded that NCRA has a negative calculated value of net assets of (-) $7.2 million as of December 31, 2019.

The State Parks assessment (Appendix D) evaluated the feasibility of converting the railroad line to a 252-mile multi-use trail and examined options for successor agency governance structures. The assessment included an examination of physical, environmental, and cultural constraints as well as opportunities and planning-level cost estimates. State Parks concluded that although the NCRA railroad corridor is conducive to trail construction and would provide a scenic tourist attraction and active transportation commuter route, the proposed Great Redwood Trail presents significant engineering challenges and high costs. Planning level, full-buildout cost estimates for the entire trail are approximately $1 billion with a cost reduction potential of $86 million. These estimates do not include potentially significant environmental remediation costs estimated at $4 billion that may be required prior to project construction. State Parks also concluded that a central governance structure is preferred to most efficiently meet the railbanking requirements to manage and maintain a multi-jurisdictional trail. A central governing agency should own the entire corridor, have a clear reporting structure, and have a consistent annual funding stream.

The Department of General Services compiled two databases, 1) NCRA – Fee Right-of-way BOE Surveyor Maps Reference, and 2) NCRA Agreements and Contracts. The first database includes 1,800 lines of parcel data for NCRA's right-of-way. The second database is focused on NCRA's agreements and contracts. Both databases have been converted to Adobe Acrobat and are available for viewing on the project website: https://calsta.ca.gov/subject-areas/reports.

The five scenarios explored and assessed consider the dissolution of NCRA, the significant fiscal and legal challenges, and the potential to change the

landscape of rail transportation on the North Coast for many years to come. While the proposed Great Redwood Trail would require significant capital expenditures to restore NCRA right-of-way for use as a trail, it would preserve the rail corridor for future rail use and provides a unique active transportation route for local commuters and recreational tourists.

Next Steps

Because NCRA was created by legislation, its dissolution will likewise require legislation. In addition to dissolving or recasting NCRA, dissolution legislation should address whether to liquidate, sell to another railroad company, or railbank the right-of-way; identify or create a successor trail management agency with a clearly defined governance structure and oversight mechanism; and identify a reliable revenue stream to support that agency. NCRA's right-of-way spans five counties and any changes in use will directly or indirectly affect residents of the entire North Coast region. Prior to liquidation or conversion of the right-of-way, it would be prudent to incorporate stakeholder concerns into the next phase of the project.

While NCRA's fate is considered by the Legislature, NCRA will need to continue to manage the right-of-way, honor existing lease agreements, and complete the railbanking process together with a successor agency.

This report and all appendices are available to the public on the CalSTA website at: https://calsta.ca.gov/subject-areas/reports

Hard copies of this report can be requested from CalSTA at (916) 323-5400.

APPENDIX A.
Statutory Reporting References

GOVERNMENT CODE 13978.9

TITLE 2. GOVERNMENT OF THE STATE OF CALIFORNIA
DIVISION 3. EXECUTIVE DEPARTMENT
PART 4.5. TRANSPORTATION AGENCY

CHAPTER 1. General Duties and Powers

Section 13978.9 (a) Upon the appropriation of moneys by the Legislature for these purposes, the Transportation Agency, in consultation with the Natural Resources Agency, shall conduct an assessment of NCRA to provide information necessary to determine the most appropriate way to dissolve NCRA and dispense with its assets and liabilities. The Transportation Agency shall report to the Legislature before July 1, 2020, on its findings and recommendations from the assessment. The report shall include, but not be limited to, all of the following:

(1) An assessment of NCRA's debts, liabilities, contractual obligations, and litigation.

(2) An assessment of NCRA's assets, including property, rights-of-way, easements, and equipment.

(3) An assessment of NCRA's freight contractor lease, including the contractor's assets and liabilities to the extent that information is available.

(4) A preliminary assessment of the viability of constructing a trail on the entirety of, or a portion of, the property, rights-of-way, or easements owned by NCRA, and recommendations relating to the possible construction of a trail, including both of the following:

(A) Options for railbanking and the governance structure or ownership structure for a new or successor entity that is necessary to railbank property, rights-of-way, and easements along the rail corridor.

(B) A preliminary assessment of which portions of the terrain along the rail corridor may be suitable for a trail.

(5) An assessment of the options for transferring the southern portion of the rail corridor to the Sonoma-Marin Area Rail Transit District and recommendations on the specific assets and liabilities that could be transferred, including rights or abilities to operate freight rail.

(b) The Transportation Agency and the Natural Resources Agency may request the Department of General Services, the Department of Finance, or any department within their agencies, or contract with other entities, to perform the

work the agencies deem necessary to carry out the duties described in this section. Any work done by the Department of General Services, the Department of Finance, or any department within the agencies pursuant to such a request may be conducted using the power and authority of the requested department.

(c) The Transportation Agency shall prioritize the assessment of the southern portion of the rail corridor and may separately report information related to the potential transfer of the southern portion of the rail corridor to the Sonoma-Marin Area Rail Transit District. It is the intent of the Legislature that information and recommendations regarding the potential transfer of the southern portion of the rail corridor to the Sonoma-Marin Area Rail Transit District be provided as expeditiously as possible and not be delayed due to the potential complexity of assessing the northern portion of the rail corridor.

(d) (1) A report to be submitted pursuant to this section shall be submitted in compliance with Section 9795.

(2) Pursuant to Section 10231.5, this section is repealed on January 1, 2024.

GOVERNMENT CODE 93000-93005

TITLE 12. NORTH COAST RAILROAD AUTHORITY

CHAPTER 1. General Provisions

Section 93000. This title shall be known and may be cited as NCRA Closure and Transition to Trails Act.

Section 93003. The Legislature finds and declares that it is in the public interest to dissolve the authority, and to transfer its rights-of-way to other entities for the purpose of potentially developing a trail that could include railbanking and continuing freight where it was operational on January 1, 2018.

GOVERNMENT CODE 93010-93012

TITLE 12. NORTH COAST RAILROAD AUTHORITY

CHAPTER 2. Creation of Authority

Section 93010. (a) The authority is hereby created, having a service area comprising the Counties of Humboldt, Mendocino, Sonoma, and Trinity.

(b) The County of Marin may elect to join the authority and, if that election is made, the authority is expanded to include that county.

GOVERNMENT CODE 93020-93025

TITLE 12. NORTH COAST RAILROAD AUTHORITY

CHAPTER 3. Powers and Duties of Authority

Section 93020. (a) The authority has all of the following powers:

(1) To acquire, own, operate, and lease real and personal property reasonably related to the furtherance of the purposes of this title, the planned transfer of all of its assets, and its dissolution. Any sale, easement, or lease entered into by the authority after August 1, 2018, shall be approved by the California Transportation Commission.

(2) To operate railroads along the rights-of-way where they were in operation on January 1, 2018.

(3) To accept grants or loans from state or federal agencies.

(4) To employ an executive officer, other staff, and consultants deemed appropriate for support of the activities of the authority, to further the purposes of this title.

(b) The authority shall do all of the following:

(1) In coordination with state agencies, immediately begin planning for the transfer of all of the authority's assets and liabilities and for the dissolution of the authority.

(2) Cooperate with its freight contractor to continue freight operations along the rights-of-way where they were in operation on January 1, 2018.

(3) Cooperate with, and provide information upon request to, the Transportation Agency, Natural Resources Agency, or other state or local agencies or contractors working at the direction of the Transportation Agency or Natural Resources Agency.

(4) Cooperate fully with the assessment conducted pursuant to Section 13978.9.

Section 93021. The authority may acquire, own, lease, and operate railroad lines and equipment, including, but not limited to, real and personal property, tracks, rights-of-way, equipment, and facilities, to further the purposes of this title.

Section 93022. The authority shall cooperate with the assessment conducted by the Transportation Agency and Natural Resources Agency pursuant to Section 13978.9, and shall provide access to all authority records, files, documents, accounts, reports, correspondence, and financial affairs to the agencies, and any entity conducting the assessment for the agencies, pursuant to Section 13978.9.

PUBLIC UTILITIES CODE 105095

DIVISION 10. TRANSIT DISTRICTS
PART 16. SONOMA-MARIN AREA RAIL TRANSIT DISTRICT
CHAPTER 4. Powers and Functions of the District
ARTICLE 4. Rail Transit Facilities and Services

105095. The district may provide a rail transit system for the transportation of passengers and their incidental baggage by rail and provision of freight service by rail.

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APPENDIX B.
Public Investment in the NCRA Rail Corridor

The California State Legislature has committed more than $100 million to the NWP line since NCRA was created in 1989. The following breakdown identifies the source and year of funding; the dollar amount programmed and allocated; and the purpose for the expenditure. These historical records of fund disbursement have been gathered by the Task Force and verified by Caltrans, California Transportation Commission, and NCRA. Public Fund Investment in the NCRA Rail Corridor 1989-2020.

Table 5. Public Fund Investment in the NCRA Rail Corridor 1989-2020

Date	Purpose	Fund	Source	Agency	Amount	
Property and Equipment Acquisition						
1991-1992	**Willits to Korbel** *Title acquired in the name of NCRA*	Prop 116	State	NCRA	$ 6,100,000	
1996	**"Willits Segment"** (Healdsburg to Willits and 4 stations) *Title acquired in the name of NCRA*	TCI / TP&D	State	NCRA	$ 596,031	
1996	**"Willits Segment"** (Healdsburg to Willits) *Title acquired in the name of NCRA*; and "**Healdsburg Segment"** (Novato to Healdsburg) and **"Lombard Segment"** (Ignacio to Lombard) *Title acquired in the name of NWPRA*	Q-Fund Loan	Fed	NCRA	$ 12,000,000	
2003	36 Freight Rail Cars, Emergency Repairs to Black Point Bridge	FEMA / OES	Fed	NCRA	$ 7,900,000	
1995	**"Healdsburg Segment"** (Novato to Healdsburg) and **"Lombard Segment"** (Ignacio to Lombard) *Title acquired in the name of NWPRA*	HR2 Demo Project	Fed	NWPRA	$ 9,770,649	
1995		ISTEA Demo Project	Fed	NWPRA	$ 6,179,351	
1995		TCI / TP&D	State	NWPRA	$ 1,488,500	
1995		TCI / TP&D	State	NWPRA	$ 765,469	**$ 44,800,000 SUBTOTAL**

Table 5. (continued)

Rail Rehab / Capital Projects - Humboldt						
1991	*Appropriated, not allocated*	Prop 116	State	NCRA	$ 72,285	
1993-1994	Phase II Capital Improvements - Humboldt	Prop 116	State	NCRA	$ 1,885,923	
2004	Tie Replacements (Northern Projects)	Prop 116	State	NCRA	$ 410,706	
1996	Short-Line Rail Rehab (Northern Projects)	TCI / TP&D	State	NCRA	$ 703,990	
1995	Willits to Eureka- Phase IV Rehab Project	TCI / TP&D	State	NCRA	$ 150,000	
1995	Willits to Eureka- Phase IV Rehab Project	TCI / TP&D	State	NCRA	$ 240,000	
1995	Willits to Eureka- Phase IV Rehab Project	TCI / TP&D	State	NCRA	$ 456,730	
1996	Short line Rehab phase IV-C Project	TCI / TP&D	State	NCRA	$ 48,472	
2010	Novato Quiet Zones, Signal Repair, Black Point Bridge Automation	ISTEA Demo Project	State	NCRA / SMART	$ 8,572,172	**$ 12,540,278 SUBTOTAL**
Rail Rehab / Capital Projects - Mendocino						
1993-19994	Phase II Capital Improvements – Mendocino	Prop 116	State	NCRA	$ 1,257,282	
2004	Tie Replacements (Northern Projects)	Prop 116	State	NCRA	$ 273,804	
1995	Willits to Eureka- Phase IV Rehab Project	TCI / TP&D	State	NCRA	$ 150,000	
2000	TCRP 32.2 - Rail Rehab Windsor to Willits	TCRP	State	NCRA	$ 600,000	
2006	TCRP 32.4 - Marin Levee Repairs/Rehab	TCRP	State	NCRA	$ 1,475,000	
2007	TCRP 32.4 - Fields Landing Levee Repair	TCRP	State	NCRA	$ 690,000	
2007	TCRP 32.4 - Schellville Rail Levee Repair	TCRP	State	NCRA	$ 2,084,000	
2007	TCRP 32.9 - Russian River Crossing Signals	TCRP	State	NCRA	$ 1,530,000	
2007	TCRP 32.9 - Russian River Crossing Signals	TCRP	State	NCRA	$ 7,495,000	
2007	TCRP 32.9 - Tracks Windsor to Lombard	TCRP	State	NCRA	$ 13,588,000	
2008	TCRP 32.9 - Russian River Rehab	TCRP	State	NCRA	$ 1,561,000	
2011	Windsor to Lombard Rail Rehab	RRIF Loan	Fed	NCRA / NWPCo	$ 3,200,000	**$ 33,904,086 SUBTOTAL**

Table 5. (continued)

Rail Rehab / Capital Projects - Marin						
1996	Marin Station Site Improvements	TCI / TP&D	State	NWPRA	$ 2,300,000	**$ 2,300,000**
						SUBTOTAL
Plans, Specs, & Estimate / Project Approval & Environmental Documents						
2000	TCRP 32.3 Capital Assessment Willits North	TCRP	State	NCRA	$ 400,000	
2006	TCRP 32.3 - Russian River EIR	TCRP	State	NCRA	$ 600,000	
2001	TCRP 32.4 - Capital Assessment	TCRP	State	NCRA	$ 100,000	
2006	TCRP 32.4 - Russian River EIR	TCRP	State	NCRA	$ 651,000	
2000	TCRP 32.5 - Env. Consent Decree Remediation (Programmed, not Allocated)	TCRP	State	NCRA	$ 2,665,000	
2001	TCRP 32.5 - Env. Consent Decree Studies	TCRP	State	NCRA	$ 100,000	
2002	TCRP 32.5 - Env. Consent Decree Remediation	TCRP	State	NCRA	$ 1,046,000	
2006	TCRP 32.5 - Env. Consent Decree Studies	TCRP	State	NCRA	$ 289,000	
2006	TCRP 32.9 - Russian River EIR	TCRP	State	NCRA	$ 6,826,000	**$ 12,677,000**
						SUBTOTAL
Debt Reduction						
2000	Q-Fund Trust Account	TCI / TP&D	State	NCRA	$ 810,550	
2000	TCRP 32.6 - Debt Reduction	TCRP	State	NCRA	$ 10,000,000	**$ 10,810,550**
						SUBTOTAL
Defray Administrative Costs						
2000-2001	TCRP 32.1 - Defray Admin Costs	TCRP	State	NCRA	$ 1,000,000	**$ 1,000,000**
						SUBTOTAL
Local Match for Federal Aid Awards						
2001	TCRP 32.8 - (Allocation returned to State)	TCRP	State	NCRA	$ 5,500,000	**$ 5,500,000**
						SUBTOTAL
Dissolution Expenses - SB 1029						
2020	Assessment Studies	2018-19 Gen Fund	State	CalSTA to Task Force	$ 3,000,000	
2020	SMART acquire freight rights (Healdsburg to Lombard)	2019-20 PTA	State	CalSTA to SMART	$ 4,000,000	
2020	2019/2020 NCRA Agency Operating Costs	2019-20 Gen Fund	State	CalSTA to NCRA	$ 500,000	

Table 5. (continued)

2020	Rail Rehab	2019-20 Gen Fund	State	CalSTA to SMART	$ 2,000,000	
2020	Legal Fees - EIR Consent Decree	2019-20 Gen Fund	State	CalSTA to Litigant	$ 2,000,000	
2020	RRIF Loan Payoff	2019-20 Gen Fund	State	CalSTA to FRA	$2,400,000	
2020	Dissolution Expenses - TBD	2019-20 Gen Fund	State	CalSTA	$ 3,900,000	**$ 17,800,000 SUBTOTAL**
				TOTAL State Investment	$ 102,281,914	
				TOTAL Federal Investment	$ 39,050,000	
				TOTAL Public Investment in NWP Line	**$ 141,331,914**	

*Except for the SB 1029 appropriations, the total expended on the NWP Line does not include funds that may have been granted to, or expended by, SMART after the dissolution of NWPRA.

State Programs

Proposition 116 *$10,000,000*

The Clean Air and Transportation Improvement Act of 1990, also known as Prop 116 is a voter-approved state proposition which designates $1.99 billion for specific projects, purposes, and geographic jurisdictions, primarily for passenger rail capital projects. In the NWP Corridor, these funds have been used for right-of-way acquisition for both NCRA and NWPRA/SMART, as well as rehabilitation projects.

Transit Capital Improvement (TCI / TP&D) *$7,509,742*

Transportation Planning & Development (TP&D) Funds are generated from sales tax on diesel fuel, sales tax due to state tax on gasoline above nine cents per gallon, and "over spill" sales tax (4.75 percent tax on taxable goods, including gasoline, in excess of revenue generated from 5 percent state sales tax on all taxable good, except gasoline). Transit Capital Improvement Program is an annual state program funded by the California Transportation Commission with TP&D and Article XIX (state gas tax) funds. Eligible uses include abandoned railroad rights-of-way acquisition; bus rehabilitation; fixed guideway/rolling stock for commuter rail, urban rail, and intercity rail; grade separation; intermodal transfer stations serving various transportation modes, ferry projects, vessels, and terminals; and short-line railroad rehabilitation. In the Northwestern Pacific Railroad corridor these funds were used as "local match" to leverage federal aid funds to acquire right-of-way south of Willits and for rehabilitation projects along the line.

Traffic Congestion Relief Program (TCRP) *$60,000,000*

The Traffic Congestion Relief Program was in effect during the years 2000 – 2018. It was created by the Legislature to provide funding for transportation projects that would improve traffic mobility and relieve congestion; connect transportation systems; and provide for better goods movement. A total of $60 million was appropriated to NCRA and was split into nine different projects (32.1 – 32.9) for use on the entire rail line. These projects covered administration costs; outstanding debts; environmental consent decree projects; "local match" for appropriations in the federal reauthorization bill of 1991, The Intermodal Surface Transportation Efficiency Act (better known as ISTEA); Q-fund trust deposit (see below for more detail); environmental studies; and long-term stabilization/rehabilitation projects.

Public Transportation Account (PTA) *$4,000,000*

The Public Transportation Account is comprised of bond proceeds allocated to capital projects and the sales tax on diesel fuel and can be used for either capital projects or agency operations. SB1029 appropriated these funds to CalSTA for SMART to purchase NWPCo's freight rights and rail equipment.

General Fund *$13,800,000*

The state General Fund makes up the bulk of the annual California State budget (with 75 percent of all appropriations) and allocating monies to state operations and payments to localities. A total of $13.8 million has been appropriated to CalSTA in the State Budget Act of 2019-20 for conducting this assessment; for track rehabilitation in the SMART corridor; and for expenses related to the dissolution of NCRA.

Federal Programs

ISTEA (Fund 368) *$15,000,000*

The federal transportation reauthorization bill, or Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), appropriated funds in Section 1108, Project 13 for Intermodal projects in Northern California for the purchase of right-of-way and to develop a transportation corridor in the existing rail right-of-way from Larkspur to Korbel, and Novato to Lombard. Roughly $4 million of this appropriation was used for right-of-way acquisition, and the remaining $11 million funded rail and depot rehabilitation projects, such as the Ukiah Depot building, in both NCRA and NWPRA corridors.

Q-Fund Loan *$12,000,000*

The federal Q-Fund Loan program provided funding from the Federal Highway Administration Right-of-Way Revolving Fund as authorized by 23 CFR, Chapter I, Subchapter G, Part 712, Subpart G, also known as "Q- Funds." The purpose of the April 1996 loan was to match state funding in the acquisition of the historic

Northwestern Pacific Railroad right-of-way from Larkspur to Willits and Novato to Lombard, also known as the "Willits," "Healdsburg," and "Lombard" segments. As previously described, NCRA retained the Willits segment while NWPRA retained the Healdsburg and Lombard segments and NCRA assumed the entire $12,000,000 loan liability. In the Traffic Congestion Relief Program created in 2000, the Legislature appropriate $5.5 million to help alleviate this debt. The Traffic Congestion Relief Program funds were transferred to a trust fund account, the balance of which was expected to grow with accrued interest and regular deposits by NCRA. The trust account remitted periodic payments on the debt until the balance of the Q-Fund Loan was forgiven under Section 1915 of the 2005 federal transportation reauthorization bill, The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (commonly referred to as SAFETEA-LU), and the remaining state funds were returned to the Traffic Congestion Relief Program.

HR2 (1987) Demonstration Projects (Funds 307, 309) *$9,770,649*

These federal demonstration funds were provided in Section 149(a)(41)(B) of the 1987 federal transportation reauthorization bill, The Surface Transportation and Uniform Relocation Assistance Act adopted in April 1987. The legislation directed the US Secretary of Transportation to carry out a highway project for the purpose of demonstrating the extent to which traffic congestion is relieved on a major north-south segment of the Federal-aid primary system by construction of high occupancy vehicle lanes along a right-of-way which is parallel to a north-south arterial which connects Santa Rosa and Petaluma and connects San Rafael and Healdsburg. These "Demonstration Funds" were used on the Healdsburg and Lombard segment right-of-way acquisitions for NWPRA.

Railroad Rehabilitation & Improvement Financing (RRIF) *$3,180,000*

The Railroad Rehabilitation and Improvement Financing (RRIF) program was established by the 1998 federal transportation reauthorization bill, The Transportation Equity Act for the 21st Century (TEA-21). Under this program, the Federal Railroad Administration is authorized to provide direct loans and loan guarantees up to $35 billion to finance development of railroad infrastructure. Direct loans can fund up to 100 percent of a railroad project with repayment periods of up to 35 years and interest rates equal to the cost of the borrowing by the government. NCRA and NWPCo are co-borrowers on this loan, which funded the final rehabilitation of Windsor to Lombard. This is discussed in more detail in the *Liabilities* section.

APPENDIX C.
OSAE Calculated Value of Net Assets Report

North Coast Railroad Authority

Calculated Value of Net Assets
as of December 31, 2019

Report No. 20-0521-002
April 2020

Team Members

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Final reports are available on our website at http://www.dof.ca.gov.

You can contact our office at:

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DEPARTMENT OF FINANCE
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Transmitted via e-mail

April 13, 2020

Elissa Konove, Undersecretary
California State Transportation Agency
915 Capitol Mall, Room 350B
Sacramento, CA 95814

Final Report—North Coast Railroad Authority, Calculated Value of Net Assets

The California Department of Finance, Office of State Audits and Evaluations, has completed its assessment of the North Coast Railroad Authority's calculated value of net assets, pursuant to Government Code section 13978.9.

The enclosed report is for your information and use. If you have any questions regarding this report, please contact Rick Cervantes, Manager, or Hanzhao Meng, Supervisor, at (916) 322-2985.

Sincerely,

Cheryl L. McCormick

Cheryl L. McCormick, CPA
Chief, Office of State Audits and Evaluations

cc: Leishara Ward, Senate Bill 1029 Project Manager, Division of Rail and Mass Transportation, California Department of Transportation

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DEPARTMENT OF FINANCE
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CALCULATED VALUE OF NET ASSETS REPORT

Elissa Konove, Undersecretary
California State Transportation Agency
915 Capitol Mall, Room 350B
Sacramento, CA 95814

The California Department of Finance, Office of State Audits and Evaluations, has performed a calculation engagement, as that term is defined in the Statement on Standards for Valuation Services (SSVS) of the American Institute of Certified Public Accountants. We performed certain calculation procedures on the North Coast Railroad Authority's (NCRA) assets and liabilities as of December 31, 2019. The specific calculation procedures are detailed in the Background and Scope, and Calculation Results sections of our calculation report. The calculation procedures were performed solely to provide the California State Transportation Agency (CalSTA) information necessary to determine the most appropriate method to dissolve the NCRA and dispense with its assets and liabilities in accordance with Government Code section 13978.9, and the resulting calculation of value should not be used for any other purpose or by another party for any purpose. This calculation engagement was conducted in accordance with the SSVS. The estimate of value that results from a calculation engagement is expressed as a calculated value, with additional information if a calculated value cannot be obtained.

As agreed upon with CalSTA, we applied the asset approach, adjusted net asset method, to estimate the value of NCRA's assets and liabilities as of December 31, 2019, excluding the estimated values for capital assets and contingent liabilities. A calculation engagement does not include all of the procedures required for a valuation engagement, as that term is defined in the SSVS. Had a valuation engagement been performed, the results might have been different.

Based on our calculation as described in this report, which are based solely on the procedures agreed upon as referred to above, and facts and circumstances as of the calculation date, the resulting calculated value of NCRA's net assets as of December 31, 2019, is $(7,239,933). This calculated value excludes capital assets and contingent liabilities and is subject to the Assumptions and Limiting Conditions, and Valuation Representation described in Appendices A and B. We have no obligation to update this report or our calculated value for information that comes to our attention after the date of this report.

Cheryl L. McCormick

Cheryl L. McCormick, CPA
Chief, Office of State Audits and Evaluations
March 12, 2020

BACKGROUND AND SCOPE

The California Department of Finance, Office of State Audits and Evaluations, conducted a calculation engagement of the North Coast Railroad Authority's (NCRA) assets and liabilities in accordance with Government Code section 13978.9. The California State Transportation Agency (CalSTA), in consultation with the California Natural Resources Agency, is responsible for conducting an assessment to provide information necessary to determine the most appropriate method to dissolve the NCRA and dispense with its assets and liabilities. Our responsibilities and objectives were to:

- Conduct an assessment of NCRA's debts, liabilities, contractual obligations, and litigation.
- Conduct an assessment of NCRA's assets, except for the estimated values for equipment and real properties with property rights.
- Conduct an assessment of NCRA's freight contractor lease, including the contractor's assets and liabilities, to the extent that information is available.

As agreed upon with CalSTA, our assessment did not include the estimated values for equipment, real properties with property rights, and contingent liabilities. Consequently, our calculated value as of December 31, 2019 excluded values for these items. The California Department of General Services (DGS) conducted the assessment for NCRA's real properties and associated property rights, including easements and encroachments. The California Department of Parks and Recreation (Parks) and its consultants, assessed NCRA's facilities and rail line conditions, including identifying equipment along the rail line and locations with potential environmental issues. We worked in partnership with DGS and Parks, and compiled lists of equipment and contingent liabilities based on the information available to us, and verified the existence of the equipment whenever possible.

In conducting the assessment and determining the calculated value, we focused on NCRA's business transactions between July 1, 2016 and December 31, 2019, and expanded this period when necessary to the extent the information was available to us. We interviewed individuals from NCRA, including NCRA's board, California Department of Transportation (Caltrans), Sonoma-Marin Area Rail Transit District (SMART), and Northwestern Pacific Railroad Company (NWP Co.); reviewed NCRA's and NWP Co.'s accounting records and other available documents; reviewed working papers of the independent auditors of NCRA and NWP Co.; obtained third-party confirmations and representation on financial and legal information and equipment conditions; and conducted visits of select NCRA depots to verify equipment. Because not all records were available and NCRA was only able to provide limited information on NCRA activities, though the current NCRA management has been in place since 2003, we determined the calculated value based on certain assumptions, as cited in the report and disclosed in Appendix A.

CALCULATION RESULTS

Based on the calculation procedures performed, facts and circumstances as of the calculation date, and assumptions made, the calculated value of NCRA's net assets as of December 31, 2019, is $(7,239,933). This calculated value excludes capital assets (equipment and real properties) and contingent liabilities. Table 1 summarizes our calculation results.

Table 1: Calculated Value of NCRA's Assets and Liabilities as of December 31, 2019

Description	Calculated Value
Railroad Rehabilitation & Improvement Financing Loan	$ (2,403,899)
Debts owed to NWP Co.	(3,321,721)
Professional Services Payables	(1,000,657)
Employment Related Liabilities	(235,365)
All Other Payables	(446,979)
Total Liabilities	**$ (7,408,621)**
Cash	$ 104,857
Accounts Receivable, net of Allowance for Bad Debt	41,378
Other Current Assets	22,453
Total Assets	**168,688**
Total Calculated Value	**$ (7,239,933)**

LIABILITIES

Railroad Rehabilitation & Improvement Financing (RRIF) Loan

Summary

NCRA, NWP Co., and the Federal Railroad Administration (FRA) entered into the Financing Agreement Between Northwestern Pacific Railroad Company and North Coast Railroad Authority and the United States of America represented by the Secretary of Transportation acting through the Administrator of the Federal Railroad Administration (RRIF Loan Agreement) in November 2011. Under the agreement, the FRA agreed to loan NCRA and NWP Co. up to $3.18 million for allowable project costs. The loan bears an interest rate of 2.96 percent per annum, and is due and payable in full 25 years after the date of the drawdown. NCRA-owned rail cars and equipment were pledged as collateral to secure the loan, as discussed in the **Equipment and Other Capital Assets** section.

Analysis

- NCRA and NWP Co. are jointly and severally liable parties to the loan, and may prepay the loan without penalty or premium.
- NWP Co. paid a $25,000 RRIF loan application fee in April 2009 and a $131,970 credit risk premium for the $3.18 million loan drawdown in November 2011. See the **Debts Owed to NWP Co.** section for details related to the RRIF Loan Agreement fees.

- In October 2011, prior to the execution of the RRIF Loan Agreement, NCRA and NWP Co. entered into a Memorandum of Understanding – FRA Loan (MOU FRA). The agreement required NWP Co. to loan NCRA $15,000 per month for NCRA operating expenses as discussed in the **Debts Owed to NWP Co.** section, and required NWP Co. to fund the NCRA quarterly RRIF loan payment. The quarterly RRIF loan payment was further defined as $45,115 in the November 2011 promissory note to the FRA. Since March 2012, NWP Co. has consistently made the quarterly payments.

Results

As of December 31, 2019, NCRA's recorded RRIF loan balance was $2,403,899. The balance was independently confirmed by FRA and is valid.

Debts Owed to NWP Co.

Incorporated in June 2006, NWP Co. is a freight carrier operating 62 route miles of rail between Lombard and Windsor in California.[18] Shortly after its inception, NWP Co. and NCRA entered into the Agreement for the Resurrection of Operations Upon the Northwestern Pacific Railroad Line and Lease (Operating Agreement) in September 2006, for the resurrection of operations along the Northwestern Pacific Railroad Line between Willits and Healdsburg, including its freight easements between Healdsburg and Lombard.

The Operating Agreement had an initial term of five years, with options to extend. In September 2011. NWP Co. sent a Notice of Action to extend the agreement term by 20 years. Under the agreement, NWP Co. is required to remit annual lease payments in the amount of 20 percent of net income, commencing in the first year after NWP Co. has generated positive net income in excess of $5.0 million. In June 2011, the Operating Agreement was amended to require NWP Co. to remit $25,000 monthly lease payments. The lease payment requirement was waived and the obligation was terminated upon the execution of the MOU FRA, as discussed later in this section.

Since September 2006, NCRA and NWP Co. have maintained a close financial and operational relationship. While NCRA struggled to become financially sustainable, it incurred significant debt through continued borrowing from NWP Co. Specifically, NCRA entered into 8 agreements, 7 amendments, and 1 informal financing arrangement with NWP Co. to fund NCRA's operations. It also incurred a trade payable obligation. As of December 31, 2019, our calculated value of NCRA's debts owed to NWP Co. totaled $3,321,721, as detailed in Table 2.

[18] Excerpt from NWP Co.'s audited financial statements for the years ended December 31, 2017 and 2016.

Table 2: Debts Owed to NWP Co.

	Description	Balance Recorded as of December 31, 2019[19]	Calculation Adjustments	Calculated Value as of December 31, 2019
1	Memorandum of Understanding between North Coast Railroad Authority and Northwestern Pacific Railroad Company for Interim Financing and Amendment	$ 1,577,910	$ (9,035)	$ 1,568,875
2	Bridge Financing and Security Agreement and Amendment	681,423	0	681,423
3	Marin Consent Decree Security Agreement	780,465	0	780,465
4	Agreement to Complete Reopening Project Lombard to Windsor and Amendments	693,305	(59,138)	634,167
5	Memorandum of Agreement – FRA	31,857	0	31,857
6	Informal Financing Arrangement	65,304	(410,304)	(345,000)
7	Agreement for Loan for NCRA Operations, Allocation and Payment of Legal Fees, Disposition of Real Estate	5,949	0	5,949
8	Fees Related to RRIF Loan Agreement	94,181	(172,428)	(78,247)
9	Ukiah Depot Remediation Agreement and Amendments	334	0	334
10	Trade Accounts Payable Owed to NWP Co.	57,498	(19,908)	37,590
11	Interest Related to Legal Fees	4,308	0	4,308
	Total	$ 3,992,534	$ (670,813)	$ 3,321,721

Memorandum of Understanding between North Coast Railroad Authority and Northwestern Pacific Railroad Company for Interim Financing and Amendment

Summary

In October 2006, NCRA and NWP Co. entered into the Memorandum of Understanding between North Coast Railroad Authority and Northwestern Pacific Railroad Company for Interim Financing (2006 MOU), effective September 20, 2006. The 2006 MOU and the April 18, 2007 amendment, obligated NWP Co. to make advance lease payments of $20,000 per month to NCRA, starting September 2006.

[19] The Balance Recorded as of December 31, 2019, as noted in the various tables throughout the report, refers to NCRA's general ledger.

Analysis

- NWP Co. made advance lease payments of $20,000 per month between September 2006 and February 2011, in accordance with the 2006 MOU.
    - We verified NCRA received these amounts by reviewing the recorded cash transactions in NCRA's general ledger. Although we did not review the bank statements or deposit slips to verify the receipt of these amounts, we assumed NCRA's general ledger for the cash account reflected the actual cash activities of the bank as the bank accounts have been maintained, managed, and reconciled by Sonoma County since 2001. We confirmed the general ledger cash balance as of December 31, 2019 to the bank statements.
- The principal debt from the $20,000 monthly payments totaled $1,060,000, which was agreed by NCRA and NWP Co. Additionally, the principal balance agreed to NCRA's independent audited financial statements dating back to the period ending June 30, 2012. The principal balance of $1,060,000 remained outstanding as of December 31, 2019.
- The Bridge Financing and Security Agreement (Bridge Financing Agreement), as discussed below, retroactively obligated NCRA to pay interest on previously borrowed funds included in the 2006 MOU at NWP Co.'s cost of borrowing.
    - NWP Co. calculated the interest amounts using a simple interest formula based on the number of days the balance was outstanding.
    - The annual interest rates ranged from 4.25 percent to 8.38 percent for the period September 2006 through December 2019, based on NWP Co.'s invoices. We compared these rates to the annual average of historical bank prime rates and the 30-year fixed mortgage rates between 2006 and 2019, and noted NWP Co.'s interest rates varied less than 0.15 percent on average from these rates. As such, we assumed interest rates used by NWP Co. reflected its actual borrowing rates and assessed the interest associated with the advance lease payments accordingly.
- Instead of maintaining an interest payment schedule for amounts borrowed, NCRA recorded interest amounts based on NWP Co.'s invoices, unless it disagreed with NWP Co.'s calculation. NCRA recorded interest for the advance lease payments totaled $517,910 as of December 31, 2019. However, based on our assessment, the amount should be reduced by $9,035, to $508,875.
    - Starting February 2011, the interest per NWP Co.'s invoices was calculated using an incorrect loan balance of $1,080,000. Although NCRA was aware of the incorrect loan balance in NWP Co.'s invoices, NCRA continued to record the incorrect interest billed until June 2018.
    - While the incorrect loan balance was first identified in February 2011, we did not have sufficient information to determine the date NWP Co. first began calculating the interest using the incorrect balance. Therefore, we reduced the balance only when the total displayed on the invoice exceeded $1,060,000.

Results

NCRA owed NWP Co. $1,060,000 as of December 31, 2019, for advance lease payments received between September 2006 and February 2011. The recorded $1,060,000 balance is valid and supported. Although NCRA's general ledger recorded $517,910 interest associated with this balance, this amount should be reduced by $9,035, to $508,875, because an incorrect balance of $1,080,000 was used to calculate interest starting February 2011. Table 3 summarizes our calculated value for the 2006 MOU and its amendment.

Table 3: Calculated Value for 2006 MOU and Amendment

Description	Debt Incurred	Balance Recorded as of December 31, 2019	Calculation Adjustments	Calculated Value as of December 31, 2019
Principal	$ 1,060,000	$ 1,060,000	$ 0	$ 1,060,000
Interest	517,910	517,910	(9,035)	508,875
Total	**$ 1,577,910**	**$ 1,577,910**	**$ (9,035)**	**$ 1,568,875**

Bridge Financing and Security Agreement and Amendment

Summary

Beginning in September 2007, NWP Co. and NCRA entered into a Bridge Financing Agreement, and later an amendment, for NWP Co. to loan NCRA funds to pay for restoration work under federal transportation programs. The Bridge Financing Agreement established interest on the outstanding loan balance to be accrued at NWP Co.'s cost of borrowing, and required NCRA to repay NWP Co. with funds reimbursed by the funding agencies. NCRA's equipment was used as collateral to the loan, as discussed in the **Equipment and Other Capital Assets** section.

Analysis

- According to NCRA's general ledger and NWP Co.'s invoices, NCRA has received and repaid $8,658,443 borrowed between October 2006 and January 2011.
    - We verified NCRA received and repaid these funds by reviewing NCRA's general ledger cash account, assuming it reflected the actual cash activities of the bank. We also assumed all amounts borrowed were used to fund authorized project costs pursuant to the Bridge Financing Agreement.
    - Although we did not review supporting documents associated with the project costs, these costs were reviewed and approved by the funding agencies before the reimbursements were made to NCRA; therefore, we assumed the amounts borrowed were for allowable project costs under federal transportation programs. Based on this assumption, the loans were authorized under the Bridge Financing Agreement.

- NWP Co.'s invoices indicated the interest was calculated by multiplying the outstanding balance by the daily interest rate by the number of days the balance was outstanding.
    - NCRA received loans from NWP Co. and repaid loan balances intermittently and the loan balance continuously fluctuated. Therefore, the number of days outstanding were determined by comparing the borrowing and repayment dates for each amount loaned.
    - Interest accrued on the outstanding loan balance and the interest amounts.
    - Based on our assessment, the interest amount was calculated using the correct outstanding balances, days outstanding, and interest rates provided by NWP Co. We assumed these rates reflected NWP Co.'s cost of borrowing. As of December 31, 2019, outstanding interest amount under the Bridge Financing Agreement totaled $681,423.
- The amendment to the Bridge Financing Agreement obligated NWP Co. to loan NCRA an additional $425,000 for costs associated with a 2008 Consent Decree with the City of Novato, as discussed in the *Marin Consent Decree Security Agreement* below. The amendment also specified interest to accrue at a rate of 8 percent annually on loaned funds. However, our review of NWP Co.'s invoices indicated the 8 percent interest rate was only applied to the amounts associated with the $425,000 loan.

Results

NCRA has repaid $8,658,443 borrowed from NWP Co. pursuant to the Bridge Financing Agreement and amendment. Interest accrued on the borrowed amounts and unpaid interest totals $681,423 is valid and supported, and remained outstanding as of December 31, 2019. Table 4 summarizes our calculated value for the Bridge Financing Agreement.

Table 4: Calculated Value for the Bridge Financing Agreement

Description	Debt Incurred	Balance Recorded as of December 31, 2019	Calculation Adjustments	Calculated Value as of December 31, 2019
Principal	$ 8,658,443	$ 0	$ 0	$ 0
Interest	681,423	681,423	0	681,423
Total	**$ 9,339,866**	**$ 681,423**	**$ 0**	**$ 681,423**

Marin Consent Decree Security Agreement

Summary

NCRA and NWP Co. entered into the Marin Consent Decree Security Agreement (Marin Consent Agreement) effective January 2009, requiring NWP Co. to loan NCRA $425,000 for legal fees and ameliorative measures or improvements related to the 2008 Consent Decree with the City of Novato. Any unpaid balance is subject to an 8 percent annual interest rate. NCRA's equipment was used as collateral to the loan, as discussed in the **Equipment Other Capital Assets** section.

Analysis/Results

NWP Co. was listed as a real party to the 2008 Consent Decree and made two payments totaling $325,000 to the City of Novato in October 2008 and December 2008. Although the payments were made prior to January 2009, the effective date of the Main Consent Agreement, the payments were assumed to be valid because NWP Co. was a party to the 2008 Consent Decree with the City of Novato. An additional payment of $100,000 was made by NWP Co. in July 2011. We verified the payments to NWP Co.'s bank records. Based on our review of NCRA and NWP Co.'s accounting records and recalculation of interest, we determined the $425,000 loan balance and the associated $355,465 interest were valid and supported as of December 31, 2019. Table 5 summarizes our calculated value for the Marin Consent Agreement.

Table 5: Calculated Value for the Marin Consent Agreement

Description	Debt Incurred	Balance Recorded as of December 31, 2019	Calculation Adjustments	Calculated Value as of December 31, 2019
Principal	$ 425,000	$ 425,000	$ 0	$ 425,000
Interest	355,465	355,465	0	355,465
Total	**$ 780,465**	**$ 780,465**	**$ 0**	**$ 780,465**

Agreement to Complete Reopening Project Lombard to Windsor and Amendments

Summary

In March 2010, NWP Co. and NCRA executed the Agreement to Complete Reopening Project Lombard to Windsor (Reopening Project Agreement), which was an authorized use of RRIF loan funds. The agreement required NWP Co. to perform the project work and loan NCRA funds to pay project costs, with interest accrued at NWP Co.'s cost of borrowing. The loan was collateralized with NCRA's equipment, as discussed in the **Equipment and Other Capital Assets** section. In September 2010 and November 2011, the Reopening Project Agreement was amended to not exceed $3.174 million.

Analysis

- NWP Co. loaned NCRA a total of $3,173,615 for project costs between March 2010 and August 2011.
    - We verified the loan receipts through reviews of NCRA's general ledger and NWP Co.'s invoices. We did not review supporting documents related to the project costs, such as timesheets and vendor invoices, but assumed all project costs were project-related, supported, and complied with the RRIF loan requirements. The total project cost and loan amounts did not exceed the amounts listed in the Reopening Project Agreement and amendments.

- NCRA repaid NWP Co. with $2,659,374 RRIF loan proceeds and $74,949 from its Petaluma easement sale.
    - The payment of the RRIF loan proceeds to NWP Co. complied with the Reopening Project Agreement, and the use of Petaluma easement sales proceeds was properly approved by NCRA's board. We validated payments totaling $74,949 by tracing to the corresponding cash account transactions in the general ledger with the assumption the general ledger for the cash account reflected the actual cash activities of the bank.
- NWP Co. eliminated fees associated with the loan, requiring NCRA to repay 88.5 percent of borrowed amounts (reduced loan balance). These reduced balances were used to calculate interest at NWP Co.'s cost of borrowing. However, NCRA's general ledger did not reflect the reduced loan balance.
    - The outstanding loan balance after NCRA applied the $2,659,374 RRIF loan proceeds was $514,241 ($3,173,615 - $2,659,374) as of December 2011. This amount should be reduced by $59,138, to $455,103 to reflect 88.5 percent of the loan balance ($455,103 = $514,241 x .885).
    - NCRA's payments of $74,949 should further reduce the outstanding loan balance to $380,155 ($455,103 -$74,949). This amount is $59,138 less than NCRA's recorded loan balance of $439,293 as of December 31, 2019.
- NWP Co. calculated interest associated with the reduced loan balance by using NWP Co.'s cost of borrowing as the interest rate.
    - We performed interest recalculations for March 2010 through December 2010 using NWP Co.'s calculation methodology, since NCRA was unable to provide invoices for this period. Our recalculation was based on the March 2010 through December 2010 project costs included in the NWP Co.'s September 2011 invoice and the interest rate from NWP Co.'s interest rate schedule, assuming this rate reflected NWP Co.'s actual cost of borrowing.
    - We reviewed invoices for January 2011 through December 2011, to determine whether NWP Co. calculated interest using the correct methodology, loan principle balance, interest rate applied, and number of days outstanding.
    - We recalculated interest from January 2012 to December 2019, since the invoices provided included incorrect principal balances, primarily due to NWP Co. not applying the Petaluma proceeds of $74,949 to the outstanding loan balance. Although variances exist between our interest assessment and NCRA's recorded interest amounts, the overall difference was less than $600 so an adjustment was not made.

Results

NCRA's recorded loan balance of $439,293 should be reduced by $59,138 to $380,155; however, NCRA's recorded interest balance of $254,012 was valid and supported as of December 31, 2019. Table 6 summarizes our calculated value for the Reopening Project Agreement.

Table 6: Calculated Value for the Reopening Project Agreement

Description	Debt Incurred	Balance Recorded as of December 31, 2019	Calculation Adjustments	Calculated Value as of December 31, 2019
Principal	$ 3,173,615	$ 439,293	$ (59,138)	$ 380,155
Interest	254,012	254,012	0	254,012
Total	**$ 3,427,627**	**$ 693,305**	**$ (59,138)**	**$ 634,167**

Memorandum of Agreement – FRA Loan; Informal Financing Arrangement; and Agreement for Loan for NCRA Operations, Allocation and Payment of Legal Fees, Disposition of Real Estate

Summary

- In October 2011, NWP Co. and NCRA executed the MOU FRA, which required NWP Co. to loan NCRA $15,000 per month for NCRA's general operating expenses commencing in the month NWP Co. received RRIF proceeds, and continuing until the Ukiah Depot sales proceeds were received or July 1, 2012, whichever is earlier. The loan accrued interest at NWP Co.'s cost of borrowing. Accordingly, NCRA recorded $15,000 monthly loan receipts from NWP Co. under the MOU FRA between October 2011 and June 2012, totaling $135,000.
- Between July 2013 and January 2016, NCRA recorded a series of $15,000 loans totaling $345,000 that accrued interest at NWP Co.'s cost of borrowing. These loans were made under an informal financing arrangement between NWP Co. and NCRA without an executed written agreement approved by NCRA's board.
- In July 2016, NWP Co. and NCRA executed an Agreement for Loan for NCRA Operations, Allocation and Payment of Legal Fees, Disposition of Real Estate (Operations Loan Agreement) which required NWP Co. to loan NCRA $15,000 per month for six months at interest commensurate with NWP Co.'s cost of borrowing. Between June 2016 and November 2016, NCRA received a total of $90,000 from NWP Co. under this agreement.
- The three agreements/financing arrangements totaled $570,000.

Analysis

- We reviewed the general ledger for the cash accounts and verified NCRA recorded the cash receipts for all above amounts, based on the assumption that the general ledger for the cash account reflected the actual cash activities of the bank.
- NCRA repaid outstanding balances totaling $570,000 as of February 2018, in three payments.
    - In applying these payments to the loan balances, we assumed the oldest loan was repaid first, and used this assumption in assessing the interest associated with each loan.

  - NCRA should not have repaid the $345,000 borrowed under the informal financing arrangement in absence of a board-approved executed written agreement. Both NWP Co. and NCRA confirmed a written agreement was not executed. Pursuant to the MOU FRA, modifications to the MOU FRA were required to be in writing and signed by all parties, and while we did see evidence of loan negotiations in e-mails, this method of communication did not meet the modification requirements. Therefore, NCRA's payment of $345,000 is available to reduce other debts NCRA owed to NWP Co.

- NCRA recorded $103,110 interest related to the three agreements/financing arrangement that were outstanding as of December 31, 2019.
  - Amounts associated with the MOU FRA and Operations Loan Agreement totaling $37,806 ($31,857 + $5,949) were valid based on the interest rates provided by NWP Co., and the assumptions that amounts were received on the first day of each month and the MOU FRA loan was repaid first. We also assumed interest rates used by NWP Co. reflected its actual borrowing rates.
  - Interest associated with the informal financing arrangement in the amount of $65,304 should not be included in NCRA's debts owed to NWP Co. due to the lack of an executed board-approved written agreement for the underlying loan.

Results

Loans pursuant to the MOU FRA and the Operations Loan Agreement totaling $225,000 ($135,000 + $90,000) are valid, supported, and repaid. The associated interest totaling $37,806 was also valid and remained outstanding as of December 31, 2019. However, the $345,000 borrowed and repaid under the informal financing arrangement in absence of an executed written agreement approved by NCRA's board is not a valid loan. Therefore, NCRA overpaid $345,000 to NWP Co. Accordingly, interest associated with this amount totaling $65,304 should also be excluded from debts owed to NWP Co. Table 7 summarizes our calculated value for the MOU FRA, the informal financing arrangement, and the Operations Loan Agreement.

Table 7: Calculated Value for the MOU FRA, Informal Financing Arrangement, and Operations Loan Agreement

Description	Debt Incurred	Balance Recorded as of December 31, 2019	Calculation Adjustments	Calculated Value as of December 31, 2019
MOU FRA				
Principal	$ 135,000	$ 0	$ 0	$ 0
Interest	31,857	31,857	0	31,857
Subtotal MOU FRA	**$ 166,857**	**$ 31,857**	**$ 0**	**$ 31,857**
Informal Financing Arrangement				
Principal	$ 345,000	$ 0	$ (345,000)	$ (345,000)
Interest	65,304	65,304	(65,304)	0
Subtotal Informal Financing Arrangement	**$ 410,304**	**$ 65,304**	**$ (410,304)**	**$ (345,000)**
Operations Loan Agreement				
Principal	$ 90,000	$ 0	$ 0	$ 0
Interest	5,949	5,949	0	5,949
Subtotal Operations Loan Agreement	**$ 95,949**	**$ 5,949**	**$ 0**	**$ 5,949**
Total Principal	**$ 570,000**	**$ 0**	**$ (345,000)**	**$ (345,000)**
Total Interest	**$ 103,110**	**$ 103,110**	**$ (65,304)**	**$ 37,806**

Fees Related to RRIF Loan Agreement

Summary

The RRIF Loan Agreement established NCRA and NWP Co. as co-borrowers on the loan of $3.18 million to fund authorized projects. NWP Co. paid a $25,000 loan application fee in April 2009, and a $131,970 credit risk premium for the drawdown of $3.18 million in November 2011. These amounts, including associated interest, were recorded as NCRA's debts owed to NWP Co.

Analysis

- NCRA recorded the $25,000 RRIF loan application fee as an advance from NWP Co. This amount accrued interest of $2,597 from April 2009 to September 2011. NWP Co. agreed to settle this debt with unpaid equipment rent (equipment credit) due to NCRA. The use of the $25,000 equipment credit was approved by NCRA's board in its October 2011 board meeting.
    - Based on our review of the board meeting minutes and inquiries with NCRA, we were unable to locate an executed written loan agreement approved by the board to authorize this advance as a loan. Therefore, the $2,597 in accrued interest should not be included in the debts owed to NWP Co. Additionally, the $25,000 equipment credit NCRA used to settle this balance should be available for other debts owed to NWP Co.

- NCRA recorded the $131,970 credit risk premium as debt owed to NWP Co., even though NCRA and NWP Co. are co-borrowers and thus equally responsible for the loan. According to NCRA's general ledger, NCRA applied $53,247 equipment credit to reduce the balance from $131,970 to $78,723. This amount remained outstanding as of December 31, 2019.
    - Based on our inquires with NCRA and the review of its board meeting minutes for 2011, NCRA and NWP Co. did not enter into a written agreement or obtain board approval that obligated NCRA to repay NWP Co. for the credit risk premium. Accordingly, the recorded interest of $12,861 should be excluded from debts owed to NWP Co. Additionally, the $53,247 equipment credit used to reduce the balance should be available for other debts owed to NWP Co.

Results

Absent an executed written agreement approved by the board, NCRA should not have recorded liabilities for the $25,000 RRIF loan application fee or the $131,970 credit risk premium paid by NWP Co. In addition, the $25,000 and $53,247 equipment credits used to settle these amounts, respectively, should be available to reduce other debts owed to NWP Co. Lastly, $2,597 and $12,861 accrued interest for these balances should also be excluded from the debts owed to NWP Co. Table 8 summarizes our calculated value for fees related to the RRIF Loan Agreement.

Table 8: Calculated Value for Fees Related to the RRIF Loan Agreement

Description	Debt Incurred	Balance Recorded as of December 31, 2019	Calculation Adjustments	Calculated Value as of December 31, 2019
RRIF Loan Application fee				
Principal	$ 25,000	$ 0	$ (25,000)	$ (25,000)
Interest	2,597	2,597	(2,597)	0
Total RRIF Loan Application Fee	**$ 27,597**	**$ 2,597**	**$ (27,597)**	**$ (25,000)**
Credit Risk Premium				
Principal	$ 131,970	$ 78,723	$ (131,970)	$ (53,247)
Interest	12,861	12,861	(12,861)	0
Total Credit Risk Premium	**$ 144,831**	**$ 91,584**	**$ (144,831)**	**$ (53,247)**
Total Fees	**$ 172,428**	**$ 94,181**	**$ (172,428)**	**$ (78,247)**

Ukiah Depot Remediation Agreement and Amendments

Summary

NCRA and NWP Co.'s Ukiah Depot Remediation Agreement (Ukiah Agreement) executed June 2013 authorized NWP Co. to commence work on the remediation of the Ukiah Depot site, and advance all funds necessary to complete the work in an amount not to exceed $250,000. Additionally, the Ukiah Agreement stated NWP Co. shall serve as the project manager and shall be paid a project management fee in the amount of 10 percent of the sum of $250,000, or the actual project cost, whichever is less. Amendments executed in December 2013 and July 2014 further increased advanced

funds to $600,000. All amounts advanced, plus unpaid project management fees, accrued interest at NWP Co.'s cost of borrowing, not to exceed 5 percent.

Analysis

NWP Co. advanced $573,730 for project costs, which accrued $56,138 in interest between 2014 and 2016. NCRA repaid all costs and interest, except for $334, in April 2016, using the Ukiah Depot sales proceeds. We relied on the general ledger for the cash account to verify payment was made, based on the assumption the general ledger for the cash account reflected the actual cash activities of the bank. Additionally, we did not review invoices related to the project costs that constituted the loan amount, but assumed these costs were actual costs NWP Co. incurred for work authorized under the Ukiah Agreement and amendments. We also assumed interest rates NWP Co. used to calculate the interest reflected NWP Co.'s actual cost of borrowing, and verified all interest amounts were calculated correctly and the interest rate used did not exceed 5 percent.

Results

As of December 31, 2019, the $334 interest amount was valid and remained outstanding. Table 9 summarizes our calculated value for the Ukiah Agreement.

Table 9: Calculated Value for Ukiah Agreement

Description	Debt Incurred	Balance Recorded as of December 31, 2019	Calculation Adjustments	Calculated Value as of December 31, 2019
Principal	$ 573,730	$ 0	$ 0	$ 0
Interest	56,138	334	0	334
Total	**$ 629,868**	**$ 334**	**$ 0**	**$ 334**

Trade Accounts Payable Owed to NWP Co.

Summary

NCRA recorded $57,498 trade accounts payable and interest amounts owed to NWP Co. as of December 31, 2019, comprised primarily of preemption costs associated with the Highway 37 project and earthquake repair costs due to damage caused by the 2014 Napa earthquake. NCRA also recorded costs related to the Santa Rosa bond wire theft and Cloverdale tunnel fire, but it settled these costs with equipment credit in September 2011.

Analysis

- We validated the $29,650 Highway 37 costs as debt owed to NWP Co. by reviewing the contractor invoices provided by NWP Co. We also validated the interest accrued on the Highway 37 costs in the amount of $7,879, by recalculating interest using NWP Co.'s interest rates, assuming these rates reflect NWP Co.'s rate of borrowing. The Highway 37 project costs and interest were outstanding debt owed to NWP Co. as of December 31, 2019.

- The $9,803 of unpaid earthquake repair costs should not be included in NCRA's debts owed to NWP Co.
    - NCRA's board approved NCRA to reimburse NWP Co. for funds it expended repairing the rail line due to the earthquake damage. Based on the review of NWP Co.'s expense schedule, it incurred $18,114 in repair costs.
    - NCRA recorded $18,114 as outstanding debt owed to NWP Co. and subsequently paid $8,311 of these repair costs in April 2016, leaving a $9,803 outstanding balance due. However, our review of NWP Co.'s accounting records noted NWP Co. applied an unidentified account credit NCRA had with NWP Co. to settle the remaining $9,803 debt owed.
- NCRA recorded trade accounts payable of $44,328 for debt associated with the Santa Rosa bond wire theft and Cloverdale tunnel fire.
    - Our review of NCRA's general ledger and board meeting minutes indicated NCRA applied a $44,328 equipment credit to settle this amount in September 2011. However, based on communications with NWP Co., it did not apply the entire $44,328 equipment credit to the outstanding balance and recorded a receivable of $26,422 from NCRA.
    - NWP Co. billed NCRA accrued interest of $10,105 based on NWP Co.'s recorded $26,422 outstanding loan balance due from NCRA as of December 31, 2019. Since NCRA settled all of the $44,328 debt related to the Santa Rosa bond wire theft and Cloverdale tunnel fire in September 2011, no interest should be accrued.

Results

The $29,650 preemption costs and the associated $7,879 interest are valid and supported. However, the $9,803 earthquake repair costs, and the $10,105 interest associated with the Santa Rosa bond wire theft and Cloverdale tunnel fire, should be excluded from debts owed to NWP Co. Table 10 summarizes our calculated value for the trade accounts payable owed to NWP Co.

Table 10: Calculated Value for Trade Accounts Payable to NWP Co.

Description	Debt Incurred	Balance Recorded as of December 31, 2019	Calculation Adjustments	Calculated Value as of December 31, 2019
Highway 37 Project				
Principal	$ 29,650	$ 29,650	$ 0	$ 29,650
Interest	7,879	7,879	0	7,879
Total Highway 37 Project	**$ 37,529**	**$ 37,529**	**0**	**$ 37,529**
Earthquake Repair	**$ 18,114**	**$ 9,803**	**$ (9,803)**	**$ 0**
Wire Theft and Tunnel Fire				
Principal	$ 44,328	$ 0	$ 0	$ 0
Interest	10,105	10,105	(10,105)	0
Total Wire Theft and Tunnel Fire	**$ 54,433**	**$ 10,105**	**$ (10,105)**	**$ 0**
Other payables	**$ 61**	**$ 61**	**0**	**$ 61**
Total Trade Accounts Payable	**$ 110,137**	**$ 57,498**	**$ (19,908)**	**$ 37,590**

Interest Related to Legal Fees

NCRA recorded a $20,527 loan for Sonoma County legal fees NWP Co. paid in June 2007, as authorized by the Bridge Financing Agreement. This balance was settled by using equipment credit pursuant to NCRA's board approval in October 2011. Interest totaling $4,308 accrued on the loan balance between June 2007 and September 2011. The interest amount was valid and remained outstanding as of December 31, 2019. We validated this interest amount based on the assumption the interest rates used reflected NWP Co.'s actual rate of borrowing. Our calculated value for interest related to legal fees is summarized in Table 11.

Table 11: Calculated Value for Interest Related to Legal Fees

Description	Debt Incurred	Balance Recorded as of December 31, 2019	Calculation Adjustments	Calculated Value as of December 31, 2019
Principal	$ 20,527	$ 0	$ 0	$ 0
Interest	4,308	4,308	0	4,308
Total	**$ 24,835**	**$ 4,308**	**$ 0**	**$ 4,308**

Other NCRA Liabilities

NCRA also owed other vendors for goods and services received, including interest accrued on several long-outstanding balances. We validated these balances by reviewing vendor invoices and court settlements, obtaining vendor confirmations, and performing recalculations and other analytical procedures. Table 12 summarizes our calculated value for other NCRA liabilities as of December 31, 2019.

Table 12: Calculated Value for Other NCRA Liabilities

Description	Balance Recorded as of December 31, 2019	Calculation Adjustments	Calculated Value as of December 31, 2019
Legal Liabilities			
Californians for Alternatives to Toxics and Friends of the Eel River	$ 1,912,570	$ (1,912,570)	$ 0
McGarry & Lukes	25,000	(25,000)	0
Consent Decree/Environmental	217,628	(217,628)	0
Total Legal Liabilities	**$ 2,155,198**	**$ (2,155,198)**	**$ 0**
Professional Services Payables			
American Rail Engineering, Inc., including interest	594,569	5,699	600,268
Christopher Neary	408,283	(7,894)	400,389
Total Professional Services Payables	**$ 1,002,852**	**$ (2,195)**	**$ 1,000,657**
Employment Related Liabilities			
Net Pension Liability	196,019	16,631	212,650
Salaries and Benefits Payable	22,715	0	22,715
Total Employment Related Liabilities	**$ 218,734**	**$ 16,631**	**$ 235,365**
All Other Payables			
Balfour Beatty Rail, Inc.	302,673	(302,673)	0
TransDynamics and Golden Age Rail Equipment Corporations	288,708	(288,708)	0
Unearned Rent Revenue	235,690	0	235,690
All Other Vendors	210,101	1,188	211,289
Total Other Payables	**$ 1,037,172**	**$ (590,193)**	**$ 446,979**
Total Other NCRA liabilities	**$ 4,413,956**	**$ (2,730,955)**	**$ 1,683,001**

Legal Liabilities

Californians for Alternatives to Toxics and Friends of the Eel River

In July 2011, Californians for Alternatives to Toxics and Friends of the Eel River filed separate petitions for writ of mandate, naming NCRA as defendant and NWP Co. as real party in interest, for violations of the California Environmental Quality Act. The lawsuit was settled in April 2019, requiring NCRA to pay legal fees to Californians for Alternatives to Toxics and Friends of the Eel River totaling $1,915,803.[20] CalSTA made payments on NCRA's behalf in January 2020. Although the payments were made subsequent to December 31, 2019, we did not include this liability in our calculated value.

McGarry & Lukes

NCRA's general ledger included a $25,000 liability for *McGarry & Lukes vs. NCRA et al,* a personal injury claim with a settlement date of January 6, 2010. We validated this obligation by verifying it to the court's judgment. Our review of the judgments payable account indicated that NCRA had not paid the settlement as of December 31, 2019. Civil Procedures Code section 337.5 provides that non-real property judgments are enforceable within 10 years from the court judgment date. Further research indicates

[20] NCRA's general leger recorded a liability of $1,912,570, which is $3,233 less than the $1,915,803 paid by CalSTA. The $1,912,570 liability was paid and is included as an adjustment in Table 12.

that an unpaid judgment generally expires after 10 years, unless the creditor files a request to renew the judgment with the court within 10 years of the judgment date, or before January 6, 2020. According to NCRA and Sonoma County's legal representation letter, no evidence of such renewal was filed. Therefore, the liability is considered expired as of January 6, 2020, and we did not include the $25,000 liability in our calculated value as of December 31, 2019.

Consent Decree/Environmental

NCRA recorded $217,628 in long-term liabilities related to the Environmental Consent Decree and another environmental-related legal settlement. We were unable to confirm the balance owed with the respective plaintiffs of these settlements, and have no knowledge the plaintiffs are seeking payments; therefore, this amount was excluded from NCRA's liabilities as of December 31, 2019, as detailed in Table 13.

Table 13: Adjustments Made to Consent Decree/Environmental Related Liabilities

Payee	Description and Status	Calculation Adjustments
California Department of Fish and Game	Related to the Environmental Consent Decree settled in July 1999. Amount was verified to the settlement agreement; however, in our confirmation process the California Department of Fish and Game did not include this amount as owed by NCRA.	$ 113,319
California Department of Toxic Substances Control	Related to the Environmental Consent Decree settled in July 1999. Amount was verified to the settlement agreement; however, in our confirmation process the California Department of Toxic Substances Control did not include this amount as owed by NCRA.	50,000
Foss Environmental Services Company	Unknown case related to environment issues. Foss Environmental Company changed its legal name to NRC Environmental Services, Inc. in December 2003 as confirmed by the State of Washington Secretary of State. However, NRC Environmental Services, Inc. did not respond to our confirmation request.	54,309
	Total Adjustments	**$ 217,628**

Professional Services Payables

American Rail Engineering, Inc.

NCRA entered into a professional services contract with the American Rail Consultants in January 2007 for engineering and other supporting services. American Rail Consultants later changed its name to AndersonPenna Partners, Inc., who then transferred all rights and obligations of the NCRA contract to American Rail Engineering, Inc. (ARE). The Principal Engineer remained the same during these changes, and also performed work for NWP Co. and SMART during the same time period.

Based on the contract and its amendments, NCRA agreed to make a fixed monthly payment on previously owed balances effective June 2008, and to pay a monthly retainer for services agreed per contract beginning February 2011. Interest accrued on amounts outstanding for more than 45 days, for work performed after July 1, 2008.

To determine amounts owed to ARE, we reviewed NCRA's general ledger for invoice and interest transactions, reviewed ARE invoices, and obtained ARE's confirmation for outstanding balances. Our assessment noted NCRA's unpaid invoices balance of $410,365 materially agrees with ARE's confirmation and is valid and supported; however, an adjustment of $5,699 is needed to increase interest owed to $189,903 based on ARE's confirmation and our recalculation. Table 14 summarizes our calculated value for amounts owed to ARE as of December 31, 2019.

Table 14: Calculated Value for Amounts Owed to American Rail Engineering, Inc.

Description	Balance Recorded as of December 31, 2019	Calculation Adjustments	Calculated Value as of December 31, 2019
Unpaid Invoices	$ 410,365	$ 0	$ 410,365
Interest	184,204	5,699	189,903
Total	**$ 594,569**	**$ 5,699**	**$ 600,268**

Christopher Neary

Christopher Neary served as NCRA's legal counsel until February 2019, when Sonoma County became NCRA's new legal counsel. Christopher Neary entered into two legal service contracts with NCRA in July 2000 and November 2006. Both contracts contained similar terms, in which NCRA agreed to pay monthly retainer and other fees for legal services, reimburse Christopher Neary for travel, out-of-pocket, and litigation-related costs, and pay outstanding service fees.

We reviewed transactions recorded in NCRA's general ledger and evaluated these transactions for its compliance with the legal service contracts. We also traced selected transactions from NCRA's general ledger to Christopher Neary's invoices. According to these invoices, Christopher Neary added interest to the outstanding balance totaling $193,660 as of July 31, 2019. However, the contracts between Christopher Neary and NCRA did not include provisions for interest on unpaid balances, and according to NCRA, its board also did not approve payment of interest associated with the unpaid balance. Therefore, NCRA did not record interest as a payable owed to Christopher Neary and we did not include the interest amount in our calculation value.

Based on our review, NCRA's recorded balance owed to Christopher Neary should be reduced by $7,894, due to an incorrectly recorded invoice and a duplicate monthly retainer recorded for September 2017. As of December 31, 2019, our calculated value for amounts owed to Christopher Neary is $400,389.

Employment Related Liabilities

Net Pension Liability

NCRA participated in the Miscellaneous Plan and the Public Employees' Pension Reform Act (PEPRA) Miscellaneous Plan, both of which are defined benefit retirement plans administered by the California Public Employees' Retirement System (CalPERS). The most recent audited financial statements as of June 30, 2018 indicated NCRA's net pension liability was $212,650 based on the actuarial valuation as of June 30, 2017. NCRA's general ledger as of June 30, 2018 agreed to the audited financial statements.

Thereafter, NCRA correctly recorded the employer contribution amounts to reduce the net pension liability in the general ledger to $196,019 as of December 31, 2019. These employer contribution amounts were verified to CalPERS' actuarial valuation reports with measurement dates of June 30, 2016 and 2017. However, NCRA's net pension liability as of December 31, 2019 will vary from $196,019 due to other factors that impact the net pension liability.[21] Therefore, we used the most recent audited amount totaling $212,650, as our calculated value for NCRA's net pension liability, resulting in a $16,631 ($212,650 - $196,019) adjustment to NCRA's recorded balance. Additionally, NCRA may incur unfunded termination liability if it were to terminate its retirement plans with CalPERS. See the **Contingent Liabilities** section for details.

Salaries and Benefits Payable

NCRA's general ledger included $22,715 in salaries and benefits payable as of December 31, 2019. Based on the review of the accounting records, we determined the balance primarily consisted of compensated absence liability (unused vacation) that is accrued when earned by employees and should be paid by NCRA upon the employees' termination or retirement. In addition, NCRA's recorded salaries and benefits payable balance as of June 30, 2018 agreed to the audited financial statements of the same date. Since general ledger transactions did not fluctuate significantly between June 30, 2018 and December 31, 2019, our calculated value for salaries and benefits payable will be based on NCRA's general ledger balance of $22,715 as of December 31, 2019.

Other Payables

Balfour Beatty Rail, Inc.

NCRA recorded a $6,637 balance owed to Balfour Beatty Rail, Inc. (BBI) for unpaid invoices and $296,036 interest, totaling $302,673 as of December 31, 2019. According to NCRA's Executive Director, the last collection call received from BBI's legal counsel was a few years ago and he did not believe the recorded balance is a payable. Based on our research, BBI was acquired by the Balfour Beatty Infrastructure in early 2014. We made several attempts to obtain confirmation of these balances from BBI and its successor company, but received no response. Because we have no knowledge to determine the validity of this debt, our calculated value will not include the amounts owed to BBI.

TransDynamics and Golden Age Rail Equipment Corporations

NCRA incurred an obligation of $510,000 to TransDynamics Corporation and Golden Age Rail Equipment Corporation for the purchase of various rail equipment in 1997. The general ledger listed an unpaid balance totaling $288,708, including $124,000 principal

[21] According to the Governmental Accounting Standards Board (GASB), the net pension liability is the difference between the total pension liability and the assets set aside to pay benefits to current employees, retirees, and their beneficiaries. Total pension liability represents the present value of projected benefit payments to employees based on their past service, and assets mostly are the plan's investments reported at fair value. Other factors that may affect net pension liability include, but are not limited to, annual service cost, interest on pension liability, changes in economic and demographic assumptions used to project benefits, differences between those assumptions and actual experience, differences between expected and actual investment returns, projections of benefit payments, discount rate, and attribution method. For additional pension liability accounting related information, visit www.gasb.org.

and $164,708 in interest. NCRA could not provide information to support the outstanding loan balance of $124,000 is valid, but continued to accrue interest in the accounting records based on its own estimate. Our research indicated TransDynamics Corporation was dissolved in November 2012, and we could not locate a successor. Further research on the Golden Age Rail Equipment Corporation on Arizona and California Secretary of State's websites returned no results. Accordingly, because we have no knowledge to determine the validity of this debt, our calculated value did not include the $288,708 related to the TransDynamics Corporation and Golden Age Rail Equipment Corporation unpaid balance and interest.

Unearned Rent Revenue

Unearned rent revenue is comprised of payments received under property and operating lease arrangements in advance of the period earned. Revenue is recognized on such lease arrangements on a pro-rata basis over the lease term. NCRA recorded $235,690 unearned rent revenue as of December 31, 2019. We validated this balance by reviewing the audited financial statements as of June 30, 2018, reviewing NCRA's Prepaid Property Leases amortization schedule, and tracing to the lease agreements for selected customers. The review of NCRA's general ledger for unearned rent revenue indicated NCRA correctly recorded transactions to recognize revenue when earned; therefore, the $235,690 unearned rent revenue balance was valid and supported, and we based our calculated value on the general ledger balance for unearned rent revenue as of December 31, 2019.

All Other Vendors

NCRA also recorded other payables of $210,101 as of December 31, 2019. We increased this amount by $1,188, to $211,289, through verifications with respective vendors.

ASSETS

Cash, Accounts Receivable, and Other Current Assets

Cash

NCRA's cash is pooled with the Sonoma County Treasurer, who has been maintaining and managing NCRA's bank accounts and acting as NCRA's disbursing agent since 2001. NCRA also has a bank account for Ukiah Depot property related transactions. We validated the cash balances for these accounts by reviewing bank statements, bank reconciliation reports, and Sonoma County's financial records. We also validated cash transactions greater than $5,000 between the period July 1, 2016 and December 31, 2019, by reviewing associated agreements and invoices. Based on our assessment, NCRA's cash balance as of December 31, 2019 totaling $104,857 is valid and supported.

Accounts Receivable

Accounts receivable consists of uncollected property lease income and other service fees. Allowance for doubtful accounts reduces the accounts receivable balance, and is

determined by NCRA's management's regular evaluation of individual customer receivables.[22]

Based on our review of income transactions for the period between July 1, 2016 and December 31, 2019, and the associated lease agreements and invoices, NCRA's primary income sources included revenue from leasing rail cars, properties, and cellphone towers facilities. NCRA hired FEC Real Estate Service (FEC) as the asset management agent, and pays FEC 30 percent of aggregate gross rent as a management fee. According to NCRA, FEC expects to continue collecting the management fee without providing services in the future, as discussed in the **Contingent Liabilities** section.

As of December 31, 2019, NCRA's accounts receivable, net of allowance for doubtful accounts, totaled $41,378, and is valid.

Other Current Assets

NCRA's other current assets totaling $22,453 includes prepaid insurance expense and small deposits made in 2006, and is valid. Our review of the general ledger activities did not identify any unusual transactions that will impact our calculated value for other current assets.

Our calculated value for Cash, Accounts Receivable, and Other Current Assets is summarized in Table 15.

Table 15: Calculated Value for Cash, Accounts Receivable, and Other Current Assets

Description	Balance Recorded as of December 31, 2019	Calculation Adjustments	Calculated Value as of December 31, 2019
Cash	$ 104,857	$ 0	$ 104,857
Accounts Receivable, net of Allowance for Bad Debt	41,378	0	41,378
Other Current Assets	22,453	0	22,453
Total	**$ 168,688**	**$ 0**	**$ 168,688**

Equipment and Other Capital Assets

NCRA's capital assets primarily consists of land, buildings, track structures, heavy equipment, rolling stock, motor vehicles, and unused signal equipment. DGS and Parks are responsible for assessing the land, buildings, and track structures. Our responsibility is to determine the existence and completeness of NCRA equipment, including heavy equipment, rolling stock, motor vehicles, and unused signal equipment. Our calculated value in Table 1 does not include the recorded cost or estimated fair market value of equipment and other capital assets.

NCRA's equipment was purchased in the 1990's and early 2000's, and the last known inventory was conducted circa 1999. To identify equipment owned by NCRA, we reviewed its capital asset list, general ledger, board meeting minutes, and other available documents, obtained third-party confirmation for rail cars under the possession

[22] Information is obtained from NCRA's audited financial statements for fiscal year ended June 30, 2018.

of others, and conducted equipment observations. We also reviewed two photo albums that contained pictures of equipment taken during NCRA's 1999 inventory and conducted internet searches to identify equipment possibly owned by NCRA but not included in its capital asset list or the photo album. In conducting our equipment observations, we visited four NCRA depots (Schellville, Cloverdale, Willits, and Ukiah) to verify the existence of equipment in the capital asset list and the photo albums. According to NCRA, these four depots housed most of the operation equipment. In our site visits, we also identified equipment not included in the capital asset list and the photo albums. Additionally, Parks and its consultants also documented equipment located along the tracks during its land survey. Because Parks and its consultants, Ascent Environmental Inc. and Alta Planning and Design, were conducting its assessment concurrently with our engagement, a comprehensive list of equipment observed along the tracks was not available for us to reconcile with NCRA's inventory list or photo albums.

Based on the procedures performed, we identified 306 pieces of equipment and miscellaneous materials (e.g. rail ties, culverts, etc.), including the following:

- 143 pieces owned by NCRA confirmed through observations or third-party confirmation. This includes 6 pieces of heavy equipment and 33 rail cars used as collateral to secure the RRIF Loan Agreement. The 33 rail cars are leased to the Boston Transit Group, with whom we confirmed the existence and operating status. The same group of equipment (heavy equipment and rail cars) also served as collateral to the Bridge Financing Agreement, the Marin Consent Agreement, and the Reopening Project Agreement to secure debts owed to NWP Co, as discussed in the **Debts Owed to NWP Co.** section. On March 27, 2019, NWP Co. filed documents with the Surface Transportation Board asserting its rights to the 33 rail cars, along with the Boston Transit Group lease and lease proceeds therefrom, pursuant to the Marin Consent Agreement.
- 38 pieces observed during site visits belonged to third parties or unknown owners. The 38 pieces does not include various liquefied petroleum gas (LPG) cars and Skunk Train rail cars owned by third parties.
- 125 pieces could not be located and we could not determine ownership. We identified these pieces of equipment by obtaining equipment-related information from the photo albums, internet searches, and available documents. Due to the age and quality of the information reviewed, we determined that the 125 pieces could include equipment no longer owned by NCRA. Additionally, in absence of identification numbers for the equipment, the 125 pieces could also be included in the 38 pieces described above.

See Appendix C for the list of equipment.

CONTINGENT LIABILITIES

Contingent liabilities are liabilities that may occur depending on the outcome of an uncertain future event. To identify contingent liabilities, we interviewed the Caltrans Senate Bill 1029 Project Manager, NCRA Executive Director, SMART General Manager, Deputy Attorney General from the California Attorney General's Office, and Sonoma County's Legal Counsel to gain an understanding of NCRA's operating activities and practices. We also reviewed NCRA's board meeting minutes and other documents,

obtained confirmation from the California State Library Research Bureau, and obtained Sonoma County Legal Counsel's representation letter. Further, we identified potential liabilities during our site visits. Table 16 summarizes contingent liabilities we identified, and available estimated costs provided by third parties. Estimated potential liability amounts listed as Unknown may require further analysis by specialized consultants to ascertain the potential estimated amount. This list is not all inclusive and additional liabilities may be identified as the NCRA dissolution progresses.

Table 16: Contingent Liabilities

Description	Estimated Potential Liability Amounts
Potential Environmental Remediation Costs	
Estimated costs associated with future rail operations and clean-up and remediation activities to comply with the Environmental Consent Decree settled in July 1999.	$4,347,000 - $6,926,000*
Potential liabilities caused by abandoned rail cars and equipment in the Eel River and other sites.	Unknown
Potential legal issues and removal costs of rail equipment in the Eureka yard.	Unknown
Potential safety improvements needed for the hazardous material storage of LPG cars stored in the Schellville Depot.	$5,200,000 - $7,200,000
Potential liabilities related to other existing and probable hazard materials and environmental contaminants identified by Parks' consultants.	Unknown
Potential Repair, Maintenance, and Structural Removal Costs	
Potential repair and maintenance costs related to a falling trestle, weed abatement, and a collapsed tunnel.	Unknown
Potential removal costs related to illegal structures.	Unknown
Potential repair and maintenance costs related to one building at the Ukiah Depot and three buildings in the Willits yard.	Unknown
Potential repair and maintenance costs related to rail debris identified by Parks' consultants.	Unknown
Potential Liabilities Resulting from NCRA's Business Practices and Property Rights	
Potential interest owed to Christopher Neary for unpaid legal services fee as of July 31, 2019.	$193,660
Estimated amount to settle compliant filed by MCM Construction related to work performed for the Ukiah Depot project.	$536,026
Potential liabilities related to a football field on the Willits yard.	Unknown
Potential liabilities related to NCRA waiving competitive bidding for contracts.	Unknown
Unfunded termination liability related to NCRA's pension plans with CalPERS as of June 30, 2018.	$759,027 - $846,259
Future management fees for lease payments collected under license agreements generated by FEC Real Estate Service.	$40,000 - $50,000 per year
Defending encroachments.	Unknown
Potential Liabilities Related to Third-Party Rail Equipment Owners	
Potential legal liabilities and costs related to relocating rail equipment owed by two third-party owners.	Unknown

*Estimate amount is pursuant to the assessment report conducted in 2002 and it is unknown whether NCRA has fulfilled all obligations pursuant to the Environmental Consent Decree as of December 31, 2019. Additionally, this estimates does not represent present value.

Potential Environmental Remediation Costs

Many NCRA depots and maintenance facilities along the rail line may need environmental clean-up, including the portion of the Ukiah Depot property sold to the Judicial Council of California.

- NCRA contracted with an environmental professional services firm to conduct an assessment on NCRA's level of compliance with the requirements, laws, and regulations pursuant to the Environmental Consent Decree, and to develop a plan for regulatory approval for compliance. The estimated costs associated with future rail operations, and clean-up and remediation activities ranged between $4.3 million and $6.9 million according to the assessment report dated July 2002. It is unknown whether NCRA has fulfilled all obligations pursuant to the Environmental Consent Decree as of December 31, 2019.
- Although no known legal claims have been filed, potential liabilities may arise for environmental related issues caused by abandoned rail cars and equipment in the Eel River and other sites.
- NCRA received a legal notice from the City of Eureka in December 2014, stating the presence of rail equipment in Eureka's yard violated Eureka's Municipal Code section 150.163 related to public nuisances. The City of Eureka required NCRA and a private party to remove all rail equipment from the Eureka yard. Our research and communication with the private party equipment owner indicated it was not removed as of December 31, 2019. This may result in monetary liabilities to NCRA. Further, in July 2015, a northern California news article reported that work to remove trains from the Eureka yard (known as the "Balloon track") was stopped due to workers becoming sick from exposure to contaminants. This may also present potential legal liabilities to NCRA.
- Unconfirmed costs and obligations associated with safety improvement over the hazardous material storage of LPG cars stored in the Schellville Depot.
    - This potential liability was identified in a complaint against NCRA filed on May 28, 2019 with Sonoma County's Permit and Resource Management Department, Code Enforcement Division. Costs associated with the safety improvements may range between $5.2 million and $7.2 million according to the September 2019 complaint.
    - Based on the Letter of Intent between NCRA, NWP Co., and SMART entered on February 15, 2017, NCRA agreed to assume all risks and fully indemnify, defend, and hold SMART harmless with respect to any claim, damage, or liability resulting from transporting hazardous materials on the tracks and/or storing LPG at the Schellville Depot.
- For other existing known and probable hazardous materials and environmental contaminants adjacent to and within the trail corridor, see the Great Redwood Trail Feasibility Report prepared by Parks' consultants Ascent Environmental Inc. and Alta Planning + Design.

Potential Repair, Maintenance, and Structural Removal Costs

- A falling trestle and weed abatement along the rail line.
- A collapsed tunnel near the proposed boundary of the rail operations that will transfer to SMART.
- Illegal structures built on NCRA's right-of-way in Humboldt County.
- One building at the Ukiah Depot appeared to be damaged by fire, and three buildings in the Willits yard were damaged or contained evidence of homeless encampments.
- Additional information related to rail debris identified along the rail line may be found in the report prepared by Ascent Environmental Inc. and Alta Planning + Design.

Potential Liabilities Resulting from NCRA's Business Practices and Property Rights

Business Practices and Operations

- Christopher Neary, the former NCRA legal counsel, may file a claim to collect potential interest accrued on his outstanding balance listed in Table 12. According to Christopher Neary's invoice, the accrued interest amounted to $193,660 as of July 31, 2019.
- MCM Construction filed a complaint for breach of contract and violation of the prompt payment statues in September 2019, alleging NCRA owes a total of $536,026 for work performed on the Ukiah Depot courthouse project, plus an additional amount for statutory late payment penalties and interest. NCRA has not filed a responsive pleading as of December 31, 2019.
- NCRA allowed Willits High School to build a football field on the Willits yard without an effective permit or insurance coverage. In November 2019, we observed school volunteers installing sprinklers on the Willits yard football field; however, the work permit expired June 15, 2018, and the insurance policy covering this work expired July 1, 2018.
- Attorney representing the Construction Industry Force Account Council threatened legal action unless NCRA rescinded the non-competitively bid contract awarded to Wipf Construction for work on the Ukiah Depot project. Although NCRA rescinded the contract by passing Board Resolution 2019-12, our review of NCRA's board meeting minutes noted NCRA has waived competitive bidding for a number of contracts in the past.
- According to CalPERS' July 2019 actuarial valuation report with measurement date of June 30, 2018, if NCRA were to dissolve as of June 30, 2018, the estimate of NCRA pension plan's financial position would range between $759,027 and $846,259 for unfunded termination liability. This range is based on NCRA's two employees who are covered under two CalPERS retirement plans, Miscellaneous and PEPRA Miscellaneous. NCRA must meet certain requirements to terminate its contract with CalPERS, and NCRA's funding and plan benefits will be impacted.[23]

[23] For requirements to terminate NCRA's contract with CalPERS, visit www.CalPERS.ca.gov.

Unauthorized Encroachments and Property Rights

- According to NCRA, FEC expressed its unwillingness to continue providing services for NCRA; however, FEC expected to collect 30 percent of aggregate gross tenant or licensee rental income each time NCRA or its successor receives a lease payment for a license agreement FEC generated, pursuant to the contract between NCRA and FEC. This amount is approximately $40,000 to $50,000 per year.
- A third party filed a Quiet Title action seeking quiet title to an easement over NCRA property in approximately 2019. The third party asserts an express easement created prior to NCRA taking ownership of the property and other rights. NCRA has not filed a responsive pleading as of December 31, 2019.
- For other identified encroachments, see the reports prepared by DGS, Ascent Environmental Inc. and Alta Planning + Design.

Potential Liabilities Related to Third-Party Rail Equipment Owners

- Two third-party rail equipment owners were unable to recover their equipment after purchase, due to NCRA's track conditions. Specifically, one owner to the rail cars and rail equipment (known as the "Ghost Train") located in Island Mountain claimed NCRA did not fulfill obligations of restoring the rail line as a condition for the purchase of the "Ghost Train." As a result, the owner could not recover the train cars after the purchase. Similarly, another owner bought rail cars located in Eureka from NCRA, but was unable to move these cars due to the track conditions and other environmental issues.

Appendix A

Assumptions and Limiting Conditions

The primary assumptions and limiting conditions pertaining to the calculated value estimate stated in the calculation report are summarized below. Additional assumptions are cited throughout the report.

1. This calculation analysis and report, and the calculated value arrived at herein, are valid only for the stated purpose as of the date of the calculation. They may not be used for any other purpose or by any other party for any purpose.
2. We performed limited procedures on the historical financial records and other related information provided by NCRA and other third parties, as specified in the calculation procedures included in this report. In the course of this engagement, we did not validate whether the information provided fully and correctly reflected NCRA's business conditions and operating results for the respective periods, except as specifically noted herein.
3. We have not audited, examined, fully reviewed, or compiled the financial information provided to us and, accordingly, we express no opinion or any other form of assurance on this information, and accept no responsibility for the accuracy and completeness of the financial information or other data provided to us by others, except for those reviewed in accordance with the calculation procedures included in the report.
4. We express no opinion for matters that require legal or other specialized expertise, investigation, or knowledge beyond that customarily employed by us.
5. Our calculation judgment, shown herein, pertains only to NCRA, at the stated calculation date, and only for the stated calculation purpose.
6. Public and industry information have been obtained from sources we believe to be reliable. However, we make no representation as to the accuracy or completeness of such information and have performed no procedures to corroborate the information.
7. The calculated value in this report is based on the facts and data set forth in this report. The calculated value deviates from the Statement on Standards for Valuation Services in a way that the calculated value did not include values for capital assets and contingent liabilities.
    a. Our engagement does not include assessing the values of the real properties; therefore, we did not make a specific compliance survey or analysis of NCRA's properties to determine whether they are subject to, or in compliance with, the American Disabilities Act of 1990, and this calculation does not consider the effect, if any, of noncompliance. DGS is responsible for conducting an assessment of NCRA's real properties and rights therein.

b. Our report includes a listing of equipment we identified and/or observed; however, no estimated fair market values for the equipment are included in the calculated value. Except as noted, we have relied on the representations of the owners, management, and other third parties concerning the useful condition of applicable equipment.

c. Our report includes contingent liabilities we identified, including environmental liabilities, based on inquiries and reviews of available documents; however, no estimated values for the contingent liabilities are included in the calculated value. Unless otherwise stated in the report, the calculated value of NCRA has not considered or incorporated the potential economic gain or loss resulting from contingent assets, liabilities, or events existing as of the valuation date. We will rely on the assessment conducted by Parks' consultants Ascent Environmental Inc. and Alta Planning + Design to determine locations that may be subject to additional environmental liabilities.

8. Finance is not an environmental consultant, and it takes no responsibility for any actual or potential environmental liabilities and related matters, nor the scope of any such liabilities. Consequently, Finance does not conduct or provide environmental assessments and has not performed one for NCRA's properties.
9. Unless otherwise stated, no effort has been made to determine the possible effect, if any, on NCRA due to future federal, state, or local legislation, including any environmental or ecological matters or interpretations thereof.
10. We have conducted interviews with NCRA's current management concerning its past and present operating activities and business practices.
11. We made onsite visits to select NCRA depots and NWP Co. with whom NCRA conducts business. We also interviewed NCRA management and other parties who have knowledge of the subject matter.
12. The working papers for this engagement are being retained in our files and are available for your reference. We would be available to support our calculated value should this be required.
13. We have no responsibility or obligation to update this report for events or circumstances occurring subsequent to the date of this report.
14. No change of any item in this report shall be made by anyone other than Finance, and we shall have no responsibility for any such unauthorized change.
15. Neither all nor any part of the contents of this report should be disseminated to the public through media, public relations, mail, direct transmittal, or any other means of communication, without the prior written consent of our approval.
16. The report assumes all required licenses, certificates of occupancy, consents, or legislative or administrative authority from any local, state, or national government, or private entity or organization have been or can be obtained or reviewed for any use on which the calculated value contained in the report are based.

17. Finance is solely responsible for the calculated results, and no staff, management members, director, or controlling person shall be subject to any personal liability whatsoever to any person, nor will any such claim be asserted by or on behalf of any other party to this agreement or any person relying on the report.
18. Future services regarding the subject matter of this report, including, but not limited to testimony or attendance in court, shall not be required of Finance, unless previous arrangements have been made in writing.
19. In all matters that may be potentially challenged by a court or other party, we do not take responsibility for the degree of reasonableness of contrary positions that others may choose to take, nor for the costs or fees that may be incurred in the defense of our calculation results against challenge(s).
20. Any decision to purchase, sell, or transfer any interest in NCRA shall be CalSTA's sole responsibility, as well as the structure to be utilized and the cost to be accepted.
21. The selection of the cost to be accepted requires consideration of factors beyond the information we will provide or have provided. An actual transaction involving NCRA might be concluded at a higher value or at a lower value, depending upon the circumstances of the transaction, and the knowledge and motivations of the affected parties at that time. Due to the economic and individual motivational influences which may affect the transaction, we assume no responsibility for the actual cost of any NCRA interest if dissolved or transferred.
22. No third parties are intended to be benefited. An engagement for a different purpose, or under a different standard or basis of value, or for a different date of value, could result in a materially different calculated value.

Appendix B
Valuation Representation

We represent that, to the best of our knowledge and belief:

- The statements of fact contained in this calculation report are true and correct.
- The reported analyses and calculated value are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, independent, unbiased, objective professional analyses and calculations.
- We have no present or prospective financial or other interest in NCRA, and we have no personal financial or other interest or bias with respect to the property or the parties involved.
- Our engagement was not contingent upon developing or reporting predetermined results.
- Our compensation for this engagement is fee-based and is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the outcome of the calculation, and amount of the calculated value, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended used of this calculation.
- The economic and industry data included in the analyses have been obtained from electronic reference sources that we believe to be reliable. We did not perform any corroborating procedures to substantiate that data.
- Our analyses and calculated value were developed and this report has been prepared in conformity with the *Statement of Standards for Valuation Services, No. 1*, promulgated by the American Institute of Certified Public Accountants.
- The parties for which the information and use of the report is restricted are identified. The report is not intended to be and should not be used by anyone other than such parties.
- We have no obligation to update the report or the calculated value for information that comes to our attention after the date of the report.

Cheryl L. McCormick

Cheryl L. McCormick, CPA
Chief, Office of State Audits and Evaluations
March 12, 2020

Appendix C
NCRA Equipment

Equipment Owned by NCRA Confirmed Through Observations or Third-Party Confirmation

Description	Identification Number[24]	Quantity	Condition	Location
Equipment - Safetran Systems	Unknown	1	Used, unknown operational condition	Cloverdale
Ford Crew Cab Pickup - Hyrail Equipped	2FTJW35G8NCB01491	1	Heavily damaged	Cloverdale
Signal Equipment	250849-002	60	New	Cloverdale
Signal Equipment - Harmon HXP Crossing Processor	HXP-1	2	New	Cloverdale
Signal Equipment - Highway Crossing Processors	HXP-3/PMD-3D	24	New	Cloverdale
Signal Equipment - LaMarch	B 85754	6	Used	Cloverdale
Boxcars - 50-foot Plate F, 100ton^,#	NCXX 1000 - NCXX 1034	33	Operational	East Coast Location, Boston Transit Group
2000 Volvo Hyrail Rotary Dump Truck^	4V5JC2UEIYN870173	1	Used, operational	Schellville
2006 Chevy 2500 Hyrail Equipped Pickup^	1GVH139U27E115524	1	Used, operational	Schellville
Ballast Cars	Unknown	2	Used, operational	Schellville
Caterpillar 430 D Backhoe, with Two Buckets and One Compaction Wheel Attachments^	CAT043odvbnk06955; BK50900579; BL50702875; H28376104	1	Used, operational	Schellville
Flat Car*	L 53-6	1	Used, operational	Schellville
Jackson Tamper	132614	1	Used, operational	Schellville
John Deere 1200 Brush Cutter and Attachment - 120C^	571525 / FF120CX036016	1	Used, operational	Schellville
John Deere 180CW Excavator^	FF180CW030047	1	Used, operational	Schellville
Side Dump Rail Car	NCR MW 100	1	Used, operational	Schellville
Sullair Air Compressor (185)^	004149705	1	Used, operational	Schellville
Crane Rail Car	Placo 2	1	Used, unknown operational condition	Willits
Flat Car	6334	1	Appears moveable	Willits
Flat Car	6349	1	Appears moveable	Willits
Stationary Hoist	Unknown	1	Unknown operational condition	Willits
Train Engine	3850	1	Vandalized, unknown operational condition, appears moveable	Willits
	Total	**143**		

^ Equipment is used as collateral to the RRIF Loan Agreement, Bridge Financing and Security Agreement, Marin Consent Agreement, and the Reopening Project Agreement.

Thirty-five box cars were purchased and leased to Boston Transit Group. Two cars were destroyed. As of December 31, 2019, 33 cars are operating.

* According to NWP Co.'s staff on site, this flat car (L 53-6) might belong to NCRA; however, the staff is uncertain.

[24] Identification numbers include model numbers, serial numbers, vehicle identification numbers, and other unique identifiers.

Equipment Observed and Belongs to Third Parties or Unknown Owners

Description	Identification Number	Quantity	Condition	Location	Identified Owner
Passenger Rail Cars	Unknown	5	Used, operational	Schellville	Golden Gate Railroad Museum
Locomotive - Mare Island	TCRY 007	1	Used, operational	Schellville	Mare Island Rail Service
Caboose&	BUG1971	1	Used, operational	Schellville	Matt Monson
Caterpillar Fork Lift - Model V80E	77X00739	1	Used, operational	Schellville	NWP Co.
Locomotive - Rolling Stock 1974 MP15DC	NWP 1501	1	Used, operational	Schellville	NWP Co.
Locomotive - Rolling Stock GE RP20GE	2RPBDB205640 0XXX	1	Used, operational	Schellville	NWP Co.
Locomotive - Rolling Stock NWP 2009 Genset EMD GP9	1RPBDB208750 00187	1	Used, operational	Schellville	NWP Co.
Hyrail Crane	Unknown	1	Used, operational	Schellville	Unknown
Track Repair Equipment	Unknown	1	Used, operational	Schellville	Unknown
Various LPG Cars	Unknown	N/A+	Used, operational	Schellville	Various Third Parties
Box Car - Green	BUGX 248574	1	Appears moveable	Willits	Matt Monson
Box Car - Red and White	BUGX 20173	1	Appears moveable	Willits	Matt Monson
Train Engine	BUGX 4304	1	Vandalized, unknown operational condition, appears moveable	Willits	Matt Monson
Backhoe (Skunk Train)	715227A	1	Used, operational	Willits	Mendocino Railroad Company
Bulldozer (Skunk Train)	Unknown	1	Used, operational	Willits	Mendocino Railroad Company
Engine (Skunk Train)	Unknown	1	Used, operational	Willits	Mendocino Railroad Company
Rail Cars (Skunk Train)	Unknown	N/A+	Used, operational	Willits	Mendocino Railroad Company
Equipment (Skunk Train)	Unknown	1	Used, operational	Willits	Mendocino Railroad Company
Track Equipment (Skunk Train)	427675	1	Used, operational	Willits	Mendocino Railroad Company
Amtrak Passenger/Luggage/ Service Car	Unknown	2	Vandalized, unknown operational condition, appears moveable. One car appeared fire-damaged.	Willits	Unknown
Baggage Car - Silver	Unknown	1	Vandalized, unknown operational condition, appears moveable	Willits	Unknown
Baggage Car - Green	Unknown	1	Vandalized, unknown operational condition, appears moveable	Willits	Unknown
Ballast Car	SERA 107	1	Moveable	Willits	Unknown
Box Car - Burlington Northern Green	Unknown	2	Appears moveable	Willits	Unknown

& The caboose was used as collateral for the RRIF Loan Agreement, Bridge Financing Agreement, Marin Consent Agreement, and the Reopening Project Agreement

+ The quantity of the cars cannot be determined. The number of cars changes based on customer needs.

Description	Identification Number	Quantity	Condition	Location	Identified Owner
Box Car - Gray	Unknown	1	Appears moveable	Willits	Unknown
Box Car - Red	2312	1	Appears moveable	Willits	Unknown
Dodge Pickup	Last 6 of VIN– 677184	1	Non-operable - missing engine parts	Willits	Unknown
Passenger Car - Green Sierra Western	Unknown	1	Vandalized, unknown operational condition, appears moveable	Willits	Unknown
Passenger Car - Orange Stripe	Unknown	2	Vandalized, unknown operational condition, appears moveable	Willits	Unknown
Tanker Car	Unknown	1	Appears moveable	Willits	Unknown
Train Engine	3844	1	Front end damage, vandalized, unknown operational condition, appears moveable	Willits	Unknown
Train Engine	3786	1	Vandalized, unknown operational condition, appears moveable	Willits	Unknown
Train Engine - Central Pacific	42	1	Vandalized, unknown operational condition, appears moveable	Willits	Unknown
	Total	**38**			

Known Equipment Not Observed, with Unknown Ownership and Unconfirmed Location

Description	Identification Number	Quantity	Unconfirmed Location
Box Car	Unknown	1	Alder Point
Flat Car	SP 565349	1	Arch Culvert
Stake Flat Car	NCR 6346 MW	1	Arch Culvert
Box Car	Unknown	1	Bell Springs
Flat Car	NCR MW 6325	1	Bell Springs
Work Trailer	Unknown	1	Cloverdale
50-Ton Locomotive Crane with Marking "C-145" on Rail Track	Unknown	1	Dos Rios
Flat Car	SP 565618	1	Dos Rios
Side Dump Rail Car	NCR MW 101	1	Dos Rios
John Deere Front Loader	Unknown	1	Eureka
Box Car	Unknown	1	Fort Seward
Gravel Conveyer (Loads Ballast on Rail Cars)	Unknown	1	Fort Seward
Mobile Worker Housing	Unknown	4	Island Mountain
Shovel	SPO - 56	1	Island Mountain
Shovel	Unknown	1	Island Mountain
The Ghost Train (a Freight Train on Rail Track)	Unknown	11	Island Mountain
White Storage Container	Unknown	1	Island Mountain
Durango Hyrail	VIN 1B4HS2BN31F604419	1	Santa Rosa
Crane	C446	1	Scotia
Flat Car	C-146	1	Scotia
Luggage Car - Yellow with Red Strip	Unknown	1	Scotia
Dodge Ram Pick Up	Exempt Plate # 023313	1	South Fork
Flat Car	Unknown	1	South Fork
Engine "North Coast Railroad"	3804	1	Ukiah
Tie Crane - Yellow	Unknown	1	Ukiah
Center Beam Rail Car - Yellow	UP 5B913	1	Willits
Flat Car	Unknown	1	Willits
Gallery Coach	1023	1	Willits
Gallery Coach	1016	1	Willits
Hercules Power Car	660	1	Willits
Locomotive 30 Ton Crane (Palco)	Unknown	1	Willits
Power Car, with all Equipment, Including Spare 450 KW Generator.	1210	1	Willits
1985 Dodge Pickup - Utility Bed and Heavy Duty Winch Equipped	Unknown	1	Unknown
1986 Ford Crew Cab with Utility Bed and Hyrail Equipped	Unknown	1	Unknown
1989 GMC 1-ton Hyrail Equipped (Heavily Damaged and Missing Parts)	Unknown	1	Unknown
50-ton Locomotive Crane with Marking "C-146" on Rail Track	Unknown	1	Unknown
Air Dumb Cars (4 Cars)	Unknown	4	Unknown
Arcata & Mad River RR Electric Engine	Unknown	1	Unknown

Description	Identification Number	Quantity	Unconfirmed Location
Baggage Car	Unknown	1	Unknown
Ballast Regulator (Marked Scrape)	Unknown	1	Unknown
Box Car	Unknown	1	Unknown
Bulkhead Flat Car	SP 508763	1	Unknown
Bulkhead Flat Car	SP 509497	1	Unknown
Case Backhoe	Unknown	1	Unknown
Case Excavator	108513	1	Unknown
Case Speed Swing - Hyrail (Case Ditcher)	1085	1	Unknown
Caterpillar Dozer "CSC"	Unknown	1	Unknown
Caterpillar Grader	Unknown	1	Unknown
Coach "Golden State"	4011	1	Unknown
EMC Steam Generator Car	Unknown	1	Unknown
Engine "NWP"	3857	1	Unknown
Engine "Southern Pacific"	4436	1	Unknown
Engine "Southern Pacific"	4371	1	Unknown
EX-EJE 53' Flat Cars (10 Cars)	Unknown	10	Unknown
Fairmont Model D Zapper (Spikers)	Unknown	1	Unknown
Flat Car	SP 565579	1	Unknown
Ford 1986 F350 Diesel (White)/Hyrail - Radio	Unknown	1	Unknown
Ford 1990 F450 Custom Diesel (White) - Radio	Unknown	1	Unknown
Generator (Wielding Equipment) and Gas Tanks	Unknown	1	Unknown
GP-7 Diesel Electric CCT 70	CCT 70	1	Unknown
Hidden Lake SW 151	SW 151	1	Unknown
Ingersoll - Rand Air Compressor "North Coast Railroad" - Orange	Unknown	1	Unknown
Jackson 925 Tie Inserter/Remover	Unknown	1	Unknown
Jackson Jordan 6500 Tamper	74	1	Unknown
Jackson Jordon 6000 Tamper	Unknown	1	Unknown
JCB 211 Backhoe	Unknown	1	Unknown
John Deere Backhoe - Spray painted "NCR"	Unknown	1	Unknown
Kershaw Ballast Regulator	Unknown	2	Unknown
Kershaw Tie Crane	Unknown	3	Unknown
Klutts Track Maintenance Equipment (Possible Ballast Regulator)	Unknown	1	Unknown
Lake Tahoe SW155	SW 155	1	Unknown
Lounge "Paul Revere"	3125	1	Unknown
Passenger Car (Appears to be a 1990's era Ford Tempo)	Unknown	1	Unknown
Pettibone Speed Swing Loader	Unknown	1	Unknown
Pettibone Speed Swing w/Hyrail Gear	Unknown	1	Unknown
Pick up - Green	Unknown	1	Unknown
Pick up Hyrail Equipped - Orange	Exempt Plate# 034280	1	Unknown
Portable Compressor	Unknown	1	Unknown
Rail Maintenance Equipment (Small) - Orange	HVI-31	1	Unknown

Description	Identification Number	Quantity	Unconfirmed Location
Rail Ties Crane (Yellow - Tamper)	Unknown	1	Unknown
San Joaquin SW500	SW 500	1	Unknown
Shasta SW507	SW 507	1	Unknown
Shovel	A&MRRR	1	Unknown
Siccisor Lift - Rail Mounted	SPO-26	1	Unknown
Speeder Car "1601" - Yellow	Unknown	1	Unknown
Speeder Car "Mutt Putt"	Unknown	1	Unknown
Speeder Car (Open Sided)	Unknown	1	Unknown
Speeder Car (2 Passenger) - Yellow	Unknown	1	Unknown
Spike Machine	Unknown	1	Unknown
Stanislaus SW511	SW 511	1	Unknown
Tamper Hydronic Rail Repair Equipment - Yellow	Unknown	1	Unknown
Tamper Pub	Unknown	1	Unknown
Tamper Torsion Beam (Attachment for Tamper)	Unknown	1	Unknown
Unnamed SW141	SW 141	1	Unknown
Unnamed SW142	SW 142	1	Unknown
Unnamed SW508	SW 508	1	Unknown
Whitefish Lake SW152	SW 152	1	Unknown
	Total	**125**	

APPENDIX D.
Great Redwood Trail Feasibility, Governance, and Railbanking Report

Due to file size, both Part I and Part II of the *Great Redwood Trail Feasibility, Governance, and Railbanking Report* are available for viewing on the project website: https://calsta.ca.gov/subject-areas/reports.

APPENDIX E.
DGS Databases

DGS compiled two separate databases, 1) NCRA – Fee Right-of-way BOE Surveyor Maps Reference, and 2) NCRA Agreements and Contracts.

The first database includes 1800 lines of parcel data for NCRA's right-of-way. This information is a compilation of data from surveyors maps and includes the following data: map references, Grantor, Grantee, type of land acquisition and date, record date, acreage, and deed number.

The second database focused on NCRA's agreements and contracts. Data included in this spreadsheet include: purpose of the agreement, county, reference links, type of agreement, options included, and payment terms.

Both databases have been converted to Adobe Acrobat and are available for viewing on the project website: https://calsta.ca.gov/subject-areas/reports.

APPENDIX F.
Environmental Liability of the NCRA Corridor

State of California — California State Transportation Agency

DEPARTMENT OF TRANSPORTATION

Memorandum

Making Conservation a California Way of Life.

To: JAMES MOORE
FINANCE BUDGET ANALYST
DEPARTMENT OF FINANCE

Date: April 3, 2020

File: **SB 1029 Assessment**

From: LEISHARA WARD LW
Division of Rail and Mass Transportation
SB 1029 Project Manager

Subject: **ENVIRONMENTAL LIABILITY OF THE NORTH COAST RAILROAD AUTHORITY CORRIDOR**

The SB 1029 Assessment Task Force has been directed by Section 13978.9(a) of the Government Code to "conduct an assessment of the North Coast Railroad Authority, to provide information necessary to determine the most appropriate way to dissolve the North Coast Railroad Authority and dispense with its assets and liabilities."

Caltrans was recently asked to assist the SB 1029 Assessment Task Force to prepare a planning level cost estimate of environmental liabilities within the North Coast Railroad Authority (NCRA) corridor. Attached herein is the cost estimate.

Please note the following general assumptions:

- Caltrans prepared this cost estimate using current dollars and market rates. The estimate does not include staff resource costs or "soft costs" as would normally be included in a Caltrans project. This estimate is for planning level project costs only and are transferrable to any organization, which would then fold in their administrative and soft costs as well.

- In addition to wetland mitigation, this cost estimate includes estimates for the technical studies to support hazardous waste mitigation and estimates for the construction costs associated with the mitigation of the hazardous materials present in the railway corridor. The Hazardous Waste/Materials is only one chapter in the Physical Environment section of the EIR/S. Each chapter will need to be evaluated for relevance, which is accounted for in the Alta/Ascent Feasibility Study.

- The Great Redwood Trail Feasibility Study conducted by the Department of Parks and Recreation and their consultants, Alta Planning and Ascent Environmental, includes planning level soft costs for trail construction and general environmental studies. Their estimate does include some hazardous

waste removal, but it does not consider a full remediation plan. Likewise, wetland mitigation is not included in the study's cost estimate.

- Caltrans has worked together with Alta Planning and Ascent Environmental to prepare a cost estimate that complements their study. The environmental liability costs herein, do not overlap with the project level costs – except in a few areas of hazardous waste removal.

- Caltrans depended on data collected and reported in the draft Great Redwood Trail Feasibility Study regarding type and level of hazardous waste as well as site locations where waste is known to reside.

- Wetland mitigation estimates are based on Caltrans knowledge of the North Coast region and the NCRA corridor specifically. Likewise, this estimate depended on the data gathered and reported in the draft Great Redwood Trail Feasibility Study to determine locations where mitigation is likely to be required were the project to move forward.

- Wetland mitigation liability may be reduced if the trail project does not progress and the right-of-way continues to exist in its current form.

- The hazardous material analysis includes short term, long term, and permanent impacts. Not all of these impact would require analysis and those that are identified as not relevant are captured in the "Topics Considered but Determined Not to be Relevant" section.

Please consider the following technical assumptions:

- The Environmental Impact Report/Study (EIR/S) estimates are not precise as each technical study for each EIR/S study area would require a separate estimate based on actual conditions which we have been unable to perform given the time and resource constraints. The EIR/S estimates also assume community and Non-Governmental Organization (NGO) support which is not guaranteed given that significant heavy construction would be required, especially in a designated Wild and Scenic River area and adjacent to tribal holdings.

- Initial Site Assessment (ISA) as referenced in the following estimate is a preliminary environmental evaluation of whether there is information available through regulatory records, past property use, owner/operator interviews, and visual observations to determine whether an environmental (hazardous waste/material) condition is present on a parcel that may impact future use or human health and the environment. If a recognized environmental condition is present, then a Preliminary Site Investigation would be conducted.

- Preliminary Site Investigation (PSI) as referenced in the following estimate is a field investigation where samples are taken for analysis to confirm whether hazardous waste/materials are present that may impact future use or human health and the environment. If hazardous waste/materials are confirmed during the PSI, then a detailed site investigation (DSI or just SI) would be conducted to determine the areal extent of the contamination, impacted media, human and ecological risk. NOTE, the cost estimate I prepared did not include costs of a DSI. In a number of instances on the identified sites tab the DSI has been conducted under oversight by the local regulatory agency and future use and/or mitigation measures have been determined. However, the anticipated future use may not be consistent with the trail concept and any parcel with a less stringent closure alternative may require additional mitigation - some estimates of the costs for mitigation were included but these estimates are very gross as the regulators have not been queried as to whether the mitigation measures are acceptable.

- Both the ISA and PSI are prepared for each parcel that would be acquired for this project, unless the parcel has been subject to a PSI and/or DSI already, then in these instances the existing document may be sufficient for estimating environmental mitigation measures.

- Note that much of the work is dependent on accessibility for heavy equipment (if not all workers and equipment will need to be airlifted in/out and all debris must be removed by air). Costs are provided for both accessible and inaccessible areas. When calculating costs for ballast and tie removal for simplicity it was assumed that 50% of the project limit was accessible and 50% was not.

- The accessibility limitations were developed based on estimating the accessible and inaccessible portions of the rail line as shown on the tab, "accessibility." We didn't use PM data as we weren't certain whether there was access around obstructions/washouts, alternative access points (other than what could be identified from Google Earth), unnamed/unidentified forest roads/tracks, or whether any of these could serve for the transport of heavy equipment and materials. We thought that Google Earth was more accurate than just using the PM's identified in the provided spreadsheet. Unfortunately, to increase accuracy will require walking, riding or driving the entire proposed trail with an eye toward determining heavy (or light) equipment access (during which the site inspection portion of the ISA could be conducted.

- One of the major costs is the ballast removal. Caltrans is not a health agency so we would be subject to the requirements of the Health and Safety Code which would require us to remove all ballast as hazardous waste (assuming that the railway ballast contains the typical concentrations of lead and arsenic found in ballast elsewhere). The Department of Toxic Substances Control may be able to mitigate these costs if they were to allow the ballast to remain in place; however,

they may require covering the ballast with clean soil. Costs were estimated based on total removal.

- We did not include estimates for construction of access roads to facilitate remediation efforts.

- The environmental mitigation cost estimates for the "Identified Sites" are included on the Cost Summary Sheet tab under line 4, "Site Remediation." Mitigation costs for the remainder of the rail line are included on the Cost Summary Sheet lines 3, 5, 6, 7 8, 9, and 10. These line items were developed using estimates provided on the tabs, "Unit Rate Assumptions" and "Debris Removal".

Location	Wetland Mitigation	Hazardous Waste Cost Estimate		
		No. of Sites	Low	High
Phase 1				
Korblex Branch	$3,999,500	4		
RTT Northern Section	$38,668,500	2		
RTT Southern Section	$1,735,500	15		
RWT Southern Section	$1,293,500	2		
Phase 2				
RTT Northern Section	$20,273,500	2		
RTT Southern Section	$669,500			
Phase 3				
RTT Northern Section	$18,245,500	7		
Phase 4				
RTT Samoa Branch	$12,467,000	1		
RTT Carlotta Branch	$6,214,000	1		
Wetland Mitigation SUBTOTAL	$103,566,500			
Hazardous Waste SUBTOTAL			$3,960,342,000	$4,007,700,500
(Planning Level Estimate) Environmental Liability TOTAL		**$4,063,908,500 - $4,111,267,000**		

Attachments
(1) Wetland Mitigation Cost Estimate
(2) North Coast Railroad Authority – Hazardous Waste Component

c: Elissa Konove, Undersecretary, California State Transportation Agency
Kyle Gradinger, Chief, Division of Rail and Mass Transportation, Caltrans
Sandra Rosas, North Region DEA Coordinator, Caltrans
Rich Bailey, Senior Engineering Geologist, Caltrans
Jason Spann, Associate Landscape Architect, Department of Parks and Recreation

Wetland Mitigation Cost Estimate
Prepared for the SB 1029 Assessment Task Force
March 2020

The costs described below are based on the phased project implementation plan developed in the Alta/Ascent Great Redwood Trail Feasibility Study.

Phase 1:

Estimate from GRT Feasibility Study (Environmental Analysis, Documentation, and Permits): $10,051,300

KORBLEX BRANCH

Potential Wetlands Mitigation Cost**:** *2.42 +2.81= 5.23 x $650,000 =$3,399,500*

Haz. Waste sites: 4 sites

RTT NORTHERN SECTION

Wetland: *2.44+7.75+5.73+18.21+13.95+10.08+1.18+0.02+0.13=59.49 x 650,000= $38,668,500*

Haz. Waste sites*: 2*

RTT SOUTHERN SECTION

Wetland: *1.33 + 0.21+0.1+0.1+.16+.77= 2.67 x650,000=1,735,500*

Haz waste:3+12=15

RWT SOUTHERN SECTION

Wetland*:.6+.22+.1+.1+ .05+.92=$ 1,293,500*

Haz. Waste:2 sites

Phase 2

Estimate from GRT Feasibility Study (Environmental Analysis, Documentation, and Permits): $14,831,500

RTT NORTHERN SECTION

Wetlands: 7.13+23.08+.12+.12+,.74= 31.19 x 650,000= $20,273,500

Haz. Waste =2

RTT SOUTHERN SECTION

Wetlands:.82 +.21= $669,500

Phase 3

Estimate from GRT Feasibility Study (Environmental Analysis, Documentation, and Permits): $9,268,000

RTT NORTHERN SECTION

Wetlands: .3+1.27+.31+2.35+1.32+.5+4.75+.36+,41+2.52+.28+3.29+7.84+2.57=28.7x 650,000 = 18,245,500

Haz.Waste= 7

Phase 4

Estimate from GRT Feasibility Study (Environmental Analysis, Documentation, and Permits): $3,391,300

RTT SAMOA BRANCH

Wetlands: 10.21+3.79+3.64+1.54= 19.18 x 650,000 =$12,467,000

Haz.waste:1

RTT CARLOTTA BRANCH

Wetland: 9.56x 650,000=$ 6,214,000

Haz.waste:1

Caveats on estimates:

- Cost per acres is for off-site mitigation (worst case scenario); cost would be approximately $100,000 per ac. less if impacts can be mitigated onsite.
- Wetland acreages are early planning level estimates and acreage will be go down when more detailed design is available and wetland delineations are conducted.
- Other environmental resources are found within the trail corridor and so additional mitigation may be needed.

NORTH COAST RAILROAD AUTHORITY - HAZARDOUS WASTE COMPONENT							
		Units	**Qnt**	**Unit Price (low)**	**Unit Price (high)**	**Total (low)**	**Total (high)**
1	**ISA (all 2,262 parcels)[1]**	each	2,262	$2,500	$ 2,500	$ 5,655,000	$ 5,655,000
2	**PSI (10% or 226 parcels)[1]**	each	226	$ 10,000	$ 100,000	$ 2,260,000	$ 22,600,000
3	**BALLAST DISPOSAL[2,3]**						
	ACCESSIBLE	tons	1,700,000	$ 369	$ 369	$ 627,087,500	$ 627,087,500
	INACCESSIBLE[4]	tons	1,700,000	$ 1,844	$ 1,844	$ 3,135,437,500	$ 3,135,437,500
4	**SITE REMEDIATION[5]**	LS	1	$ 18,090,000	$ 27,135,000	$ 18,090,000	$ 27,135,000
5	**TIE DISPOSAL[3,6]**						
	ACCESSIBLE	tons	210,000	$ 112	$ 112	$ 23,546,250	$ 23,546,250
	INACCESSIBLE[4]	tons	210,000	$ 561	$ 561	$ 117,731,250	$ 117,731,250
6	**RAIL CAR REMOVAL[7]**						
	ACCESSIBLE	events	15	$ 59,000	$ 108,000	$ 885,000	$ 1,620,000
	INACCESSIBLE[4]	events	15	$ 295,000	$ 540,000	$ 4,425,000	$ 8,100,000
7	**ABANDONED EQUIPMENT[8]**	events	5	$ 59,000	$ 108,000	$ 295,000	$ 540,000
8	**CULVERT DEBRIS REMOVAL[9,3]**					$ -	$ -
	ACCESSIBLE	events	6	$ 47,000	$ 88,000	$ 282,000	$ 528,000
	INACCESSIBLE[4]	events	6	$ 235,000	$ 440,000	$ 1,410,000	$ 2,640,000

NORTH COAST RAILROAD AUTHORITY - HAZARDOUS WASTE COMPONENT							
		Units	Qnt	Unit Price (low)	Unit Price (high)	Total (low)	Total (high)
9	**OTHER INFRASTRUCTURE[10,3]**						
	ACCESSIBLE	events	9	$ 147,500	$ 270,000	$ 1,327,500	$ 2,430,000
	INACCESSIBLE[4]	events	8	$ 737,500	$ 1,350,000	$ 5,900,000	$ 10,800,000
10	**BRIDGE OR TRESTLE[11]**						
	SURVEY	each	85	$ 15,000	$ 15,000	$ 1,275,000	$ 1,275,000
	REMEDIATION	each	21	$ 35,000	$ 75,000	$ 735,000	$ 1,575,000
11	**EIR/EIS[12]**						
	Southern Section (PM 68 - 85)	each	1	$ 2,000,000	$ 3,000,000	$ 2,000,000	$ 3,000,000
	Southern Section (PM 87 - 151)	each	1	$ 3,000,000	$ 4,000,000	$ 3,000,000	$ 4,000,000
	Northern Section (PM 236 - 296)	each	1	$ 3,000,000	$ 4,000,000	$ 3,000,000	$ 4,000,000
	Eel River Canyon (PM 151 - 236)	each	1	$ 4,000,000	$ 5,000,000	$ 4,000,000	$ 5,000,000
	Carlotta, Samoa and Koblex Spurs	each	1	$ 2,000,000	$ 3,000,000	$ 2,000,000	$ 3,000,000
	TOTAL[13]					**$ 3,960,342,000**	**$ 4,007,700,500**
	TOTAL COST PER MILE[14]					**$ 15,841,368**	**$ 16,030,802**

Notes

1. Based on the 2018 cost estimate.
2. Based on class I unit rate cost developed in the unit rate assumptions tab. Assumes 1.3 tons per cubic yard.
3. Assume that half the rail line is inaccessible based on review access points and terrain on google earth, see accessibility tab for map. Assume 5 times multiplier on inaccessible areas.
4. Areas deemed "Inaccessible" include areas where access is problematic created by washouts, slides, slope failures, and tunnel collapses. Cost estimates for demolition and removal of environmental hazards are based on airlifting equipment and workers into the area, and

airlifting out the hazardous materials. If access is established through road or railway construction then costs would decline to the accessible rate. Costs for any access construction are not included.

5. Site remediation cost assumptions provided on the "Identified Sites" tab and based the Hazardous Materials and Environmental Contaminates developed by PWA. High range assume %50 increase from base.
6. Based on class II unit rate cost developed in the unit rate assumptions tab. Assumes 1.3 tons per cubic yard.
7. Estimated number of rail car events based on infrastructure table. Assumed total of 30 events, 5 off tracks (all inaccessible) and 25 on tracks (10 inaccessible). Cost estimate from ROM cost provided by AIS on per event basis (see AIS tab). Inaccessible events assumed to cost five times normal event.
8. Assumed same price as accessible rail car event.
9. Estimated number of events based on infrastructure table. Assumed total of 12 events. Cost estimate from ROM cost provided by AIS on per event basis (see AIS Cost Estimate tab). Assumed half inaccessible (see accessibility tab for map)
10. Other infrastructure identified on the table includes switch, grease boxes, and miscellaneous items. Assumed half the price as accessible rail car event.
11. Assume each requires an ACM and LBS survey and 25% require some removal. Estimated unit rates based on similar projects.
12. EIR/S estimates include associated technical studies but exclude hazardous materials/waste technical studies which are included on lines 1 and 2. The estimates for EIR/S assume community support for the conversion. The cost estimates do not include legal support costs if the EIR/S or preferred alternative is challenged in court.
13. It may be appropriate to apply the USEPA remedial cost estimating model range of +80% to -30% to these values.
14. Assumes entire length is 250 miles.

Hazardous Material Site	Type & Cleanup Status	Location Relative to Trail Corridor	Contaminants of Concern	Notes	Cost Assumptions[1, 3]	Estimated Cost[2]
RWT Southern Section						
Southern Pacific Oliveto Station	Cleanup Program Site Open: Site Assessment as of 6/11/2019	Within/immediately adjacent, near MP 69	PCE Potential contamination of an aquifer used for drinking water	Union Pacific Railroad sent a request for case closure in March 2018, which was denied. In September 2019, SWRCB indicated that additional evaluation and potential remediation is required.	Assume disposal half mile of soil along the trail (4000 CY) VOC/metals impacted soil (class II).	$ 735,000
Former Masonite Wood Treatment Facility	Cleanup Program Site Open: Verification Monitoring as of 6/22/2019 Land use restrictions in place	Within/immediately adjacent, between MP 83 and MP 84	Arsenic, PCP, TPHs Potential contamination of soils and drinking water supply	Nearly 38,000 tons of impacted soil have been excavated from five areas near the former facility and a PCP recycling pond, reagents have been injected to enhance degradation of residual PCP and arsenic. A deed restriction is in place for three areas of the parcel: a Restricted Soils Area, a Restricted Groundwater Area, and a Notice/Notification area surrounding the Restricted Groundwater Area. Excavation in the Restricted Soils Area must follow the requirements of the Soil Management Plan established for the parcel.	Assume disposal of 1 mile of soil along the trail (8000 CY) VOC/metals impacted soil (75% class II and 25% class I).	$ 1,670,000
Cloverdale Mill	Cleanup Program Site Open: Inactive as of 10/17/2017	0.05 mile east of trail corridor, between MP 85 and MP 86	Heavy metals, petroleum Potential contamination of an aquifer used for drinking water	In 2004, the property was approved for redevelopment; the lumber mill buildings were demolished, and 10,000 cubic yards of contaminated soils were removed. Redevelopment halted in 2011, and the remedial effort was not completed.	Assume limited soil excavation 1,000 CY (class III).	$ 86,000
RTT Southern Section						
Coast Wood Preserving	DTSC Site Cleanup Program and National Priorities List Certified Operation & Maintenance as of 5/10/2011	Within/immediately adjacent, between MP 111 and MP 112	Arsenic, chromium Potential contamination of soil and an aquifer used for drinking water	According to information updated in March 2019, DTSC, EPA, Coast Wood Preserving, and ELT, Inc. signed a Consent Decree for the transfer of cleanup responsibility to ELT, Inc. in December 2017. In 2018, Coast Wood Preserving closed their operations and in accordance with the Consent Decree, ELT, Inc. began the process of completing RAP implementation. Future work, as required by the RAP, includes soil investigation and soil removal. Groundwater monitoring is ongoing.	Assume disposal of 1 mile of soil along the trail (8000 CY) VOC/metals impacted soil (75% class II and 25% class I).	$ 1,670,000

Hazardous Material Site	Type & Cleanup Status	Location Relative to Trail Corridor	Contaminants of Concern	Notes	Cost Assumptions[1, 3]	Estimated Cost[2]
Shell Oil/DZ, Inc.	Cleanup Program Site Open: Remediation as of 3/3/2002	0.08 mile east of trail corridor, near MP 114	Diesel, gasoline, waste oils Potential contamination of an aquifer used for drinking water	Per an Annual Estimation Letter from May 2019, the Regional Water Board expected to prepare and finalize a deed restriction and prepare closure documentation in fiscal year 2019/2020.	Assume no remediation required given media impacted, contaminant type and distance to the trail.	$ -
Ukiah Recycle and Salvage/Unocal Bulk Plant	Cleanup Program Site Open: Remediation as of 7/16/2003	0.08 mile east of trail corridor, near MP 114	Diesel, gasoline, other petroleum Potential contamination of an aquifer used for drinking water	Per an Annual Estimation Letter from May 2019, The Regional Water Board expected to review the site for possible closure and proceed with closure requirements, or direct additional work in fiscal year 2019/2020.	Assume no remediation required given media impacted, contaminant type and distance to the trail.	$ -
Old Leslie Street Gas Plant	Cleanup Program Site Open: Remediation as of 10/9/2013	0.08 mile east of trail corridor, at MP 114	Other petroleum and PAHs Potential soil contamination, concerns under investigation	The previous operation resulted in the contamination of soil and groundwater at the site. Per an Annual Estimation Letter dated May 2019, the Regional Water Board expects to proceed with the site closure process, including remediation, during fiscal year 2019/2020.	Assume limited soil impact that need to be address. Class II disposal of 1000 CY.	$ 184,000
Ukiah Station/UPRR	Cleanup Program Site Completed: Closed as of 9/25/2018 Land Use Restrictions	Within/immediately adjacent, between MP 114 and MP 115	Diesel, PAHs, solvents, and oils Potential contamination of an aquifer used for drinking water	Although the case is closed, there are site management requirements, including restrictions on excavation and subsurface work without prior development of a Health & Safety Plan and agency review and approval.	Assume disposal of 1 mile of soil along the trail (8000 CY) VOC/metals impacted soil (class III), due to COC type and case status.	$ 690,000
Lightel's Bulk Plant	Cleanup Program Site Open: Site Assessment as of 6/22/2017	0.08 mile east of trail corridor, between MP 114 and MP 115	Benzene, diesel, ethylbenzene, gasoline, toluene, and xylene Potential contamination of an aquifer used for drinking water	Site assessment and remediation activities have been ongoing since 1997 and include minor excavation, ongoing free product removal, and intermittent soil vapor extraction from 2007 to 2011. Per a 2019 Monitoring and Sampling Report dated October 2019, there are plans to continue site assessment activities, including a vapor intrusion assessment.	Assume limited soil vapor investigation and risk analysis to confirm no risk to trail users.	$ 100,000
Masonite Corporation	Cleanup Program Site Open: Eligible for Closure as of 6/11/2019	0.07 mile west of trail corridor, between MP 115 and MP 116	Diesel, oils, chlorinated hydrocarbons, PAHs, PCE Potential contamination of soils and drinking water supply	A report dated September 2018 indicates that the remedial goals of an October 2017 work plan were reached.	Assume limited site assessment to confirm no risk to trail users.	$ 50,000

Hazardous Material Site	Type & Cleanup Status	Location Relative to Trail Corridor	Contaminants of Concern	Notes	Cost Assumptions[1, 3]	Estimated Cost[2]
Unauthorized Waste Disposal Site (Carter Waste Site #2)	Cleanup Program Site Open: Inactive as of 6/15/2017	0.10 mile west of trail corridor near MP 117	Metals, petroleum, solvents, non-petroleum hydrocarbons Potential contamination of soils	The most recent documentation indicates that the Regional Water Board was preparing to evaluate the case status, comply with CEQA, and close the case (June 2012).	Assume limited site assessment to confirm no risk to trail users.	$ 50,000
Ukiah Timber/Seabloom Salvage Company	DTSC Site Cleanup Program Inactive: Action Required as of 6/2/2008	0.02 mile west of trail corridor, near MP 118	Under investigation	In 2008, DTSC prepared a Site Screening Assessment under its cooperative agreement with EPA. A surface soil sample was collected during a site visit in March 2008. The sample contained 160 parts per million (ppm) of arsenic and 270 ppm of lead, both exceeding their residential screening levels. The site screening assessment recommended additional site characterization.	Assume disposal half mile of soil along the trail (4000 CY) metals impacted soil (class II).	$ 735,000
Louisiana Pacific Calpella Station	Cleanup Program Site Open: Inactive as of 5/26/2009	Within/immediately adjacent, between MP 119 and MP 120	N/A (under investigation)	This is a former sawmill site owned by LP. The property was sold to Mendocino Forest Products in 1999 and is now a wood distribution center. A leak was discovered and reported in 1997. No further information is available.	Assume disposal 1 mile of soil along the trail (8000 CY) hydrocarbon impacted soil (class III). Assume deed modification	$ 690,000
Southern Pacific Calpella Station	Cleanup Program Site Completed: Case Closed as of 10/30/2018 Land Use Restrictions	Within/immediately adjacent, near MP 120	Gasoline Potential concerns under investigation	Site investigation and remediation has been completed. Per the Covenant (September 2018), development and use of the property is restricted to industrial, commercial, and/or office space uses. Specific uses that are not permitted include residences, hospitals, schools, or any other uses where children or senior citizens could congregate.	Assume disposal 0.5 miles of soil along the trail (4000 CY) hydrocarbon impacted soil (class III). Assume deed modification.	$ 395,000
Masonite Corporation	DTSC Evaluation No Further Action as of 10/5/1989	0.02 mile west of trail corridor, between MP 120 and MP 121	N/A	The site was identified during a drive by and screening was completed in 1988. No additional information is available.	Assume limited soil impact that need to be address. Class II disposal of 1000 CY.	$ 184,000
Southern Pacific Redwood Valley Station	Cleanup Program Site Open: Inactive as of 5/28/2009	Within/immediately adjacent, near MP 122	Diesel Potential concerns under investigation	As of May 2019, the Regional Water Board anticipated they would evaluate the site for the need for additional remediation work and draft an environmental covenant during fiscal year 2019/2020.	Assume disposal 0.5 miles of soil along the trail (4000 CY) hydrocarbon impacted soil (class III).	$ 345,000

Hazardous Material Site	Type & Cleanup Status	Location Relative to Trail Corridor	Contaminants of Concern	Notes	Cost Assumptions[1, 3]	Estimated Cost[2]
Union Oil	DTSC Historical Refer to RWQCB as of 7/27/1988	Within/immediately adjacent, near MP 139	N/A	The site was identified during a drive by and screening was completed in 1988. No additional information is available through GeoTracker.	Assume limited soil impact that need to be address. Class III disposal of 1000 CY.	$ 86,000
Little Lake Industries	LUST Cleanup Site Completed: Case Closed as of 9/22/1997	Within/immediately adjacent, between MP 139 and MP 140	Solvents Potential contamination of an aquifer used for drinking water	Remediation and verification monitoring activities occurred in 1997 and the case was closed shortly thereafter.	Assume limited site assessment to confirm no risk to trail users.	$ 50,000
NCRA Willits Rail Yard	Cleanup Program Site Open: Site Assessment as of 12/27/1991	Within/immediately adjacent, between MP 139 and MP 140	Diesel Potential concerns under investigation	As of May 2019, the Regional Water Board anticipated they would evaluate the site status, prepare a deed restriction and closure documentation, and bring the case through the closure process during fiscal year 2019/2020.	Assume disposal 1 miles of soil along the trail (8000 CY) hydrocarbon impacted soil (class III).	$ 690,000
RTT Eel River Canyon Section						
Dos Rios Rail Yard	N/A	Within/immediately adjacent, between MP 166 and MP 167	N/A	As of 2002, the Dos Rios maintenance yard contained oil and grease waste, a diesel storage tank, and lead-acid batteries. Heavy surface staining was noted between rails of the side rail, and there was a large pile of disposed rail ties (Kleinfelder 2002). Cleanup activities were conducted at the Dos Rios maintenance yard in 2004 (Kleinfelder 2005). No rail-related waste or other debris were identified by PWA during field assessment in early 2020 at this location.	Assume limited site assessment to evaluate risk to trail users and limited soil impacts that need to be addressed. 1000 CY soil to class II.	$ 234,000
Nashmead	N/A	Within/immediately adjacent, between MP 175 and MP 176	N/A	According to a Consent Decree and Stipulated Judgment (California v. NCRA, Case No. CV80240, July 1999), at one point there was a railroad car in the streambed of the Eel River at MP 175 (Kleinfelder 2002), which is near the Nashmead maintenance yard. As of 2002, it was suspected that petroleum storage facilities had been removed, but that ties were buried (Kleinfelder 2002).	Assume disposal of 1 mile of soil along the trail (8000 CY) VOC/metals impacted soil (75% class II and 25% class I).	$ 1,670,000

Hazardous Material Site	Type & Cleanup Status	Location Relative to Trail Corridor	Contaminants of Concern	Notes	Cost Assumptions[1, 3]	Estimated Cost[2]
Maintenance Yard				PWA noted the presence of railroad infrastructure, rail metal debris, and railroad cars in this area during their field assessment in early 2020.		
Bell Springs Maintenance Yard	N/A	Within/immediately adjacent, near MP 185	N/A	Previously-documented petroleum storage, oil spills, and rail ties, as well as an underground fuel tank (Kleinfelder 2002). PWA noted the presence of a rail car in the Eel River and rail debris near this location during their field assessment in early 2020.	Assume disposal of 0.5 miles of soil along the trail (4000 CY) TPH/metals impacted soil (75% class II and 25% class I).	$ 835,000
Island Mountain Maintenance Yard	N/A	Within/immediately adjacent, near MP 194	N/A	This maintenance yard was noted in the 1999 Consent Decree and Stipulated Judgment as having contaminated equipment; the consent decree required additional sampling and investigation as well as preparation of a remediation plan. As of 2002, the site contained drums and containers with petroleum waste and product within boxcars. There are also storage tanks and drums that were empty but suspected to have previously held petroleum, oil, and fuel. Surface staining was noted, and discarded rail ties were present (Kleinfelder 2002). Aerial imagery in this location shows multiple parallel tracks with 10 rail cars and various structures. PWA noted the presence of rail cars, track switches, and other rail-related debris near this location during their field assessment in early 2020.	Assume disposal of 1 mile of soil along the trail (8000 CY) VOC/metals impacted soil (75% class II and 25% class I).	$ 1,670,000
Alderpoint Maintenance Yard	Cleanup Program Site Open: Inactive as of 2/27/1992	Within/immediately adjacent, near MP 209	Diesel Potential contamination is under investigation	Per correspondence from December 2015, the Regional Water Board expected to review the soil and groundwater investigation workplan and associated reports and conduct site inspections.	Assume disposal half mile of soil along the trail (4000 CY) metals impacted soil (class II).	$ 735,000

Hazardous Material Site	Type & Cleanup Status	Location Relative to Trail Corridor	Contaminants of Concern	Notes	Cost Assumptions[1, 3]	Estimated Cost[2]
Fort Seward Maintenance Yard	N/A	Within/immediately adjacent, near MP 216	N/A	As of 2002, the Fort Seward Maintenance Yard contains many drums and buckets in a boxcar, with some containing grease and oil. Oil surface staining was noted (Kleinfelder 2002). Cleanup activities were conducted at the Fort Seward Maintenance Yard in 2004 (Kleinfelder 2005). No rail related waste or other debris were identified by PWA during their site visit in early 2020 at this location.	Assume limited site assessment to evaluate risk to trail users and limited soil impacts that need to be addressed. 1000 CY soil to class II.	$ 136,000
RTT Northern Section						
South Fork Maintenance Yard/ Station	LUST Cleanup Site Open: Site Assessment as of 9/25/2018	Within/immediately adjacent, near MP 237	Diesel Potential contamination of an aquifer used for drinking water	Per correspondence from September 2019, UPRR is working on a subsurface investigation work plan to determine if groundwater has been impacted by the LUST.	Assume limited soil excavation 1,000 CY (class III).	$ 86,000
Scotia Maintenance Yard	N/A	Within/immediately adjacent, near MP 253	N/A	As of 2002, the Scotia Maintenance Yard in Scotia was used for storage of oil supply and waste products, and an aboveground storage tank was present. Rail ties were stored in the area, and an oil deposit was noted in the side rail tracks (Kleinfelder 2002). Cleanup activities were conducted at the Scotia Maintenance Yard in 2004 (Kleinfelder 2005). No rail-related waste or other debris were identified by PWA during their field assessment in early 2020 at this location.	Assume limited soil excavation 1,000 CY (class III).	$ 86,000
Eel River Sawmills	Cleanup Program Site Open: Verification Monitoring as of 6/22/2017	Within/immediately adjacent, near MP 259	Diesel, gasoline, pesticides, fumigants, waste oils Potential contamination of an aquifer used for drinking water	The site is jointly led by the Regional Water Board with the DTSC. All but one of the major mill buildings were removed between 2007 and 2008. The City of Rio Dell has standby wells adjacent to the site. Per correspondence from October 2016, the Regional Water Board expected to conduct site inspections, review monitoring reports, and review any plans needed to complete investigation of the extent of groundwater contamination in fiscal year 2016/2017.	Assume limited soil excavation 1,000 CY (class II).	$ 184,000

Hazardous Material Site	Type & Cleanup Status	Location Relative to Trail Corridor	Contaminants of Concern	Notes	Cost Assumptions[1, 3]	Estimated Cost[2]
Pacific Lumber Company Fortuna Mill	Cleanup Program Site Open: Assessment & Interim Remedial Action as of 6/22/2017	Within/immediately adjacent, near MP 265	Diesel, dioxin/furans, gasoline, waste oils Potential contamination of soil and an aquifer used for drinking water	Per correspondence from February 2020, the Regional Water Board requested that the entire parcel be included in the Land Use Covenant, not just the areas of residual contamination, prior to site closure.	Assume disposal 0.5 miles of soil along the trail (4000 CY) hydrocarbon impacted soil (class III). Assume deed modification.	$ 395,000
Unocal Bulk Plant	Cleanup Program Site Open: Assessment & Interim Remedial Action as of 12/29/2010	Within/immediately adjacent, between MP 266 and MP 267	Gasoline Potential contamination of an aquifer used for drinking water	Per correspondence from May 2019, the Regional Water Board anticipated they would review and comment on draft environmental covenant agreements and facilitate the institution of the land use covenant in fiscal year 2019/2020.	Assume disposal 1 mile of soil along the trail (8000 CY) hydrocarbon impacted soil (class III). Assume deed modification.	$ 740,000
Eureka Former Fuel Pipeline	Cleanup Program Site Open: Inactive as of 6/13/2017	Within/immediately adjacent, near MP 283	Heating oil, fuel oil Potential contamination of soil and an aquifer used for drinking water	Per correspondence from May 2019, The Regional Water Board anticipated they would evaluate the site status and conduct site inspections/evaluate the site for closure in fiscal year 2019/2020.	Assume limited soil excavation 1,000 CY (class III).	$ 86,000
NWP Railroad Yard	Cleanup Program Site Open: Inactive as of 2/10/1998	Within/immediately adjacent, near MP 284	Under investigation	The GeoTracker case summary indicates that there was a leak discovered and reported in 1998 and there are potential stormwater issues.	Assume disposal 0.5 miles of soil along the trail (4000 CY) hydrocarbon impacted soil (class III).	$ 345,000
R.E. Davenport	DTSC Historical Refer to Regional Water Board as of 1/3/1994	0.02 mile north of trail corridor, near MP 284	Waste oil, mixed oil	The bankrupt owner was unable to cleanup 150 bulging and leaking drums of bilge oil from boats. Emergency response was undertaken at the waterfront site and the Regional Water Board funded part of the cleanup. Since the site is only oil contaminated, it was referred to the Regional Water Board (no information available through GeoTracker).	Assume limited soil excavation 1,000 CY (class III).	$ 86,000
Southern Pacific – Waterfront/G & R Metal	Cleanup Program Site Open: Verification Monitoring as of 6/14/2017	Within/immediately adjacent, between MP 284 and MP 285	Gasoline, arsenic, chromium, copper, lead, nickel, PCBs, waste oils Potential contamination of surface water and groundwater	The GeoTracker case summary for Southern Pacific – Waterfront indicates that the case was combined with G&R Metals in 2002. Per correspondence from May 2019, the Regional Water Board anticipated they would review site closure documents, prepare a site closure summary, develop site closure documents for public notice, and prepare the deed restriction in fiscal year 2019/2020.	Assume limited soil excavation 2,000 CY (class II), given contaminant types.	$ 368,000

Hazardous Material Site	Type & Cleanup Status	Location Relative to Trail Corridor	Contaminants of Concern	Notes	Cost Assumptions[1, 3]	Estimated Cost[2]
Beaver Lumber Company of Arcata	Cleanup Program Site Completed: Case Closed as of 1/3/2007	Within/immediately adjacent, near MP 292	Pesticides, fumigants, solvent, distillates Potential contamination of an aquifer used for drinking water	A No Further Action Letter was issued on January 2, 2007 by the Regional Water Board confirming that site investigation and remedial action is complete.	Assume limited site assessment to confirm no risk to trail users.	$ 50,000
RTT Carlotta, Samoa, and Korblex Branches						
Samoa Peninsula	Cleanup Program Site Open: Inactive as of 6/14/2017 Land Use Restrictions	Immediately adjacent to Samoa Branch	Aviation Potential contamination of an aquifer used for drinking water	Per an Annual Estimation Letter from May 2019, the Regional Water Board anticipated they would review reports needed to complete investigation of the vertical and horizontal extent of contamination and conduct site inspections in fiscal year 2019/2020.	Assume limited soil excavation 1,000 CY (class III).	$ 86,000
Former Evergreen Pulp Incorporated	Cleanup Program Site Open: Assessment & Interim Remedial Action as of 3/6/2016	Immediately adjacent to Samoa Branch	Gasoline, metals, solvents Potential contamination of soil and aquifer used for drinking water	In September 2014, EPA completed the removal of spent pulping liquors that were previously stored in multiple onsite aboveground storage tanks. Per an Annual Estimation Letter from May 2019, the Regional Water Board expects to conduct site inspections and review monitoring reports and remedial action plans in fiscal year 2019/2020.	Assume limited soil excavation 2,000 CY (class II), given contaminant types.	$ 368,000
McNamara and Peepe Lumber Mill	DTSC Site Cleanup Program Active as of 1/2/2019 Land Use Restrictions	Immediately adjacent to Korblex Branch	2,3,4,6-TCP, PCP, waste potentially containing dioxins Potential contamination of soil and groundwater	Land use restrictions are in place and notification prior to a change in land use or subsurface work is required.	Assume disposal 0.5 miles of soil along the trail (4000 CY) VOC impacted soil (class II). Assume deed modification.	$ 785,000
McNord Lumber Company	DTSC Site Cleanup Program Active as of 11/21/2019	Immediately adjacent to Korblex Branch	2,3,4,6-TCP, PCP Potential contamination of sediments and soil	McNord Lumber Company operated a lumber mill from at least 1961 through 1974. Mill operations included the dipping of wood products in a fungicide and PCP, and allowing them drip dry. Blue Lake Forest Products currently operates a lumber and trailer storage facility. A dip tank, using Britewood S dip solutions, is located on the north side of the property.	Assume disposal of 0.5 miles of soil along the trail (4000 CY) VOC impacted soil (class II).	$ 735,000
					Total Site Cost	**$ 18,090,000**

Soil Excavation Disposal Costs (class III)	Unit	Qnt		Unit Price		Total
Planning and Oversight	ls	1	$	150,000	$	150,000
Mobilization	LS	1	$	50,000	$	50,000
Excavation	cy	20,000	$	8	$	150,000
Transport	CY	20,000	$	15	$	300,000
Disposal	Ton	30,000	$	35	$	1,050,000
Reporting	LS	1	$	25,000	$	25,000
TOTAL					**$**	**1,725,000**
				Price per Yard	**$**	**86**
				Price per Ton	**$**	**112**

Assumption:
20k Yards of waste
75 mile round trip 15 CY/trip
100/hr trucking costs @ 45 mph
includes all plan, permitting and reg fees
1.3 tons/CY

Soil Excavation Disposal Costs (class II)	Unit	Qnt		Unit Price		Total
Planning and Oversight	ls	1	$	150,000	$	150,000
Mobilization	LS	1	$	50,000	$	50,000
Excavation	cy	20,000	$	8	$	150,000
Transport	CY	20,000	$	45	$	900,000
Disposal	Ton	30,000	$	80	$	2,400,000
Reporting	LS	1	$	25,000	$	25,000
TOTAL					**$**	**3,675,000**
				Price per Yard	**$**	**184**
				Price per Ton	**$**	**239**

Assumption:
20k Yards of waste
200mile round trip 15 CY/trip
100/hr trucking costs @ 60 mph
includes all plan, permitting and reg fees
1.3 tons/cy

Soil Excavation Disposal Costs (class I)	Unit	Qnt	Unit Price	Total
Planning and Oversight	ls	1	$ 150,000	$ 150,000
Mobilization	LS	1	$ 50,000	$ 50,000
Excavation	cy	20,000	$ 8	$ 150,000
Transport	CY	20,000	$ 115	$ 2,300,000
Disposal	Ton	30,000	$ 100	$ 3,000,000
Reporting	LS	1	$ 25,000	$ 25,000
TOTAL				**$ 5,675,000**
			Price per Yard	**$ 284**
			Price per Ton	**$ 369**

Assumption:

20k Yards of waste
500 mile round trip 15 CY/trip
100/hr trucking costs @ 60 mph
includes all plan, permitting and reg fees
1.3 tons/cy

Estimated volume of soil per mile trail

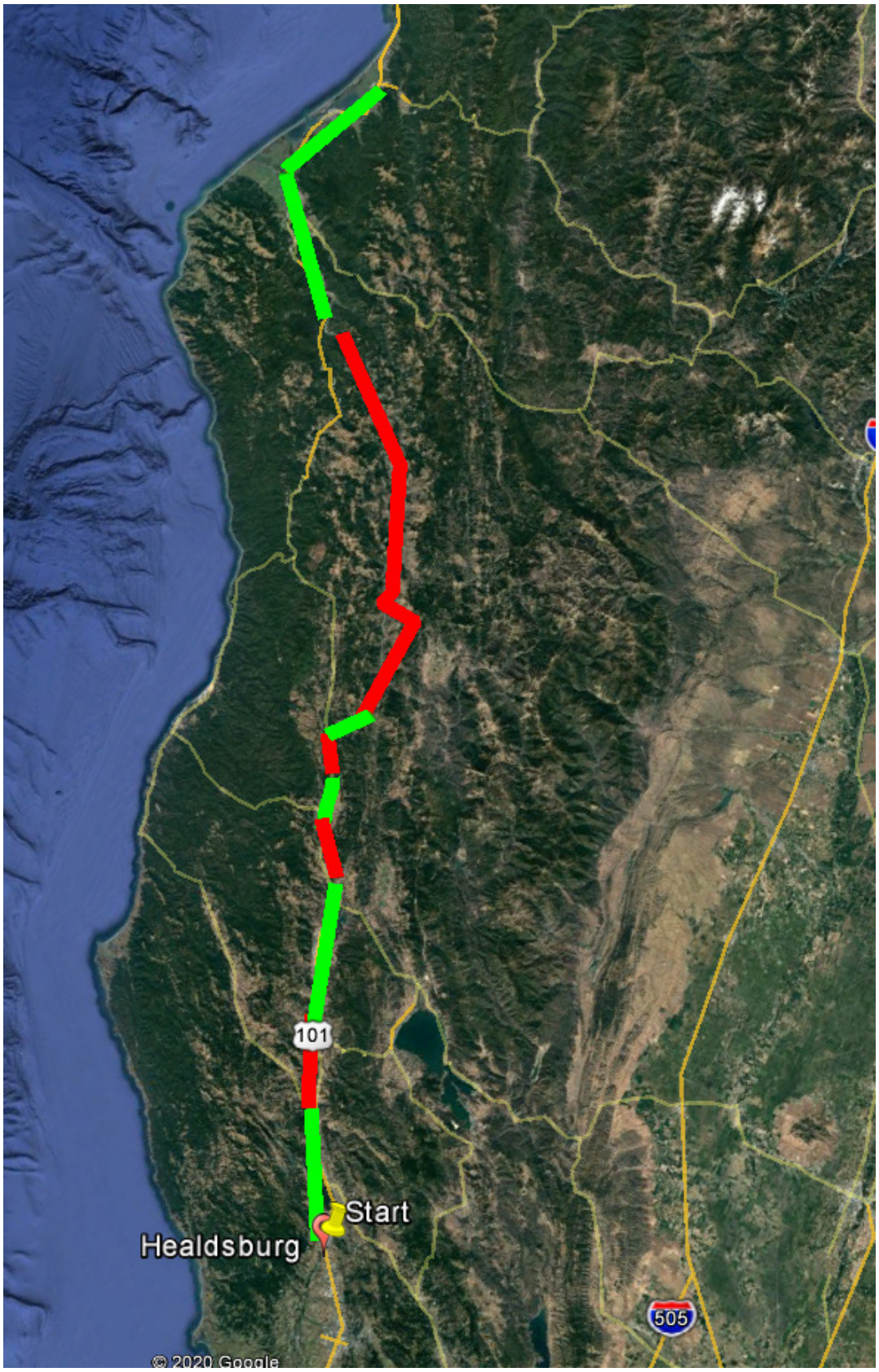
excavation depth	2	feet
excavation width	20	feet
excavation length	5280	feet
Total Volume	211200	cf
Total Volume	7822.2	CY

Debris Removal Cost Per Event

Individual Subcomponent	Low	High	
Preconstruction Planning and Work Survey	$ 12,000	$ 20,000	(HASP, SOPs, Driving and Planning Survey of entire Line)
Crew Mobilization/Demob (Rail Car Demolition)	$ 12,000	$ 18,000	
Crew Mobilization/Demob (Culvert & Debris Removal)	$ 8,500	$ 12,500	
Demolition Crew Deployment (Rail Car)	$ 25,000	$ 50,000	
Culvert & Debris Removal Crew Deployment	$ 16,500	$ 33,000	
Transportation and Disposal of Waste	$ 10,000	$ 20,000	
Subtotal by Work Component			
Rail Car Demolition	$ 59,000	$ 108,000	
Culvert & Debris Removal	$ 47,000	$ 85,500	

Notes and Assumptions:

1. This is a very rough estimate and could vary significantly. Before a firm estimate can be developed the project team and contractors will need to drive or survey some or all of the area to develop solid estimates.
2. Note also that these numbers for preconstruction planning and work survey are per event. Depending upon project staging multiple events may occur thereby greatly increasing costs.
3. Assumes that demolition and clean-up areas are “concentrated along the route" and it will not be necessary to clean-up the entire 300 miles of track.
4. Mobilization and demobilization events could vary and costs would be additive for each event.
5. Access to the clean-up areas is a large factor in determining costs.
6. These estimates do not include remove of the rails, ties, bridges, and other infrastructure items.
7. Salvage for the effort is not included.
8. Permitting and delays for access are not included but could be expected to increase costs.
9. This assumes accessibility by large dump trucks to demolition/debris removal areas to remove the waste. If access is restricted expect costs to increase by a multiplier of 5X.
10. Typically demolition would include hydraulic shear on a large excavator along with oxyacetylene torch for rail car demolition and large excavator and torch or jack hammer for culvert and debris moval. If access by an excavator is not possible, expect costs to increase by a factor or 5X to 7X as all work would be conducted manually.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