5-NJ.9 NEW JERSEY AIR QUALITY

This section summarizes the change in air pollutant emissions that would result from the proposed Acquisition-related operational changes in the state of New Jersey. The primary air pollutant emission sources from trains and related activities include locomotive emissions on rail line segments, at rail yards, and at intermodal facilities. In addition to locomotive emissions, SEA evaluated emissions from other sources at intermodal facilities (idling trucks, lift cranes, etc.), motor vehicles idling near at-grade crossings, and decreases in truck emissions due to truck-to-rail freight diversions.

To analyze the air quality effects of the proposed Acquisition, SEA evaluated rail line segments, rail yards, and intermodal facilities that would meet or exceed the Board's thresholds for environmental analysis defined in Chapter 2, "Proposed Action and Alternatives." See Chapter 3, "Analysis Methods and Potential Mitigation Strategies," for additional information and a summary of the air quality analysis methodology. Appendix E, "Air Quality," contains a detailed description of methodology and detailed tables of results.

SEA addressed air pollutant emissions for sulfur dioxide (SO_2), volatile organic compounds (VOCs), particulate matter (PM), lead (Pb), nitrogen oxides (NO_x) and carbon monoxide (CO). SEA determined that emissions for SO_2, VOCs, PM and Pb would not exceed the emission screening thresholds for environmental analysis in any county. However, SEA found that these thresholds would be exceeded for NO_x in various counties in 17 states, and CO in three counties in two states (IL and OH). NO_x air pollutant emissions may affect a region's ability to attain the National Ambient Air Quality Standards for ozone. CO emissions may affect a local area's ability to attain the National Ambient Air Quality Standards for CO.

Two NS and four Shared Area rail line segments, and one NS and two CSX intermodal facilities exceeded the Board's threshold for air quality analysis in New Jersey. Table 5-NJ-10 shows the air quality evaluation process that was followed. SEA identified six counties in New Jersey which include these rail facilities. For these counties, SEA summed emissions increases from changes on rail line segments and other activities and compared them to the air emission screening level that would require a permit if the source were a stationary source (rather than a mobile source, such as trains, trucks, and other vehicles). If the calculated emissions exceeded this screening level, SEA conducted a detailed emissions analysis known as a "netting analysis" in these counties. The netting analysis considered all emissions increases and decreases from proposed Acquisition-relatedactivity changes. SEA compared the netting analysis results to the air emission screening level and performed additional analyses for counties where netting analysis results exceeded the air emission screening level. For these counties, SEA inventoried all county air pollutant emissions sources to evaluate if proposed Acquisition-related emissions represented more than one percent of all emissions sources in the county.

Table 5-NJ-10
New Jersey Counties Evaluated in Air Quality Analysis

Counties Exceeding the Board's Activity Thresholds	O_3 Status [a]	Exceeds Emissions Screening Level Before Netting	Exceeds Emissions Screening Level After Netting	Exceeds 1 Percent of County Emissions
Bergen	N (Severe)	Yes	Yes	No
Essex	N (Severe)	Yes	No	-
Hudson	N (Severe)	Yes	No	-
Mercer	N (Severe)	Yes	Yes	No
Middlesex	N (Severe)	Yes	Yes	No
Union	N (Severe)	Yes	No	-

[a] M= Maintenance Area, N= Nonattainment Area, as defined in the Clean Air Act.

Chapter 4, "System-wide and Regional Setting, Impacts and Proposed Mitigation," contains a discussion of NO_x emissions, on a regional basis, relative to its potential contribution to O_3 formation in the Ozone Transport Region (OTR). New Jersey is in the OTR.

The emissions estimates presented in Appendix E, "Air Quality," show that the increased county-wide air pollutant emissions from the facilities described above exceed the threshold for six counties in New Jersey. SEA's analysis results for these counties are presented below:

5-NJ.9.1 County Analysis

Bergen County

EPA has designated Bergen County as a severe nonattainment area for O_3. Table 5-NJ-11 shows that the net NO_x emissions increase in Bergen County, considering all proposed Acquisition-related emissions changes, is above the emissions screening threshold of 25 tons/year used to determine if emissions changes are potentially significant. However, the increased NO_x emissions are less than one percent of the existing county-wide NO_x emissions. Therefore, SEA considers the net emissions increase is not significant.

Table 5-NJ-11
Bergen County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Suffern, NY to Ridgewood Jct., NJ	114.08
Rail Segment (NS)	Ridgewood Jct., NJ to Croxton, NJ	43.39
Rail Segment (CSX)	Ridgefield Heights, NJ to Newburgh, NY	32.73
Rail Segment (SA)	North Bergen, NJ to Ridgefield Heights NJ	1.14
Intermodal Facility (CSX)	Little Ferry	26.79
Truck Diversions (both)	County-wide	-9.49
Total Acquisition-Related Net NO_x Emissions Increase		208.64
NO_x Emissions Screening Level		25.00
Existing (1995) County Total NO_x Emissions		32,113.17
Percent Increase in County NO_x Emissions		0.65%

Essex County

EPA has designated Essex County as a severe nonattainment area for O_3. Table 5-NJ-12 shows that the net NO_x emissions change in Essex County, considering all proposed Acquisition-related emissions changes, is below the emissions screening threshold of 25 tons/year used to determine if emissions changes are potentially significant.

Table 5-NJ-12
Essex County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (SA)	Lane, NJ to Union, NJ	2.01
Rail Segment (SA)	Port Newark, NJ to Bayway, NJ	2.84
Rail Segment (SA)	NK, NJ to Boundbrook, NJ	-1.37
Rail Segment (SA)	Valley, NJ to NK, NJ	-1.26
Rail Segment (SA)	Kearney, NJ to Valley, NJ	-23.09
Rail Segment (SA)	Green, NJ to Oak Island, NJ	0.35
Rail Segment (NS)	Oak Island, NJ to Morrisville, PA	1.26

Table 5-NJ-12
Essex County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Yard (CSX)	Newark - Oak Island	7.28
Rail Yard (NS)	Newark - Oak Island	-6.45
Truck Diversions (both)	County-wide	-65.71
Total Acquisition-Related Net NO_x Emissions Change		-84.14
NO_x Emissions Screening Level		25.00

Hudson County

EPA has designated Hudson County as a severe nonattainment area for O_3. Table 5-NJ-13 shows that the net NO_x emissions change in Hudson County, considering all proposed Acquisition-related emissions changes, is below the emissions screening threshold of 25 tons/year used to determine if emissions changes would be potentially significant. Therefore, SEA does not consider this change to be significant.

Table 5-NJ-13
Hudson County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Ridgewood Jct., to Croxton, NJ	7.98
Rail Segment (NS)	Croxton, NJ to Wayne, NJ	0.20
Rail Segment (SA)	Green, NJ to Oak Island, NJ	1.18
Rail Segment (SA)	Hack, NJ to Croxton, NJ	-4.61
Rail Segment (SA)	Croxton, NJ to North Bergen, NJ	3.19
Rail Segment (SA)	Nave, NJ to North Bergen, NJ	-30.71
Rail Segment (SA)	Waldo, NJ to Hack, NJ	-11.97
Rail Segment (SA)	Hack, NJ to Kearney, NJ	-17.21
Rail Segment (SA)	Kearney, NJ to Valley, NJ	-1.00
Rail Segment (SA)	North Bergen, NJ to Ridgefield Heights, NJ	0.81
Rail Yard (CSX)	Bayonne	-0.80
Rail Yard (NS)	Croxton	-0.42

Table 5-NJ-13
Hudson County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Yard (CSX)	Kearney - Meadows	-21.41
Rail Yard (NS)	South Kearney	-0.48
Intermodal Facility (NS)	North Jersey - Croxton (NJIT)	14.98
Intermodal Facility (NS)	North Jersey - E-rail	54.51
Intermodal Facility (NS)	North Jersey - South Kearney (APL)	-11.75
Intermodal Facility CSX)	South Kearney	14.27
Truck Diversions (both)	County-wide	-33.33
Total Acquisition-Related Net NO_x Emissions Change		-36.57
NO_x Emissions Screening Level		25.00

Mercer County

EPA has designated Mercer County as a severe nonattainment area for O_3. Table 5-NJ-14 shows that the net NO_x emissions increase in Mercer County, considering all proposed Acquisition-related emissions changes, is above the emissions screening threshold of 25 tons/year used to determine if emissions changes are potentially significant. However, the increased NO_x emissions are less than one percent of the existing county-wide NO_x emissions. Therefore, SEA considers the net emissions increase is not significant.

Table 5-NJ-14
Mercer County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (SA)	Midway, NJ to Morrisville, PA	76.98
Rail Segment (SA)	Trenton, NJ to Port Reading, NJ	-4.68
Rail Segment (CSX)	CP Wood, NJ to Trenton, NJ	-0.25
Rail Segment (NS)	Oak Island, NJ to Morrisville, PA	5.56
Truck Diversions (both)	County-wide	-16.52
Total Acquisition-Related Net NO_x Emissions Increase		61.09
NO_x Emissions Screening Level		25.00

Table 5-NJ-14
Mercer County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Existing (1995) County Total NO_x Emissions		24,804.88
Percent Increase in County NO_x Emissions		0.31%

Middlesex County

EPA has designated Middlesex County as a severe nonattainment area for O_3. Table 5-NJ-15 shows that the net NO_x emissions increase in Middlesex County, considering all proposed Acquisition-related emissions changes, is above the emissions screening threshold of 25 tons/year used to determine if emissions changes would be potentially significant. However, the increased NO_x emissions would be less than one percent of the existing county-wide NO_x emissions. Therefore, SEA considers the net emissions increase is not significant.

Table 5-NJ-15
Middlesex County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (SA)	Union, NJ to Midway, NJ	138.57
Rail Segment (SA)	Bayway, NJ to PD, NJ	2.72
Rail Segment (SA)	Port Reading, Jct NJ to Port Reading, NJ	11.97
Rail Segment (SA)	NK, NJ to Boundbrook, NJ	-12.17
Rail Segment (NS)	Oak Island, PA to Morrisville, PA	12.59
Rail Yard (CSX)	Port Reading	-3.65
Rail Yard (CSX)	South Amboy - Browns	-0.47
Truck Diversion (both)	County-Wide	-37.93
Total Acquisition-Related Net NO_x Emissions Increase		149.12
NO_x Emissions Screening Level		25.00
Existing (1995) County Total NO_x Emissions		36,271.29
Percent Increase in County NO_x Emissions		0.41%

Union County

EPA has designated Union County as a severe nonattainment area for O_3. Table 5-NJ-16 shows that the net NO_x emissions increase in Union County, considering all proposed Acquisition-related emissions changes, is below the emissions screening threshold of 25 tons/year used to determine if emissions changes are potentially significant. Therefore, SEA determined that the net emissions increase is not significant.

5-NJ.9.2 Summary of Potential Effects and Preliminary Recommended Mitigation

While there are localized increases in emissions in some counties, the increases are not likely to affect compliance with air quality standards. Therefore, SEA has determined that air quality will not be significantly affected and no mitigation is necessary. See system-wide and regional discussion in Section 4.12 "Air Quality."

Table 5-N-16
Union County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (SA)	Lane, NJ to Union, NJ	45.52
Rail Segment (SA)	Port Newark, NJ to Bayway, NJ	9.69
Rail Segment (SA)	Union, NJ to Midway, NJ	6.43
Rail Segment (SA)	Bayway, NJ to PD, NJ	3.31
Rail Segment (SA)	NK, NJ to Boundbrook, NJ	-11.46
Rail Segment (CR/NS)	Oak Island, NJ to Morrisville, PA	3.96
Rail Yard (CSX)	Bayway	0.29
Rail Yard (CSX)	Linden	-0.06
Rail Yard (CSX)	Metuchen	-0.41
Rail Yard (CSX)	South Plainfield - Manville	-0.65
Intermodal Facility (NS)	Elizabeth - Portside	5.84
Truck Diversions (both)	County-wide	-44.12
Total Acquisition-Related Net NO_x Emissions Increase		18.34
NO_x Emissions Screening Level		25.00

5-NJ.10 NEW JERSEY NOISE

To analyze the potential noise impacts of the proposed Acquisition, SEA evaluated rail line segments, rail yards and intermodal facilities that would meet or exceed the Board's thresholds for environmental analysis of noise. Although new construction projects and rail line abandonments can result in noise increases, the noise effects would be temporary and therefore, SEA did not evaluate them.

5-NJ.10.1 Proposed Activities

Train noise sources include diesel locomotive engine and wheel/rail interaction noise (or wayside noise) and horn noise. Wayside noise affects all locations in the vicinity of the rail facility, and generally diminishes with distance from the source. Horn noise is an additional noise source at grade crossings, and also generally diminishes with distance. SEA performed an analysis to identify rail line segments, rail yards and intermodal facilities where the proposed changes in operations meet or exceed the Board's environmental analysis thresholds at 49 CFR 1105.7(e)(6). Where the proposed rail activity would exceed these thresholds, SEA calculated the 65 dBA L_{dn} noise contours for the pre- and post-Acquisition conditions. SEA based the noise level impact assessment on the projected activity level data provided by the railroads. SEA counted sensitive receptors (e.g., schools, libraries, hospitals, residences, retirement communities, and nursing homes) within the noise contours for both pre-Acquisition and post-Acquisition operating conditions.

The CSX and NS intermodal facilities that would experience increases in traffic or activity meeting the Board's environmental analysis thresholds for New Jersey are listed in Table 5-NJ-17.

The counties where these facilities are located are listed in Section 5-NJ.2, "Proposed Conrail Acquisition Activities in New Jersey."

Table 5-NJ-17
Intermodal Facilities in New Jersey That Exceed Board Thresholds for Noise Analysis

Site ID	Facility Location	Trucks Per Day		Percent Change in ADT on Local Roads	Change in dBA	Approximate Distance to 65 dBA L_{dn} contour
		Pre-Acquisition	Post-Acquisition			
CM-03	Little Ferry	215	392	2.0-7.0	2.6	225
CM-04[a]	South Kearney	410	483	1.0-2.0	< 2	---
NM-10	Elizabeth[b]	98	483	0.4-3.1	6.9	180

[a] SEA determined that the increase in noise due to increased rail activity was insignificant and receptor counts were unnecessary. Refer to the screening methodology in Appendix F for additional detail.

[b] Combined results for both E-rail and Portside facilities.

5-NJ.10.2 Summary of Potential Effects and Preliminary Recommended Mitigation

There are different noise mitigation techniques used to reduce horn noise and wayside noise. These different types of noise and mitigation techniques are as follows:

Grade Crossing Noise Effects. The Federal Railroad Administration (FRA) has indicated that it will propose new rules on train horn blowing procedures in 1998. These new rules may allow communities to apply for an exception to horn blowing at certain grade crossings that meet explicit criteria. These criteria relate to so-called "quiet zones" where FRA would no longer require train engineers to sound the train horn at grade crossings with special upgraded safety features. Examples of such safety features include four-quadrant gates and median barriers that preclude motorists from entering the crossings while the crossing arm is down. Until FRA develops and implements these regulations, these measures are not feasible for SEA to require as mitigation. However, communities will have the opportunity to qualify for "quiet zones" once the FRA regulations are in place.

Wayside Noise Effect. Wayside noise is the sound of a train as it passes by. Wayside noise is comprised of steel wheel/ rail interaction noise, and locomotive diesel engine noise. This type of noise can be reduced by constructing barriers between the railway noise source and adjoining land uses, and by installing building sound insulation. Noise barriers include earth berms and walls that block the sound. Rail lubrication can be used to reduce "wheel squeal" noise on curved track. Building sound insulation consists of special windows and other building treatments that reduce interior noise. Noise barriers are the preferred type of noise mitigation for this project since barriers can be built on railroad property. Additional discussion of noise mitigation measures is included in Appendix F, "Noise Methods."

As noted above, for receptors near grade crossings that would experience increases in noise resulting from horn sounding, mitigation is not currently feasible. For areas affected by wayside

noise, SEA considered rail line segments eligible for noise mitigation for noise sensitive receptors exposed to at least 70 dBA L_{dn} and an increase of at least 5 dBA L_{dn} due to increased rail activity.

The combined effect of the two facilities in Elizabeth, N.J. (E-rail and Portside), produces a noise increase above 5 dBA L_{dn}, but there are no sensitive receptors within the 65 dBA contour so mitigation is not needed.

It is SEA's preliminary conclusion that no rail line segments, rail yards, or intermodal facilities in New Jersey warrant noise mitigation according to the project mitigation criteria.

5-NJ.11 NEW JERSEY CULTURAL RESOURCES

Cultural resources include historic and archaeological features. SEA determined that potential effects to cultural resources would most likely occur during new construction and rail line proposed abandonment activities that meet or exceed the Board's thresholds for environmental analysis.

Based on site visits and evaluation of railroad documents, SEA identified cultural resources that may be affected by Acquisition-related construction. SEA included qualified professionals in the fields of architectural history and archaeology specific to the State of New Jersey.

5-NJ.11.1 Construction

Construction: Little Ferry (Little Ferry, New Jersey) (CSX). SEA conducted a site visit and based on its findings determined that there are no cultural resources at the Little Ferry site, therefore, there would be no effect or mitigation required. A letter from the New Jersey SHPO dated March 5, 1997, declared the project will have no effect on historic properties. Refer to Appendix M for agency correspondence.

5-NJ.12 NEW JERSEY HAZARDOUS MATERIALS AND WASTE SITES

In analyzing the effects on hazardous waste sites for the proposed Conrail Acquisition, the primary issue addressed was whether proposed construction and abandonment activities would disturb contaminated areas. SEA identified potential impacts on hazardous waste sites and related environmental concerns for each location where proposed Acquisition-related construction or abandonment activities would take place.

SEA investigated the following sites in New Jersey for potential hazardous materials or waste impacts:

- Little Ferry Connection.

5-NJ.12.1 Construction: Little Ferry Connection (Bergen County, NJ) (CSX)

For the purposes of evaluating hazardous waste sites, SEA is showing the north and south trackage areas separately.

North Connection Trackage (480 feet)

Existing Environment. The Environmental Data Resources (EDR, 1997) report identified no hazardous waste sites or related environmental concerns within 500 feet of the proposed connection. However, the EDR report identified 43 sites that could not be mapped due to inadequate address information. These sites included 24 NJ Release sites (all also listed as NJ Spills sites); one Solid Waste Facility/Land Fill (SWF/LF); six Leaking Underground Storage Tanks (LUSTs); and 12 Underground Storage Tanks. SEA was unable to locate these sites. SEA supplemented this information on a site visit on July 9, 1997, and did not identify any additional environmental concerns.

Potential Effects and Preliminary Recommended Mitigation. SEA identified no hazardous waste sites within 500 feet of the proposed connection. However, the locations of the sites that could not be mapped are unknown. If hazardous materials are encountered during construction, CSX would follow appropriate regulations and procedures described in Chapter 3, "Analysis Methods and Potential Mitigation Strategies," and Appendix H. Because existing regulatory requirements of other agencies and standard construction practices of the Applicant adequately address potential disturbance of contaminated areas, it is SEA's preliminary determination that no additional mitigation is necessary.

South Connection Trackage (600 feet)

Existing Environment. The EDR report (1997) identified no hazardous waste sites or related environmental concerns within 500 feet of the proposed connection. However, the EDR report identified 80 sites that could not be mapped due to inadequate address information. These sites included 79 New Jersey Release/Spills sites, three LUST sites (two of which are also listed as New Jersey Release/Spills sites), and one SHWS (which is also listed for NJ Release/Spills). SEA could not locate these sites. SEA supplemented this information through contact with a local official (Ridgefield Construction Official Bialkowski) and a site visit on July 9, 1997. Mr. Bialkowski reported no environmental concerns within or adjacent to the proposed Little Ferry South connection. SEA determined that there are no additional known hazardous waste sites or related environmental concerns within 500 feet of the proposed connection.

Potential Effects and Preliminary Recommended Mitigation. SEA identified no hazardous waste sites within 500 feet of the proposed connection. However, the locations of the 80 sites that could not be mapped are unknown. SEA does not anticipate that the proposed connection would disturb known hazardous materials. If hazardous materials are encountered during

construction, CSX would follow appropriate regulations and procedures described in Chapter 3, "Analysis Methods and Potential Mitigation Strategies," and Appendix H. Because existing regulatory requirements of other agencies and standard construction practices of the Applicant adequately address potential disturbance of contaminated areas, it is SEA's preliminary determination that no additional mitigation is necessary.

5-NJ.13 NEW JERSEY NATURAL RESOURCES

SEA focused the natural resources analysis on any proposed physical alteration affecting water resources, wetlands, biological resources, and wildlife habitats. SEA determined that the potential for impacts to natural resources would most likely be associated with site-specific projects related to the proposed abandonment of rail lines and construction of new connector lines, rail yards, and intermodal facilities that would meet or exceed the Board's thresholds for environmental analysis.

SEA evaluated the proposed construction of two rail line connections at the Little Ferry site in the state of New Jersey. SEA contacted the appropriate Federal and state regulatory and review agencies for natural resources, regarding the proposed projects that occur within their jurisdictions. Specifically, for the state of New Jersey, SEA coordinated with:

- U.S. Department of Agriculture Forest Service.
- U.S. Department of Agriculture Natural Resource Conservation Service.
- U.S. Department of the Army Corps of Engineers.
- U.S. Department of the Interior Fish and Wildlife Service (USFWS).
- U.S. Department of the Interior National Park Service.
- U.S. Environmental Protection Agency.
- New Jersey Department of Environmental Protection.

SEA determined that potential impacts to natural resources could occur at the Little Ferry site. Tables 5-NJ-18 and 5-NJ-19 present the Federally protected animal and plant species that occur in New Jersey, as identified by the USFWS Division of Endangered Species (August 1997). Based on information from the USFWS local field office, SEA identified the species known to occur in those counties affected by proposed construction and abandonment activities. "Threatened" describes a species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range; "Endangered" describes a species that is in danger of extinction within the foreseeable future throughout all or a significant portion of

its range. Appendix I contains a brief description of suitable habitats for threatened and endangered species.

Table 5-NJ-18
Federally Protected Animal Species Listed for New Jersey

Group	Common Name	Scientific Name	Status	Bergen County
Vertebrates				
Mammal	Indiana Bat	*Myotis sodalis*	Endangered	
Bird	Bald Eagle	*Haliaeetus leucocephalus*	Threatened	
Bird	American Peregrine Falcon	*Falco peregrinus anatum*	Endangered	X
Bird	Piping Plover	*Charadrius melodus*	Threatened	
Bird	Roseate Tern	*Sterna dougalli dougalli*	Endangered	
Reptile	Kemp's (=Atlantic) Ridley Sea Turtle	*Lepidochelys kempii*	Endangered	
Reptile	Hawksbill Sea Turtle	*Eretmochelys imbricata*	Endangered	
Reptile	Leatherback Sea Turtle	*Dermochelys coriacea*	Endangered	
Reptile	Loggerhead Sea Turtle	*Caretta caretta*	Threatened	
Invertebrates				
Insect	Northeastern Beach Tiger Beetle	*Cicindela dorsalis dorsalis*	Threatened	

Table 5-NJ-19
Federally Protected Plant Species Listed for New Jersey

Family Name	Common Name	Scientific Name	Status	Bergen County
Fabaceae	Sensitive Joint-vetch	*Aeschynomene virginica*	Threatened	
Liliaceae	Swamp Pink	*Helonias bullata*	Threatened	
Orchidaceae	Small Whorled Pogonia	*Isotria medeoloides*	Threatened	
Cyperaceae	Knieskern's Beaked-rush	*Rhynchospora knieskernii*	Threatened	
Scrophulariaceae	American Chaffseed	*Schwalbea americana*	Endangered	

Source: USFWS - Region 5 Office

5-NJ.13.1 Summary of Potential Effects and Preliminary Recommended Mitigation

Construction: Little Ferry Connections (Bergen County, NJ) (CSX)

The proposed construction at Little Ferry involves two connections, one that is 480 feet long, and one that is 600 feet long. Figure 5-NJ-5, presented at the end of the state discussion depicts the site at Little Ferry and the surrounding conditions.

Water Resources

Existing Conditions - Water Resources. Based on review of U.S. Geological Survey topographic mapping and on observations made during the subsequent site visit, SEA determined that three tidal water bodies exist within approximately 500 feet of the proposed construction areas: the Hackensack River and Overpeck Creek are located with 500 feet of the proposed northern connection at Little Ferry; a portion of Bellman Creek is located within 500 feet of the proposed southern connection at Little Ferry. Based on review of National Wetlands Inventory mapping and the site visit, SEA identified estuarine intertidal wetlands associated with these streams; these wetlands occur within 500 feet of the proposed connections at Little Ferry.

Based on review of Federal Emergency Management Agency Flood Insurance Rate Maps, SEA determined that the Little Ferry site is not located within the 100-year floodplain.

Potential Effects - Water Resources. Based on site investigations, discussion with resource agencies, and the railroad plans, SEA determined that the proposed construction at Little Ferry could affect surface waters and wetlands. Therefore, CSX may be required to obtain authorization under Section 404 of the Clean Water Act. A National Pollutant Discharge Elimination System stormwater permit may be required if more than five acres of land would be disturbed during construction activities. SEA also evaluated the potential impacts of soil erosion resulting from cleared vegetation and exposed soil, and concluded that the construction at Little Ferry would not cause significant erosion due to the implementation of Best Management Practices to control runoff and to stabilize the soil, as required by state and local authorities.

SEA concluded that the proposed construction at Little Ferry would not adversely affect floodplains, since the proposed construction area is not located within the 100-year floodplain

Biological Resources

Light industrial and commercial land uses comprise the intense development that surrounds the Little Ferry construction site.

Existing Conditions - Vegetation. There is limited vegetative cover in the vicinity of CSX's proposed construction areas at Little Ferry. SEA observed that asphalt roadway and crushed-stone ballast cover nearly all of the site. SEA also determined the limited vegetation is comprised mostly of common weed species, although some immature trees occur near the commercial and industrial facilities located east and west of the proposed construction at Little Ferry.

Potential Effects - Vegetation. SEA concluded that, because of disturbed condition of the existing site, the proposed construction at Little Ferry would affect only commonly occurring vegetation that is characteristic of such disturbed areas. Specifically, the construction would affect scattered grass and weedy species within the railroad right-of-way. SEA further concluded that these plant species would naturally revegetate the new railroad right-of-way, adjacent to the new connector.

Existing Conditions - Wildlife. During the site visit, SEA observed that the entire project site at Little Ferry and its surrounding area has been disturbed by commercial and industrial development. The wildlife habitat found on and near the proposed construction sites is limited to vegetation that is typical of disturbed areas, such as common reed (*Phragmites austalis*) which is interspersed with a few immature trees. SEA determined that the land to be used for construction of the two new connections provides suitable habitat only for those wildlife species adapted to developed areas, specifically songbirds and small mammals such as mice, voles, and moles. SEA determined that, because of the disturbed nature of the proposed construction sites, Little Ferry has limited wildlife habitat value.

Potential Effects - Wildlife. SEA concluded that the proposed construction at Little Ferry would cause no adverse impacts to wildlife populations because the existing wildlife habitat is limited. Construction activities would temporarily disturb wildlife along the proposed construction sites, but wildlife would re-inhabit the sites following completion of the construction activities at Little Ferry. The proposed construction would not adversely affect the movement or migration of wildlife

Existing Conditions - Threatened and Endangered Species. Based on coordination with representatives of the USFWS Pleasantville field office, SEA determined that one Federally listed endangered animal species, the American peregrine falcon *(Falco peregrinus anatum)*, is known to occur in Bergen County. However, Representatives of the USFWS and the New Jersey Department of Natural Resources indicated that there are no reports of any Federally listed threatened or endangered animal species occurring near the proposed construction at Little Ferry.

During the site visit, SEA evaluated the habitat present at the Little Ferry site for its potential to support the American peregrine falcon, and found that the area does not support the habitat requirements of this listed species. In addition, SEA did not observe this endangered species

during the site visit. Based on these findings, SEA determined that there is minimal potential for the presence of the American peregrine falcon at the Little Ferry site.

Potential Effects - Threatened and Endangered Species. Since the Federally listed endangered species, American peregrine falcon, is not located on the site of, or within the vicinity of, the proposed action, SEA concluded that the proposed action will not affect this listed species. SEA also determined that the proposed construction would not affect any critical habitat for the American peregrine falcon at the Little Ferry site.

Existing Conditions - Parks, Forests, Preserves, Refuges, and Sanctuaries. The SEA contacted representatives of the USFWS, the National Park Service, and the U.S. Forest Service to identify land within the jurisdiction of these Federal agencies. Based on this coordination SEA determined that there are no Federal or state parks, forest, preserves, refuges or sanctuaries located within one mile of the proposed Little Ferry construction site.

Potential Effects - Parks, Forests, Preserves, Refuges, and Sanctuaries. Because there are no wildlife sanctuaries, refuges, forests, or preserves located within one mile of the Little Ferry site, the proposed construction would not adversely affect these types of resources.

Preliminary Recommended Mitigation: Little Ferry Construction

Due to Best Management Practices used in the railroad's construction specifications and regulatory programs governing effects on wetlands, water resources, and protected species, it is SEA's preliminary determination that no mitigation is necessary. However, as a condition of approval, SEA would require CSX to conform to its standard specifications during construction. These standard specifications are presented in Chapter 3, Section 3.15 "Natural Resources."

5-NJ.14 NEW JERSEY LAND USE/SOCIOECONOMICS

For the land use/socioeconomics analysis, SEA evaluated potential changes in the physical environment related to the proposed Conrail Acquisition. The issues included consistency with current land use plans and existing Coastal Zone Management plans, potential effects on prime farmland, and suitability of abandoned rights-of-way for alternative public uses.

SEA investigated the potential impacts to land use/socioeconomics that could occur at the Little Ferry construction site.

5-NJ.14.1 Summary of Potential Effects and Preliminary Recommended Mitigation

Construction: Little Ferry Connections (Bergen County, NJ) (CSX)

The proposed action at the Little Ferry site are the construction and operation by CSX of a new rail line connection between the existing NYS&W Railroad and Conrail tracks. The connection consists of two separate lead tracks into the Little Ferry intermodal facility.

The site of the proposed Little Ferry north construction is located south of Overpeck Creek, a tributary of the Hackensack River, on the NYS&W. The Hackensack River adjoins the west side of the site approximately 500 feet west of the proposed north construction. The proposed north connection would be completed within railroad rights-of-way, and would not require acquisition of any land.

The site of the proposed Little Ferry south construction is located just to the northwest of Bellman's Creek and is bordered by wetlands on the west side. The proposed south connection would be completed within railroad rights-of-way, and would not require acquisition of any land.

Existing Land Use Plan/Zoning. The area of the proposed construction is zoned as light industrial. Residential zoning occurs approximately 350 feet east of the proposed site.

Consistency with Local Land Use Plan. Based on the available information and because the connections would be completed within the railroad rights-of-way, the proposed construction would be consistent with the future land uses.

Prime Farmland. Soils at the proposed construction site are classified as urban land, and NRCS does not consider them to be prime farmland soils.

Coastal Zone. The proposed site is located within a Coastal Zone Management area. Two waterways, the Hackensack River and Overpeck Creek have been identified as tidal bodies of water and therefore are regulated by the New Jersey Coastal Zone. According to the Chief of the Bureau of Coastal Regulations, the proposed action is consistent with coastal zone regulations.

Indian Reservations. According to the Bureau of Indian Affairs, there are no Federally recognized Native American tribes or reservations in the State of New Jersey.

Based on the findings described above, it is SEA's preliminary determination that there would be no significant impacts to land use associated with the proposed Acquisition at the Little Ferry site. Because there are no significant impacts, SEA does not recommend mitigation.

5-NJ.15 NEW JERSEY ENVIRONMENTAL JUSTICE

As part of its analysis, SEA examined activities associated with the proposed Conrail Acquisition for environmental justice impacts (disproportionately high and adverse impacts to minority and low-income populations) in accordance with Executive Order 12898. As described in the Environmental Justice Methodology in Chapter 3, "Analysis Methods and Potential Mitigation Strategies," SEA first categorized the nature of the populations in areas where Acquisition-related activities are proposed. SEA determined whether the population in such areas met the following environmental justice thresholds: (1) greater than 50 percent of the population is minority or low-income, or (2) the minority or low-income population percentage is 10 percent greater than the minority or low-income population percentage in the county.

Next, SEA ascertained whether this population fell within an area of potential effect. SEA defined a typical zone on either side of a rail line segment or proposed construction site, or bordering a railroad intermodal facility or rail yard, as an area of potential effect. In general, the extent of an area of potential effect may vary depending on the nature of the changes in rail activity associated with it, but such areas typically extend 400 to 1500 feet out from the rail line segment or facility being analyzed.

SEA then evaluated these areas of potential effect for proposed Acquisition-relatedactivities that would meet or exceed the Board's thresholds for environmental analysis. In this analysis, SEA evaluated potential impacts on safety, transportation, air quality, noise, cultural resources, hazardous waste sites, hazardous materials transport, natural resources, and land use/socioeconomic effects. SEA also visited the sites of proposed construction for new rail line connections, rail line segments, intermodal facilities, and rail yards.

SEA developed and executed expanded public outreach efforts for those jurisdictions that met both SEA's thresholds for environmental justice and the Board's thresholds for environmental significance. SEA designed the public outreach process to seek widespread notice and dissemination of SEA's environmental impact analysis; provide additional opportunities for community input to the NEPA process; solicit information about cumulative effects in minority and low-income communities; and allow minority and low-income communities to assist in fashioning appropriate alternatives and mitigation measures. SEA is placing additional copies of the Draft EIS in jurisdictions with high proportions of minority and low-income populations that do not have significant environmental impacts which could result from the proposed Acquisition.

This section presents the results of those evaluations and analysis. A complete list of all the sites analyzed for environmental justice impacts is presented in Appendix K.

5-NJ.15.1 New Jersey Environmental Justice Setting

There are no rail yards in New Jersey with proposed changes that meet the Board's thresholds for environmental analysis. The proposed new constructions in the state of New Jersey did not meet either the minority or low-income population thresholds for further environmental justice analysis

Intermodal Facilities

There are four intermodal facilities in New Jersey with proposed changes in truck traffic that meet the Board's thresholds for environmental analysis. The Little Ferry facility is located in proximity to 83rd Street and Westside Avenue (Bergen County); Portside is located in proximity to Mc Lester Street (Union County); South Kearny is located in proximity to Fish House Road and Central Avenue (Hudson County); and the E-Rail facility is located in proximity to Dowd Avenue and Trumball Street (Union County). Table 5-NJ-20 presents the existing minority and low-income composition of the areas of potential effect surrounding the proposed intermodal facilities and associated truck routes that meet the environmental justice population thresholds.

Table 5-NJ-20
New Jersey Environmental Justice Site Summary for Intermodal Facilities

Area of Potential Effect	Total Population	Total Minority Percentage	Total Low-Income Percentage	Population of Concern	
				Minority Population	Low-Income Population
Bergen County	825,380	17.4%	3.9%	NA	
Little Ferry (CM-03)	2,793	17.9%	5.0%	No	No
Little Ferry Truck Routes (CM-03)	6,516	51.1%	14.4%	Yes	Yes
Hudson County	553,099	52.6%	14.8%	NA	
So. Kearny (CM-04)	109	4.6%	12.8%	No	No
So. Kearny Truck Routes (CM-04)	3,573	54.5%	19.8%	Yes	No
Union County	493,819	34.7%	7.2%	NA	
E-Rail (NM-10)	3,297	63.6%	7.8%	Yes	No
E-Rail Truck Routes (NM-10)	19,531	73.0%	17.3%	Yes	Yes
Port Side (SM-01)[a]	1,747	81.6%	0.0%	Yes	No

[a] Truck access to/from Port Side is directly from the N.J. Turnpike and the Port of Elizabeth and was thus not analyzed.

Rail Line Segments

Table 5-NJ-21 presents the existing minority and low-income composition of the area of potential effect surrounding the three rail line segments in New Jersey with proposed changes that meet the environmental justice population thresholds. Other rail line segments in New Jersey are not near environmental population communities that meet the threshold for analysis.

Table 5-NJ-21
New Jersey Environmental Justice Summary for Rail Line Segments

Area of Potential Effect	Total Population	Total Minority Percentage	Total Low-Income Percentage	Population of Concern	
				Minority Population	Low Income Population
Union County	493,819	34.7%	7.2%	NA	
Lane - Union (S-030)	10,070	52.7%	11.2%	Yes	No
Mercer, Middlesex, Counties, NJ, Bucks County, PA	1,538,778	18.0%	5.2%	NA	
Midway, NJ - Morrisville, PA (S-031)	5,720	56.7%	18.1%	Yes	Yes
Union County	493,819	34.7%	7.2%	NA	
PN - Bayway (S-032)	3,277	77.1%	24.9%	Yes	Yes

5.NJ.15.2 Summary of Potential Effects and Preliminary Recommended Mitigation

Based on currently available information and after reviewing the findings of each of the resource analyses (noise, air quality, transportation, etc.), SEA identified no significant potential environmental effects at the Port Side (SM-01) and E-Rail (NM-10) intermodal facilities or along the access routes to these facilities. SEA also identified no significant potential environmental effects along truck access routes for the Little Ferry (CM-03) and South Kearny (CM-04) intermodal facilities based on the environmental resource findings. The data also reveal that there are no significant potential environmental effects along the Lane -Union (S-030) rail line segment, the Midway, NJ - Morrisville, PA (S-031) rail line segment, and the PN-Bayway (S-032) rail line segment. Therefore, SEA's preliminary determination is that no environmental justice effects would occur in New Jersey as a result of the proposed Conrail Acquisition, and no mitigation would be necessary.

5-NJ.16 NEW JERSEY CUMULATIVE EFFECTS

Within the State of New Jersey, the Applicants propose the following activities that meet or exceed the Board's thresholds for environmental analysis: increased traffic on six rail line segments; increased traffic at three intermodal facilities, and two proposed construction projects at one site. The following table addresses other potential actions brought to SEA's attention that, when combined with the proposed Acquisition, could contribute to a cumulative impact. SEA was made aware of these activities through site visits and public comment. Local agencies provided the information shown in Table 5-NJ-22 to SEA within the schedule specified in the scope for review and analysis.

Table 5-NJ-22
Information Provided to SEA About Other Activities or Projects

Action-Type	Site	Information from Site Visit or Public Comment	Relationship to Proposed Acquisition
Rail Line Segment	Burlington (NJ)	New Jersey Transit Office of New Rail Construction study underway on the Conrail Bordentown Secondary Line between Trenton and Camden.	Related. This line is a Shared Asset Area. The Applicants indicate that rail traffic will not change substantially on this route.

Cumulative Effects Findings

The results of the New Jersey Transit study may indicate local intent to expand commuter rail. If the proposal or project is funded, it may represent a potential cumulative effect for that portion of the affected rail line. As discussed in Chapter 6, "Agency Coordination and Public Outreach," SEA conducted extensive scoping and data collection for this Draft EIS. At this point in its investigation, SEA is unaware of any activities that would require a cumulative effects analysis. Therefore, based on its independent analysis and all information available to date, SEA has made a preliminary conclusion that there would be no significant cumulative effects associated with the proposed Acquisition in the State of New Jersey.

Cumulative Effects Mitigation Measures

Due to a lack of cumulative effects, no mitigation measures are necessary. However, SEA encourages the Applicants to contact New Jersey Transit to ensure that the proposed Acquisition would not adversely affect any planned activities.

5-NJ.17 NEW JERSEY AREAS OF CONCERN

This Draft EIS examines system-wide and site-specific issues. An important part of SEA's analysis of the proposed Acquisition is the evaluation and consideration of environmental comments. The following table provides a list of agencies and local governments that have submitted environmental comments for the State of New Jersey. A complete list of entities that have submitted environmental comments to SEA on or before October 31, 1997 is provided in Appendix O of this document.

Table 5-NJ-23
Agencies in New Jersey Submitting Environmental Comments

Entity	Nature of Comment(s)
Board of Chosen Freeholders of Burlington County	Safety, traffic congestion, land use, and environmental justice
Department of Environmental Protection	Air, water resources, and commuter operations
New Jersey Transit	Safety and commuter operations
Ridgefield Park, Village of	Emergency response, land use, commuter operations, at-grade crossing safety, and hazardous materials
South Western Regional Planning Agency	Traffic congestion, energy, air, noise, and environmental justice
South Jersey Transportation Planning Organization	Commuter operations

SEA appreciates these comments and considers all comments in its environmental analysis and the development of potential system-wide and/or site-specific mitigation. For issue areas that do not meet the Board's environmental analysis thresholds or are not Acquisition-related, SEA has not conducted detailed analysis. SEA encourages parties to submit site-specific, Acquisition-related comments. SEA will review all comments submitted during the 45-day comment period on this Draft EIS in the preparation of the Final EIS.

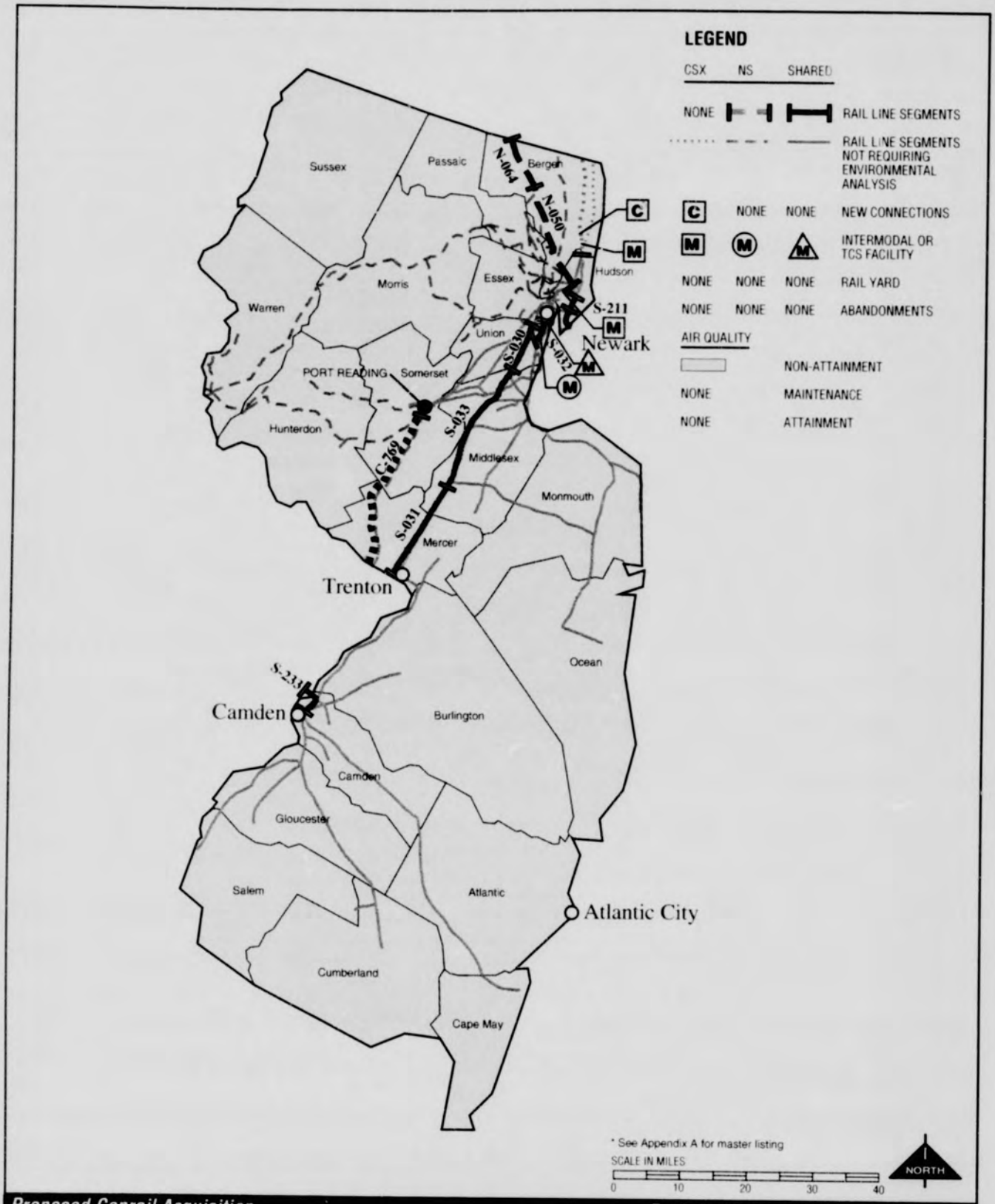

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FIGURE 5-NJ-1

RAIL LINE SEGMENTS, NEW CONNECTIONS, INTERMODAL FACILITIES, RAIL YARDS AND ABANDONMENTS REQUIRING ENVIRONMENTAL ANALYSIS

NEW JERSEY - CSX, NORFOLK SOUTHERN, SHARED

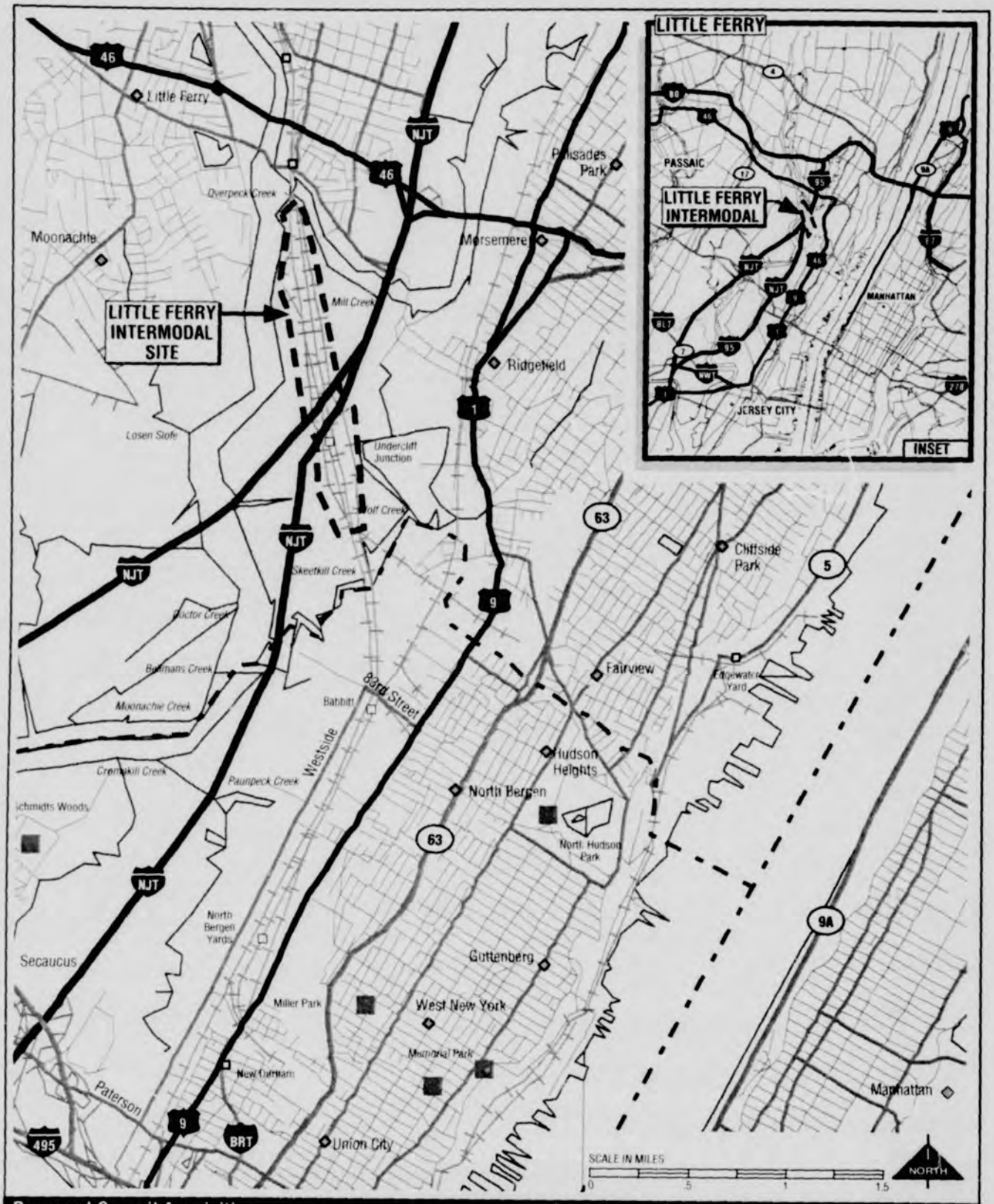
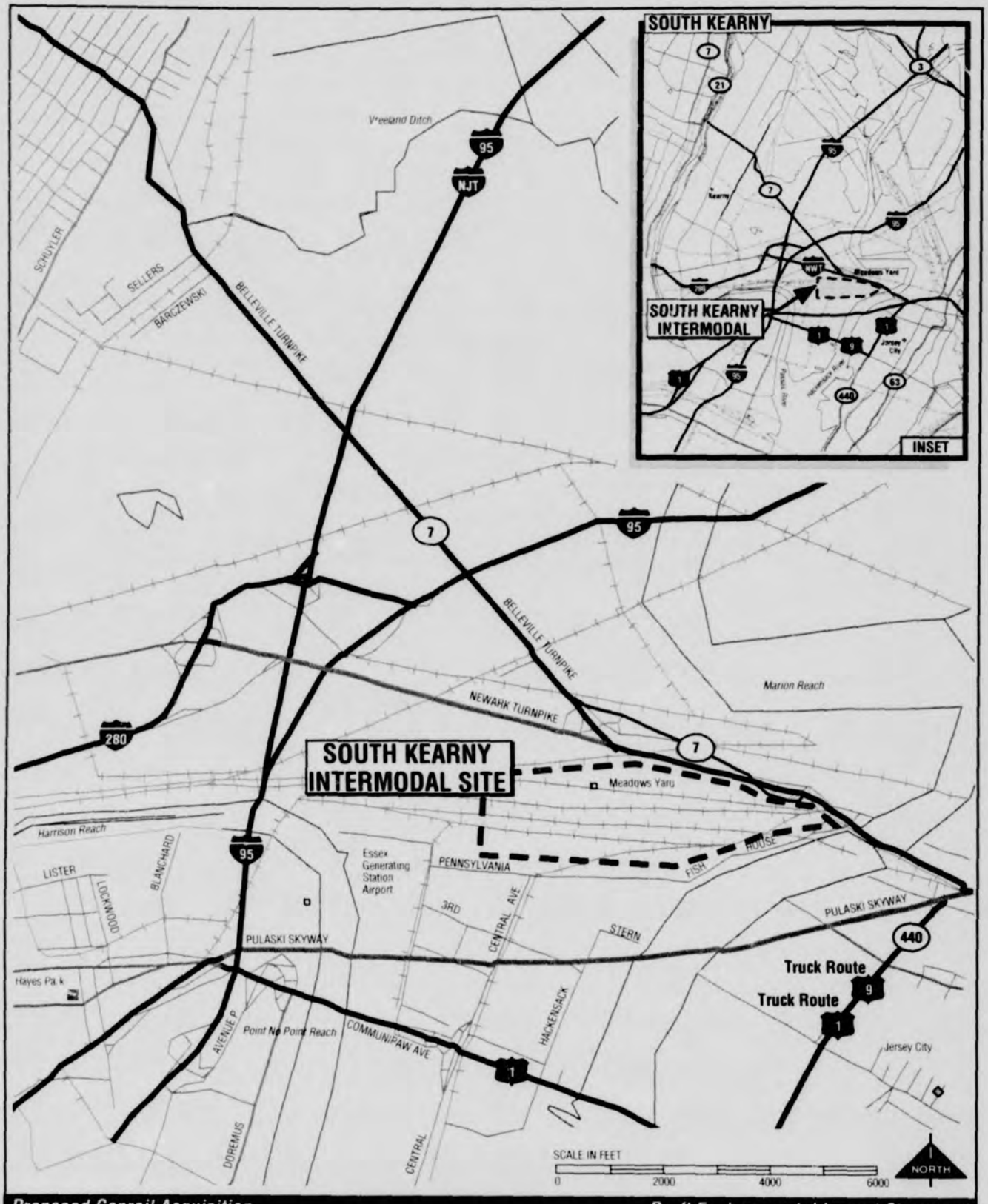


FIGURE 5-NJ-2

LITTLE FERRY INTERMODAL SITE, LITTLE FERRY, NEW JERSEY

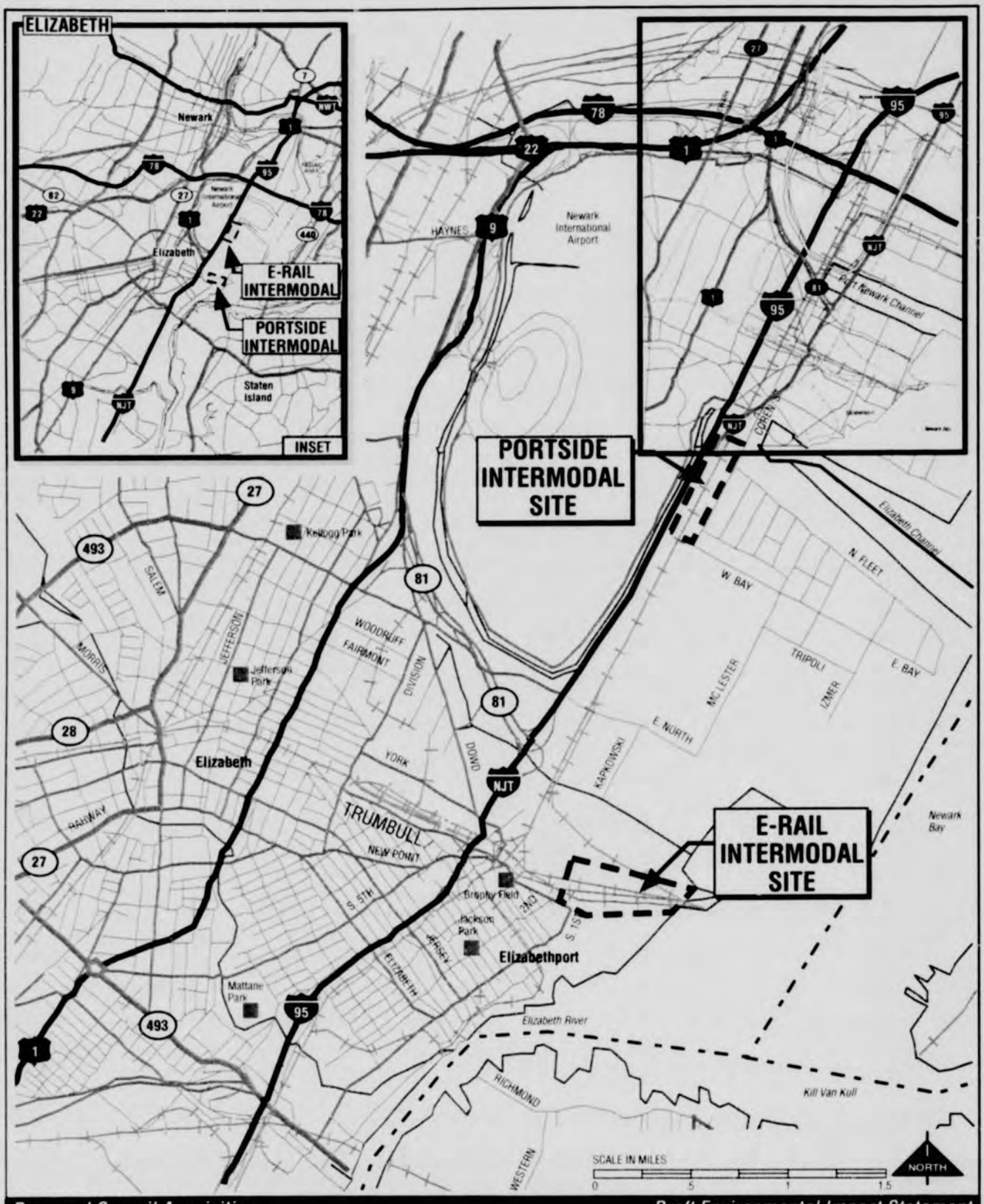
CSX



Proposed Conrail Acquisition *Draft Environmental Impact Statement*

FIGURE 5-NJ-3

SOUTH KEARNY INTERMODAL SITE, SOUTH KEARNY, NEW JERSEY
CSX

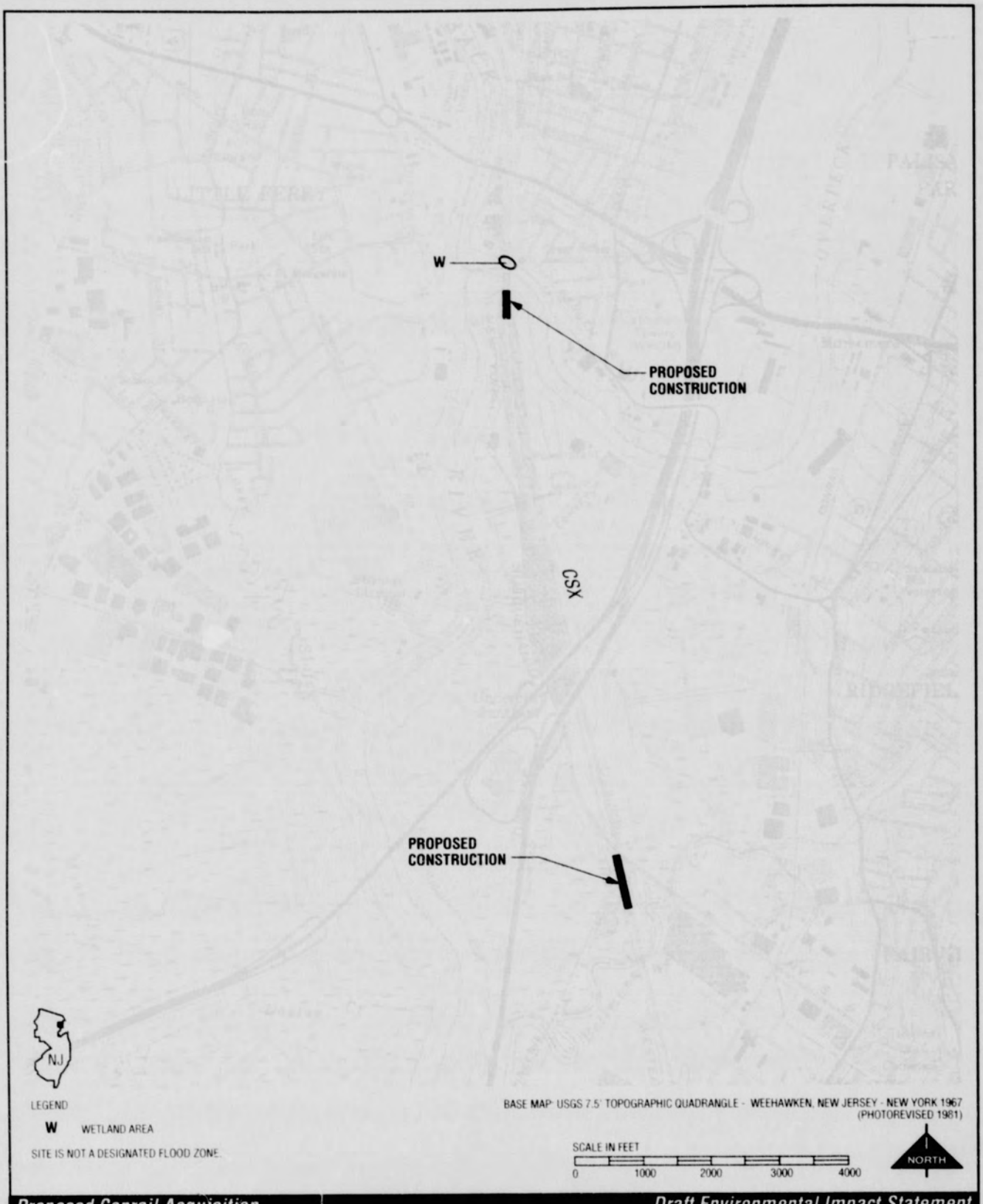


Proposed Conrail Acquisition *Draft Environmental Impact Statement*

FIGURE 5-NJ-4

E-RAIL and PORTSIDE INTERMODAL SITES, ELIZABETH, NEW JERSEY

NORFOLK SOUTHERN, SHARED



Proposed Conrail Acquisition | *Draft Environmental Impact Statement*

FIGURE 5-NJ-5

LITTLE FERRY, BERGEN COUNTY, NEW JERSEY
CSX

5-NY
NEW YORK

This section provides background information for resources in New York. Tables list the proposed Conrail Acquisition-related activities in New York that meet or exceed the Board's thresholds for environmental analysis. This section also presents the various technical analyses conducted for these activities in New York. The analyses highlight the potential environmental impacts and proposed mitigation actions that SEA recommends as part of the Draft EIS study.

5-NY.1 NEW YORK SETTING

New York is located in the northeast region of the United States. Principal products of New York include printing and publishing, electrical machinery, instruments, dairy products, livestock, apples, stone, cement, and salt. The railroad network throughout the state provides a means of transporting and distributing many of these goods and for other products imported into the state.

Transportation Facilities

Major interstate highways serving New York are I-90, an east/west facility; I-88, an east/west facility; I-81, a north/south facility; I-87, a north/south facility; and I-95, a major north/south facility in the eastern United States. These interstates serve cities such as New York City, Buffalo, Syracuse, Albany, Poughkeepsie, and Rochester. Ports located in the state are Port New York, the Ports of Buffalo, Oswego, and Albany.

Railroad Facilities

Thirty-eight railroads operate in New York, covering a total of 3, 826 route miles. Conrail and NS are the two Class I Railroads operating in the state. Of the 3, 826 route miles:

- Conrail operates 2,080 route miles in New York, which is 54 percent of the state's total rail miles.

- NS operates 106 route miles in New York, which is 3 percent of the state's total rail miles.

Cities served by these rail lines include New York, Buffalo, Albany, Rochester, Utica, Syracuse, Watertown, Massena, Binghamton, and Elmira.

Conrail serves the metropolitan New York City area with terminals in New Jersey including: Kearny, Jersey City, Elizabeth, and North Bergen. Selkirk Yard near Albany and Frontier Yard in Buffalo are Conrail's two major classification yards. Conrail operates rail-related facilities in Voorheesville, Buffalo, and Syracuse. NS operates an intermodal facility in Buffalo. NS also has other rail related facilities in Buffalo and Albany.

Intercity Passenger and Commuter Rail Services

Amtrak provides passenger service throughout the state. Amtrak owns and operates the Northeast Corridor (NEC), and other lines in the state. Service is provided daily to New Rochelle, Yonkers, Poughkeepsie, Hudson, Rensselaer/Albany, Schenectady, Amsterdam, Utica, Syracuse, Rochester, Buffalo, and Niagra Falls.

Commuter rail service is provided by New Jersey Transit (NJT) and Metro North, a division of New York's Metropolitan Transportation Authority, to the New York City area. NJT provides services to New York City's Penn Station and other cities including Suffern, Port Jervis, and Spring Valley. Metro North provides services between Grand Central Station with three lines in New York, the Hudson, Harlem and New Haven lines.

5-NY.2 PROPOSED CONRAIL ACQUISITION ACTIVITIES IN NEW YORK

In the Operating Plans submitted to the Board, the Applicants project that the proposed Conrail Acquisition would restore competitive rail transportation to significant portions of New York state.

CSX would operate the Conrail route through Syracuse and Albany, and the West Shore Line into the Newark, New Jersey area. CSX also would operate the Conrail line to New York City, New England, and Montreal via Syracuse.

NS would operate the Conrail line from metropolitan New York to Buffalo through Binghamton, known as the Southern Tier, and would restore the old Erie Lackawanna Line as a main line. NS intends to develop business along the line and would integrate the Southern Tier into its east-west routes connecting New York/Northern New Jersey with the west. NS also would operate and upgrade the Buffalo Line between Buffalo and Harrisburg, Pennsylvania, which connects the Buffalo-Canadian gateway with the southeast.

Both CSX and NS plan to undertake extensive activities in New York as part of the proposed Conrail Acquisition. The proposed Conrail Acquisition-related activities that would meet or exceed the Board's thresholds for environmental analysis in New York include increased train

operations on a total of 13 rail line segments, construction of two rail line connections, and increased number of rail cars handled at one rail yard in Buffalo. Figures 5-NY-1a and 1b, show the general location of these facilities. Additional segments SEA studied also appear on the figures. (All figures are presented at the end of this state discussion.)

In New York, there are no intermodal facilities or proposed abandonments that would meet or exceed the Board's thresholds for environmental analysis. Tables 5-NY-1, 5-NY-2, and 5-NY-3 show rail segments, rail yards, or new connections in New York. Following these tables are brief descriptions of the activities, where appropriate.

Table 5-NY-1
New York Rail Line Segments Which Meet or Exceed Board Environmental Thresholds

Site ID	From	To	Description	Length in miles	County	Setting
C-050	Buffalo, NY	CP Sycamore NY	Conrail Belt Line Br. Buffalo Metro	1	Erie	Urban/Industrial
C-051	Chili, NY	Frontier, NY	Conrail Chicago Line	16	Erie	Urban/Industrial
				30	Genesee	Rural
				5	Monroe	Rural/Urban
C-052	CP Sycamore NY	Black Rock, NY	Conrail Belt Line Br. Buffalo Metro	6	Erie	Urban/Industrial
C-053	Hoffmans, NY	Utica, NY	Conrail Chicago Line	24	Herkimer	Commercial/ Residential/Rural
				39	Montgomery	Commercial/ Residential/Rural
				2	Oneida	Commercial/ Industrial/Residential/ Rural
				1	Schenectady	Commercial/Industrial /Residential
C-054	Selkirk, NY	Hoffmans NY	Conrail Selkirk Secondary Chicago Line	14	Albany	Commercial/ Residential
				8	Schenectady	Industrial/ Residential

Table 5-NY-1
New York Rail Line Segments Which Meet or Exceed Board Environmental Thresholds

Site ID	From	To	Description	Length in miles	County	Setting
N-060	Corning, NY	Geneva, NY	Conrail Corning Secondary	5	Chemung	Industrial/ Commercial/ Residential/Rural
				15	Schuyler	Commercial/ Residential/Rural
				8	Ontario	Rural
				7	Steuben	Residential/Rural
				22	Yates	Industrial/ Commercial/ Residential/Rural
N-061	Ebenezer Jct, NY	Buffalo, NY	Conrail Ebenezer Secondary	6	Erie	Urban/Industrial
N-062	Suffern, NY	Campbell Hall, NY	Conrail Southern Tier Line	30	Orange	Suburban/Urban
				5	Rockland	Suburban/Urban
N-063	Campbell Hall, NY	Port Jervis, NY	Conrail Southern Tier Line	30	Orange	Rural
N-064	Suffern, NY	Ridgewood Jct, NJ	Southern Tier, Binghamton to New York City	1	Rockland	Urban/Suburban/ Industrial/Commercial
N-065	Corning, NY	Buffalo, NY	Southern Tier Mainline	52	Steuben	Rural/Urban
				13	Allegany	Rural/Urban
				11	Livingston	Rural/Urban
				28	Wyoming	Rural/Urban
				10	Genesee	Rural
				14	Erie	Urban/Industrial

Table 5-NY-1
New York Rail Line Segments Which Meet or Exceed Board Environmental Thresholds

Site ID	From	To	Description	Length in miles	County	Setting
N-070	Ashtabula OH	Buffalo, NY	Conrail Chicago Line	28	Erie	Urban/Industrial
				41	Chautauqua	Rural/Urban

C = CSX
N = NS

Table 5-NY-2
New York Rail Yard Which Meet or Exceed Board Environmental Thresholds

Site ID	Location	County	Facility	Description	Setting
NY-05	Bison	Erie	Buffalo Jct	Increase of 283 railcars/day	Urban/Industrial

Table 5-NY-3
New York New Connections

Site ID	Location	County	Length in feet	Description	Setting
NC-09	Blasdell, Buffalo	Erie	5200	Connecting track to permit efficient movement between Erie, PA and Binghamton, NY	Urban/Industrial
NC-10	Gardenville Jct, Buffalo	Erie	1700	Connecting track to permit efficient movement between Erie, PA and Binghamton, NY	Urban/Industrial

Rail Yards

Bison Rail Yard (Erie County, NY) (NS). The Bison Yard is located in Buffalo Junction. NS reopened the yard in 1991. NS anticipates increase rail traffic from 389 to 672 railcars daily.

Construction

Construction: Blasdell Connection (Erie County, NY) (NS). This proposed construction is a new connection that would be located in Blasdell, Erie County, New York, approximately six miles south of Buffalo. NS would connect the NS Cleveland mainline to the Conrail Buffalo line to provide efficient train movement from Erie, Pennsylvania to Buffalo, New York. NS would

construct, approximately 5,200 feet of new rail line, rebuild a previous overpass over Lake Avenue, and rehabilitate an existing railroad bridge to tie into the Conrail Buffalo Line. (See Figure 5-NY-2.)

An alternative would be to construct a connection that would diverge northwest from the NS north/south line and join the existing east/west Conrail line in the northeast. The connection would be approximately 2,500 feet long and require the acquisition of 5.5 acres of new right-of-way. NS did not consider this alternative reasonable because it would cross a park, a Little League baseball field, a stream, and a potential wetland area; SEA concurs. The no-action alternative would not meet the purpose or need of the proposed action. Therefore, NS did not consider it to be a reasonable alternative; SEA concurs.

Construction: Gardenville Junction Connection (Erie County, NY) (NS). The proposed connection at Gardenville Junction would be located in Erie County, NY approximately 3.0 miles southeast of Buffalo, and would connect the east/west Conrail Buffalo line to the northwest/southeast Conrail Ebenezer secondary line to provide efficient train movement from Erie, Pennsylvania to Buffalo, New York or the Conrail Southern Tier, avoiding heavily congested CP (Control Point)-Draw. The connection would be located northwest of the intersection of the Conrail lines. The design includes approximately 1,700 feet of new rail line on 3.9 acres and would occupy approximately 1.8 acres of existing right-of-way. (See Figure 5-NY-3.)

NS did not identify any other build alternatives because of the site-specific characteristics and configurations of the rail lines. The no-action alternative would not meet the purpose or need of the proposed action. Therefore, NS did not consider it to be a reasonable alternative; SEA concurs.

5-NY.3 NEW YORK SUMMARY OF ANALYSIS

Based on the nature of the proposed Conrail Acquisition-related activities in New York that meet the Board's thresholds for environmental analysis and the scope for the Draft EIS, SEA determined that a site-specific analysis did not apply for the following technical areas:

- Transportation (Navigation).
- Energy.

Details of the environmental analysis for New York follow.

5-NY.4 NEW YORK SAFETY: FREIGHT RAIL OPERATIONS

SEA conducted a statistical analysis to evaluate the potential change in safety on all rail line segments where the proposed Conrail Acquisition would result in eight or more additional freight trains per day. SEA identified two rail line segments within New York that would experience this level of increased activity. While increased freight train activity would increase the probability of a freight train accident, SEA did not consider an increase significant unless the predicted accident rate shortened the duration between accidents to one every 100 years or less per mile. Table 5-NY-4 presents results of the analysis, showing the approximate mileage of each rail line segment within the state.

Table 5-NY-4
Estimated Change in Years Between Accidents - Freight Rail Operations

Site ID	Between	And	Miles in State	Increase in Trains per Day	Pre-Acquisition Accident Interval [a]	Post-Acquisition Accident Interval [a]
N-061	Ebenezer Jct.	Buffalo	6	11.4	0 [b]	403
N-070	Ashtabula, OH	Buffalo	69	12.1	349	175

[a] Accident Interval figures show the years/mile.
[b] No current through traffic.

The Federal Railroad Administration (FRA) requires all railroads to submit reports for all train accidents resulting in personal injury or causing property damage greater than $6,300 (1996 FRA reporting threshold). Train accidents meeting this reporting requirement are relatively infrequent. The FRA reported about 2,600 accidents (3.69 accidents per million train miles[1]) nationally in 1996. Most of these accidents were relatively minor; almost 90 percent of these accidents caused less than $100,000 in damage. In addition, most of the train accidents did not affect on people or non-railroad property.

Accident risk predictions are best expressed by describing the elapsed time expected between any two consecutive events. The current national average is that a main line freight train accident occurs once every 117 years on each mile of route. FRA records, as described in Chapter 4, "System-Wide and Regional Setting Impacts," show a substantial decrease, both in total number of accidents and in accidents per million train miles, a standard industry measure.

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1 "Train miles" are calculated by multiplying the number of trains by the distance traveled. For example, on a typical 100 mile rail line, one million annual train miles results from operating 28 trains per day every day for 365 days.

Because there are few accidents, and most of these accidents are relatively minor, it is not possible for SEA to accurately predict either the frequency or severity of actual accidents.

SEA estimated the change in the risk of an accident resulting from the increased activity on rail line segments as a result of the proposed Conrail Acquisition. Because SEA analyzed rail line segments that vary in length from one mile to more than 100 miles, and because freight train accidents typically have little impact on surrounding areas, SEA expressed all predicted risks of accidents on a route-mile basis. Section 3.2 "Safety: Freight Rail Operations," discusses the analysis process in greater detail.

5-NY.4.1 Summary of Potential Effects and Preliminary Recommended Mitigation

In New York, SEA found that no rail line segments met its criteria of significance (one accident expected every 100 years or less per mile of route). Therefore, SEA does not recommend mitigation.

5-NY.5 NEW YORK SAFETY: PASSENGER RAIL OPERATIONS

In New York, passenger trains share certain tracks with freight trains. SEA evaluated the potential for increased accidents between freight trains and passenger trains, for both intercity and commuter trains. Because changes in the frequency of rail accidents are directly related to changes in overall train activity, SEA's analysis concentrated on rail line segments carrying both passenger and freight trains that would experience an increase in freight train traffic of one or more trains per day.

In Chapter 4, "System-Wide and Regional Setting, Impacts and Proposed Mitigation," SEA addresses the issue of potential increased risk to passenger train operations associated with the proposed Conrail Acquisition. System-wide, SEA identified 197 freight rail line segments that also carry passenger trains. Of these, SEA analyzed 93 rail line segments that would experience an increase of one or more freight trains per day resulting from the proposed Acquisition. Twelve of these rail line segments are located in New York; these rail line segments are on many Amtrak passenger train routes.

FRA requires reports from railroads concerning all train accidents resulting in personal injury or causing property damage greater than $6,300 (1996 FRA reporting threshold). FRA requires the same reporting for passenger train accidents. A nationwide average of fewer than 200 passenger train accidents per year (for both Amtrak intercity and urban area commuter trains) has occurred over the last three years. Most of these accidents were relatively minor and rarely involved any fatalities, but because the safety of passengers as well as property is frequently involved, their occurrence is of serious concern.

Given the limited number of passenger rail accidents, SEA was unable to accurately predict the severity, location, or timing of actual accidents. SEA therefore focused on estimating the potential risks of an accident. In this safety analysis, SEA used increased freight activity on rail line segments to estimate the changes in passenger train accident risks. To assess significance, SEA first determined whether the proposed Acquisition-related change in the projected accident rate was greater that an annual increase of 25 percent. SEA then determined if the predicted accident frequency was less than one accident in 150 years. Thus, SEA determined a potential impact to be significant if the projected annual increase in accidents was greater than 25 percent and the frequency was less than one accident in 150 years.

5-NY.5.1 Summary of Potential Effects and Preliminary Recommended Mitigation

The pre-Acquisition accident interval for each rail line segment is shown in Table 5-NY-5. Accidents pose potential threats to passengers on the train; therefore, for each rail line segment, risk is expressed as the expected interval between events over the length of the rail line segment. Table 5-NY-5 also shows the expected change in years between accidents for the individual rail line segments.

Table 5-NY-5
Estimated Change in Years Between Accidents for Passenger Rail Operations

Site ID	From	To	Miles in State	Pre-Acquisition Accident Interval[a]	Post-Acquisition Accident Interval[a]
C-687	Buffalo	Draw	2	20,946	19,980
N-063	Campbell Hall	Port Jervis	30	203	133
C-051	Chili	Frontier	51	224	198
C-740	Fairport	Rochester	11	1,037	903
C-053	Hoffmans	Utica	66	180	154
C-739	Lyons	Fairport	42	379	334
C-741	Rochester	Chili	13	832	753
C-738	Solvay	Lyons	23	211	186
N-062	Suffern	Campbell Hall	35	292	178
C-735	Syracuse	Syracuse Jct.	6	1,603	1,376
C-737	Syracuse Jct.	Solvay	2	4,617	3,937
C-735	Utica	Syracuse	51	189	161

[a] Accident Intervals shows years between accidents.

SEA determined that the increase in risk for passenger train accidents on one rail line segment, Campbell Hall to Port Jervis, exceeded SEA's criteria for significance. For this rail line segment, SEA anticipates that potential conflicts could be minimized by reinforcing passenger trains' priority over freight trains. It is SEA's preliminary recommendation that all freight trains, both opposing and moving in the same direction as passenger trains, be clear of the main track at least 15 minutes prior to the estimated arrival of the passenger train. In doing so, the passenger train can pass safely and without delay.

5-NY.6 NEW YORK SAFETY: HIGHWAY/RAIL AT-GRADE CROSSINGS

Increased train activity could affect the safety of roadway users at highway/rail at-grade crossings. To address potential changes in accident frequency, SEA compared existing accident frequency rates with accident frequency rates at all highway/rail at-grade crossings that would experience a Conrail Acquisition-related increase of eight or more trains per day. At these locations, SEA looked at the most recent five years of accident history available, and calculated the potential change in the number of years between accidents. SEA's analysis procedure considered the type of existing warning devices at the highway/rail at-grade crossings, including passive devices (signs or crossbucks), flashing lights, or gates.

To evaluate the significance of potential changes in accident frequency in New York, SEA categorized highway/rail at-grade crossings into two categories:

- Category A consisted of highway/rail at-grade crossings with a history of relatively frequent train-vehicle accidents. SEA considered highway/rail at-grade crossings in New York with accident frequency rates at or above the state's 50th highest accident frequency rate of one accident every ten years (0.1023 accident frequency rate) to be Category A highway/rail at-grade crossings. For all Category A highway/rail at-grade crossings, SEA considered the relatively small accident frequency rate increase of one accident every 100 years (a 0.01 accident frequency rate increase) to be significant.

- Category B consisted of highway/rail at-grade crossings with a history of relatively infrequent train-vehicle accidents. SEA considered highway/rail at-grade crossings in New York with accident frequency rates less than one accident ten years (less than 0.1023 accident frequency rate) to be Category B highway/rail at-grade crossings. For these crossings, SEA considered an accident frequency rate increase of one accident every 20 years (a 0.05 accident frequency rate increase) to be significant.

Table 5.NY-6, presented at the end of this state discussion, presents the results of SEA's analysis. A county by county summary of results follows.

5-NY.6.1 County Analysis

Chautauqua County

SEA's safety analysis showed that for the 46 highway/rail at-grade crossings studied in Chautauqua County, the predicted increases in accident frequency would range from 0.0027 to 0.0196. This translates into a range of increases from one accident every 370 years to one accident every 51 years. SEA determined that the predicted increase resulting from the proposed Contrail Acquisition was significant at Loomis Street. This highway/rail at-grade crossing is classified as Category A. SEA found the predicted increases at the other locations to be below the criteria for significance.

Erie County

SEA's safety analysis showed that for the 15 highway/rail at-grade crossings studied in Erie County, the predicted increases in accident frequency would range from 0.0042 to 0.0190. This translates into a range of increases from one accident every 238 years to one accident every 53 years. SEA found these predicted increases to be below the criteria for significance.

5-NY.6.2 Summary of Potential Effects and Preliminary Recommended Mitigation

SEA determined that the proposed Conrail Acquisition would significantly increase the predicted accident risk at one highway/rail at-grade crossings in New York. Table 5-NY-7 shows SEA's recommended mitigation to reduce this risk.

SEA analyzed the accident frequency with and without the upgraded warning device in place, as shown in Table 5-NY-6 presented at the end of this state discussion. With the mitigation measure, the accident frequency at this location would decrease to below the pre-Acquisition level. SEA recommends that NS upgrade the existing warning device, as shown in Table 5-NY-7. This recommendation would eliminate the adverse effects on highway/rail at-grade crossing safety resulting from the proposed Conrail Acquisition in New York.

Table 5-NY-7
Recommended Mitigation to Improve Safety at Highway/Rail At-Grade Crossings in New York

County	Railroad Segment	FRA ID	Highway/Rail At-Grade Crossing	Existing Warning Devices	SEA's Proposed Mitigation
Chautauqua	N-070	471825F	Loomis Street	Passive	Flashing Lights

5-NY.7 NEW YORK SAFETY: RAIL TRANSPORT OF HAZARDOUS MATERIALS

The primary concern with the rail transportation of hazardous materials is a spill or accidental release resulting from a train accident. SEA analyzed all rail line segments where the number of car loads containing hazardous materials would increase as a result of the proposed Acquisition. This resulted in SEA evaluating rail line segments that were below the Board's thresholds for environmental analysis.

The Association of American Railroads (AAR), in conjunction with the Chemical Manufacturer's Association (CMA), developed standards and practices to manage the risk of a hazardous material spill that the railroads have adopted. The practices include identifying "key routes" as those rail lines that handle in excess of 10,000 car loads of hazardous material each year. Key trains are trains with at least five car loads of poison inhalation hazard (PIH) material, or 20 car loads of other hazardous material. Key trains are restricted to 50 miles per hour maximum authorized speed and normally operate on Class 2 track or better. The AAR key route practices include special train handling procedures and extra inspection and special actions whenever wayside detectors indicate potential concerns. The standards and practices for key routes are shown in AAR Circular No. OT-55-B. A copy of this Circular is included in Attachment 10 of Appendix B, "Safety."

5-NY.7.1 Rail Line Segment Analysis

As a result of the proposed Conrail Acquisition, the railroads would change the routing of many car loads of hazardous material. The designation of "key routes" would change as the railroads shift hazardous material traffic from one rail line to another. In addition, certain rail line segments that are currently "key routes" would carry increased volumes of cars containing hazardous material.

SEA applied two different criteria to determine if the effects of rerouting hazardous material car loads are potentially significant:

1. The volume of hazardous materials transported on a rail line would be 10,000 or more car loads per year. The Acquisition-related change in volume of hazardous material car loads would upgrade a rail line segment to a key route designation.

2. The volume of hazardous material car loads doubles, and exceeds 20,000 or more car loads per year. SEA has termed rail line segments which meet these criteria a "major key route."

Rail line segments that would meet the first criteria are considered "key routes" and warrant the base level mitigation. Rail line segments that meet the second criteria are considered "major key routes" and warrant expanded mitigation. Depending on the individual circumstances, a rail line segment could meet both criteria and therefore warrant both the base level and the expanded mitigation.

5-NY.7.2 Summary of Potential Effects and Preliminary Recommended Mitigation

Potential Effects. Based on the information provided by the Applicants and SEA's independent analysis, SEA determined that nine rail line segments in New York carrying increased amounts of hazardous material are of potential concern. Table 5-NY-8 shows these rail line segments, indicates the estimated annual car loads of hazardous material for both pre- and post-Acquisition, and identifies the key route status of each. SEA determined that nine rail line segments currently carry less than 10,000 car loads of hazardous material per year but would increase to at least 10,000 car loads per year due to the proposed Acquisition. Two routes would at least double the volume of hazardous material transported, resulting in 20,000 or more car loads per year. Two routes meet both of these significance thresholds.

Table 5-NY-8
Rail Line Segments with Significant Increases in Annual Hazardous Material Car Loads

Site ID	Between	And	Miles in State	Estimated Annual Car Loads		Significance Thresholds	
				Pre-Acquisition	Post-Acquisition	New Key Route	Major Key Routes
C-052	CP Sycamore, NY	Black Rock, NY	6	7,000	20,000	X	X
N-061	Ebenezer, NY	Buffalo, NY	6	0	18,000	X	
N-062	Suffern, NY	Campbell Hall, NY	35	0	18,000	X	
N-063	Campbell Hall, NY	Port Jervis, NY	30	0	18,000	X	
N-065	Corning, NY	Buffalo, NY	128	2,000	16,000	X	
N-070	Buffalo FW, NY	Ashtabula, OH	69	8,000	26,000	X	X
N-245	Port Jervis, NY	Binghamton, NY	84	0	18,000	X	
N-246	Binghamton, NY	Waverly, NY	42	0	18,000	X	
N-247	Waverly, NY	Corning, NY	36	0	18,000	X	

Preliminary Mitigation Recommendation. SEA recommends requiring CSX and NS to bring the rail line segments into compliance with AAR key route standards and practices for those segments that would become a new key route.

For the two segments in Table 5-NY-8 identified as major key routes, where the volume of hazardous material car loads would at least double and exceed 20,000 car loads, SEA

recommends that CSX and NS develop a Hazardous Materials Emergency Response Plan to contain and minimize the potential effects of any accidents or incidents. SEA will further recommend that CSX and NS conduct hazardous materials accident simulations with the voluntary participation of emergency service providers along the rail line segments at least once every two years. Participants in these plans include county and municipal government, local fire departments, and medical and other emergency response teams.

5-NY.8 NEW YORK TRANSPORTATION: PASSENGER RAIL SERVICE

In New York, passenger trains share certain tracks with freight trains. SEA evaluated potential Acquisition-related effects on the ability of rail line segments to accommodate existing passenger rail service, both intercity and commuter rail, and reasonably foreseeable new or expanded passenger service. SEA identified those rail line segments that carry both freight and passenger trains and would experience an increase of one or more freight trains per day.

Amtrak

Amtrak currently provides service throughout the state to New Rochelle, Yonkers, Poughkeepsie, Hudson, Rensselaer/Albany, Schenectady, Amsterdam, Utica, Syracuse, Rochester, Buffalo, New York City, and Niagra Falls on Amtrak's Northeast Corridor line and on Conrail lines. Section 4.7.1, "Intercity Passenger Rail Service," discusses intercity passenger rail service effects.

Commuter Rail

SEA's evaluation included an assessment of the projected level of train traffic and the capacity of the railroad facilities including the number of main tracks, maximum authorized speed for freight and passenger trains, and the type of train control, signaling and train dispatching system utilized. SEA also examined the frequency of interlockings, which permit faster trains to move around slower trains. SEA utilized experienced railroad operating personnel to assess each line segment using timetables, track charts, existing and proposed train levels, professional experience and personal familiarity with the rail facilities.

Metro-North Commuter Railroad (MNCR) serves the metropolitan New York Area. It owns and operates on three major lines, known as the Hudson, Harlem, and New Haven Lines, which radiate north and east from Grand Central Station. The Hudson and Harlem lines are located entirely within New York state while much of the New Haven Line is located in the state of Connecticut. MNCR contracts with New Jersey Transit for the operation of trains originating in New York state on the Port Jervis and Pascack Valley lines. These lines terminate at Hoboken, New Jersey. MNCR carries 61.3 million passengers annually on the three main lines. MNCR, Amtrak, and Conrail conduct operations according to Northeast Operating Rules Advisory Committee rules.

MNCR does not operate any trains on Amtrak-owned lines. Amtrak, however, uses MNCR's New Haven Line between Shell Interlocking in New Rochelle, New York and New Haven, Connecticut, as part of the Northeast Corridor. New Jersey Transit operates MNCR's Suffern to Port Jervis service in Orange and Rockland Counties. These trains originate and terminate in Hoboken, New Jersey. They operate on a 66-mile line segment in New York state that Conrail owns and New Jersey Transit dispatches.

New Jersey Transit operates 16 daily trains for MNCR on the Port Jervis Line. MNCR has discussed acquisition of this segment with Conrail and NS. NS is assigned the rail line. Freight trains operate on the Croxton Yard, New Jersey - Port Jervis, New York rail line segment. In the Operations Plan submitted with the Joint Applications, NS has proposed increasing traffic by 4.1 trains per day to a total of 12.0 trains per day (post-Acquisition). This line, also known as the Southern Tier Line, is capable of accommodating double-stack container trains. The New York, Susquehanna and Western Railroad has trackage rights on this line between Campbell Hall and Port Jervis, a distance of 24 miles, and beyond to Binghamton. Chapter 4, Section 4.7.1, "Intercity Passenger Rail Service", presents additional information regarding this rail line.

Conrail uses its trackage rights on the MNCR Hudson Line between Poughkeepsie and the Borough of the Bronx for the operation of two through-freight trains. Conrail schedules these trains in the late night and early morning period so that they do not affect commuter operations. CSX will operate the line and does not propose an increase in freight operations on this segment.

Future Services Under Study

In addition to the existing commuter rail operations in New York, MNCR's Pascack Line serves southern Rockland County, on the west shore of the Hudson River. The Port Jervis Line serves western Rockland County. Rockland County, is studying the possible restoration of commuter service in eastern Rockland County on the Conrail River Line, assigned to CSX, to West Haverstraw, New York. Presently, there is no capital funding or operating agreement for such service.

The City of Dunkirk submitted a document to express their desire to have Amtrak's Lake Shore Limited stop there. The City and CSX reached a service agreement, but a dispute developed over the need to refurbish the existing station, which is owned by Conrail. The City did not comment regarding commuter rail service. The City has asked for help in securing Conrail's cooperation to allow them to refurbish the station.

5-NY.8.1 Summary of Potential Effects and Preliminary Recommended Mitigation

Based on the evaluation of railroad capacity issues and information provided by the Applicants including MNCR operating plans and existing and projected train traffic, SEA concluded that the existing capacity of the commuter rail line segments evaluated could accommodate the

proposed increase in freight train levels without adverse effects on MNR commuter train service in New York. Therefore, SEA does not anticipate that mitigation would be required.

5-NY.9 NEW YORK TRANSPORTATION: HIGHWAY/RAIL AT-GRADE ROADWAY CROSSING DELAY

In order to analyze the effects of the proposed Conrail Acquisition on the roadway system at existing highway/rail at-grade crossings, SEA identified the crossings on rail line segments that would exceed the Board's environmental analysis thresholds for air quality. SEA then calculated potential changes in vehicle delay at these crossings where average daily traffic (ADT) volumes are 5,000 or greater. SEA concluded that the potential effect of increased train traffic for highways with ADT volumes below 5,000 would be experienced by very few drivers and the additional vehicular delay would be minimal. The description of levels of service and criteria of significance have been addressed in Chapter 3, "Analysis Methods and Potential Mitigation Strategies," and Appendix C, "Traffic and Transportation."

5-NY.9.1 County Analysis

There are three counties in New York that have highway/rail at-grade crossings for which SEA performed vehicle delay calculations. Table 5-NY-9, presented at the end of this state discussion, contains a summary of these results.

Albany County

The single crossing analyzed in Albany County would have a minimal increase in crossing delay per stopped vehicle. The level of service under post-Acquisition conditions would be C. The increase in maximum queue would be one vehicle.

Chautauqua County

The single crossing analyzed in Chautauqua County would have a minimal increase in crossing delay per stopped vehicle. The level of service under post-Acquisition conditions would be B. The increase in maximum queue would be one vehicle.

Erie County

The two crossings analyzed in Erie County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B and C. The largest increase in maximum queue would be one vehicle.

5-NY.9.2 Summary of Potential Effects and Preliminary Recommended Mitigation

Based on the above analysis and the information presented in Appendix C, it is SEA's preliminary determination that the proposed Conrail Acquisition would have no significant effect on vehicle delay at highway/rail at-grade crossings in New York. Therefore, SEA does not propose mitigation.

5-NY.10 NEW YORK TRANSPORTATION: ROADWAY EFFECTS FROM RAIL FACILITY MODIFICATIONS

5-NY.10.1 Constructions

SEA analyzed the transportation effects of proposed new construction projects in New York resulting from the proposed Conrail Acquisition. For the new rail constructions, the transportation effects are related to highway/rail at-grade crossings. Therefore, SEA used the same analysis methods as described for highway/rail at-grade crossing delay and safety.

5-NY.10.2 Summary of Potential Effects and Preliminary Recommended Mitigation

There are two rail constructions proposed by NS in New York that require environmental analysis. A description of the transportation analysis for each proposed Acquisition is provided below.

Construction: Blasdell Connection (Erie County) (NS)

NS proposes to build a connection between the north-south NS line and the east-west Conrail line. The connection would be in the southeast quadrant of the intersecting rail lines. It would be approximately 5,200 feet long. It includes reconstruction of a previous highway overpass at Lake Avenue and rehabilitation of an existing Conrail railroad bridge. The proposed rail connection would parallel the existing NS, Conrail, Buffalo Southern, and South Buffalo tracks and would pass under Lake Avenue. The connection would handle nine trains per day. Figure 5-NY-2 shows the area of the proposed rail line connection.

Because there are no highway/rail at-grade crossings within the limits of construction, SEA concluded that there would be no effect on highway traffic from this proposed rail line connection.

The proposed Acquisition would create typical vehicular delays and the need for detours during construction of this rail connection and overpass. The overpass construction and bridge rehabilitation may have some short-term effect on train and vehicular traffic. The construction would be performed in accordance with applicable Federal, state, and local regulations for construction projects. Construction traffic would use Lake Avenue to travel to and from the construction.

Construction: Gardenville Junction Connection (Erie County) (NS)

NS proposes to build a rail line connection between the existing northwest-southeast and east-west Conrail lines in Gardenville Junction. The new connection would be located in the southwest quadrant of the two intersecting rail lines and would be approximately 1,700 feet long. It is located along the previous alignment of connecting track, which has been removed. The connection would handle nine trains per day. Figure 5-NY-3 shows the area of the proposed rail line connection.

Because there are no highway/rail at-grade crossings within the limits of construction, SEA concluded that there would be no effect on highway traffic from this proposed rail line connection.

There would be no short term vehicular delays and detours during construction of this rail connection. NS would perform the construction in accordance with applicable Federal, state, and local regulations for construction projects. Construction traffic would use North Seneca Road to travel to and from the construction.

5-NY.11 NEW YORK AIR QUALITY

This section summarizes the change in air pollutant emissions that would result from the proposed Acquisition-related operational changes in the state of New York. The primary air pollutant emission sources from trains and related activities include locomotive emissions on rail line segments, at rail yards, and at intermodal facilities. In addition to locomotive emissions, SEA evaluated emissions from other sources at intermodal facilities (idling trucks, lift cranes, etc.), motor vehicles idling near at-grade crossings, and decreases in truck emissions due to truck-to-rail freight diversions.

To analyze the air quality effects of the proposed Acquisition, SEA evaluated rail line segments, rail yards, and intermodal facilities that would meet or exceed the Board's thresholds for environmental analysis defined in Chapter 2, "Proposed Action and Alternatives." See Chapter 3, "Analysis Methods and Potential Mitigation Strategies," for additional information and a summary of the air quality analysis methodology. Appendix E, "Air Quality," contains a detailed description of methodology and detailed tables of results.

SEA addressed air pollutant emissions for sulfur dioxide (SO_2), volatile organic compounds (VOCs), particulate matter (PM), lead (Pb), nitrogen oxides (NO_x) and carbon monoxide (CO). SEA determined that emissions for SO_2, VOCs, PM and Pb would not exceed the emission screening thresholds for environmental analysis in any county. However, SEA found that these thresholds would be exceeded for NO_x in various counties in 17 states, and CO in three counties in two states (IL and OH). NO_x air pollutant emissions may affect a region's ability to attain the National Ambient Air Quality Standards for ozone. CO emissions may affect a local area's ability to attain the National Ambient Air Quality Standards for CO.

Seven NS and five CSX rail line segments and one NS rail yard exceeded the Board's threshold for air quality analysis in New York. Table 5-NY-10 shows the air quality evaluation process that was followed. SEA identified thirteen counties in New York which include any part of these rail facilities. For these counties, SEA summed air emissions increases from changes on rail line segments and other activities and compared them to the air emission screening level that would require a permit if the source were a stationary source (rather than a mobile source, such as trains, trucks, and other vehicles). If the calculated air emissions exceeded this screening level, SEA conducted a detailed air emissions analysis known as a "netting analysis" in these counties. The netting analysis considered all emissions increases and decreases from Acquisition-related activity changes. SEA compared the netting analysis results to the air emission screening level and additional analyses were performed for counties where netting analysis results exceeded the air emission screening level. For these counties, SEA inventoried all county air pollutant emissions sources to evaluate if proposed Acquisition-related air emissions represented more than one percent of all air emissions sources in the county.

Table 5-NY-10
New York Counties Evaluated in Air Quality Analysis

Counties Exceeding the Board's Activity Thresholds	O_3 Status[a]	Exceeds Emissions Screening Level Before Netting	Exceeds Emissions Screening Level After Netting	Exceeds 1% of County Emissions
Albany	N (Marginal)	No	-	-
Chatauqua	Attainment	Yes	Yes	Yes
Chemung	Attainment	No	-	-
Erie	N (Marginal)	Yes	Yes	No
Montgomery	N (Marginal)	Yes	Yes	Yes
Orange	N (Sev/Mod)	Yes	Yes	Yes
Rensselaer	N (Marginal)	No	-	-
Rockland	N (Severe)	No	-	-
Schenectady	N (Marginal)	No	-	-
Schuyler	Attainment	No	-	-
Seneca	Attainment	No	-	-
Stuben	Attainment	No	-	-
Yates	Attainment	No	-	-

[a] A= Attainment area, M= Maintenance area, N= Nonattainment area, as defined in the Clean Air Act.

Chapter 4, "System-wide and Regional Setting, Impacts and Proposed Mitigation," contains a discussion of NO_x emissions, on a regional basis, relative to its potential contribution to O_3 formation in the Ozone Transport Region (OTR). New York is in the OTR.

The emissions estimates presented in Appendix E, "Air Quality," show that the increased county-wide air pollutant emissions from the facilities described above exceed the threshold for four counties in New York. SEA's analysis results for these counties are presented below.

5-NY.11.1 County Analysis

Chautauqua County

EPA has designated Chautauqua County as an attainment area for all criteria pollutants. Table 5-NY-11 shows that the net NO_x emissions increase in Chautauqua County, considering all Acquisition-related emissions changes, is above the emissions screening threshold of 100 tons/year used to determine if emissions changes are potentially significant. The increased net NO_x emissions are also more than one percent of the existing county-wide NO_x emissions. Although the net emissions increase is more than one percent of the county-wide emissions, SEA does not expect this increase in NO_x emissions to have any adverse effects on air quality because the county is in attainment for all of the ambient air quality standards.

Table 5-NY-11
Chautauqua County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Ashtabula, OH to Buffalo, NY	346.79
Rail Segment (CSX)	Buffalo Seneca, NY to Ashtabula, OH	-47.90
Truck Diversion (both)	County-Wide	-11.82
At-Grade Crossings (both)	Affected Crossings >5000 Vehicles/Day[a]	0.35
Total Acquisition-Related Net NO_x Emissions Increase		287.42
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		12,750.02
Percent Increase in County NO_x Emissions		2.25%

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Erie County

EPA has designated Erie County as a marginal nonattainment area for O_3. Table 5-NY-12 shows that the net NO_x emissions increase in Erie County, considering all Acquisition-related emissions changes, is above the emissions screening threshold of 50 tons/year used to determine if emissions changes are potentially significant. However, the increased NO_x emissions would be less than one percent of the existing county-wide NO_x emissions. Therefore, SEA does not consider the net emissions increase to be significant.

Table 5-NY-12
Erie County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Ashtabula, OH to Buffalo NY	235.66
Rail Segment (CR/CSX)	Buffalo, NY to CP Sycamore, NY	3.74
Rail Segment (CR/CSX)	Chili, NY to Frontier, NY	76.68
Rail Segment (CR/CSX)	CP Sycamore, NY to Black Rock, NY	23.38
Rail Segment (CR/CSX)	Buffalo, NY to Draw, NY	16.55
Rail Segment (CR/CSX)	Draw, NY to Buffalo Creek Jct., NY	0.62
Rail Segment (CR/CSX)	Buffalo Creek Jct., NY to Buffalo Seneca	-3.86
Rail Segment (CR/CSX)	Buffalo Seneca, NY to Ashtabula, OH	-28.99
Rail Segment (CR/CSX)	Frontier, NY to Buffalo, NY	-4.79
Rail Segment (NS)	Buffalo, NY to Black Rock, NY	-23.41
Rail Segment (CR/CSX)	Black Rock, NY to Niagara Falls, NY	4.52
Rail Segment (CR/NS)	Ebenezer Jct., NY to Buffalo, NY	37.67
Rail Segment (CR/NS)	Keating, PA to Ebenezer Jct, NY	1.16
Rail Segment (CR/NS)	Corning, NY to Buffalo, NY	34.97
Rail Yard (CSX)	Buffalo Frontier	-13.15
Rail Yard (CSX)	Buffalo Seneca	-13.65
Rail Yard (NS)	Buffalo Jct.	13.26
Intermodal Facility (CSX)	Buffalo	5.32

Table 5-NY-12
Erie County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Intermodal Facility (NS)	Buffalo New Facility	2.81
Truck Diversion (both)	County-Wide	-20.90
At-Grade Crossings (both)	Affected Crossings >5000 Vehicles/Day[a]	0.02
Total Acquisition-Related Net NO_x Emissions Increase		347.61
NO_x Emissions Screening Level		50.00
Existing (1995) County Total NO_x Emissions		43,478.62
Percent Increase in County NO_x Emissions		0.80%

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Montgomery County

EPA has designated Montgomery County as a marginal nonattainment area for O_3. Table 5-NY-13 shows that the net NO_x emissions increase in Montgomery County, considering all Acquisition-related emissions changes, is above the emissions screening threshold of 50 tons per year used to determine if emissions changes would be potentially significant. The increased net NO_x emissions would be over one percent of the existing county-wide NO_x emissions. Because these emissions could contribute to O_3 formation on a regional level, refer to Chapter 4 for further discussion of the potential effects on regional air quality.

Table 5-NY-13
Montgomery County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (CR/CSX)	Hoffmans, NY to Utica, NY	203.63
Truck Diversion (both)	County-Wide	-8.56
Total Acquisition-Related Net NO_x Emissions Increase		195.07
NO_x Emissions Screening Level		50.00
Existing (1995) County Total NO_x Emissions		2,253.53
Percent Increase in County NO_x Emissions		8.66

Orange County

EPA has designated part of Orange County as a moderate O_3 nonattainment area and part as a severe O_3 nonattainment area. Table 5-NY-14 shows that the net NO_x emissions increase in Orange County, considering all Acquisition-related emissions changes, is above the emissions screening thresholds of 50 and 25 tons per year, respectively, that were used to determine whether emissions changes would be potentially significant. The increased net NO_x emissions would also exceed one percent of the existing county-wide NO_x emissions. Because these emissions could contribute to O_3 formation on a regional level, refer to Chapter 4 for further discussion of the potential for effects on regional air quality.

Table 5-NY-14
Orange County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emission (tons/year)
Rail Segment (CR/CSX)	Ridgefield Heights, NJ to Newburgh, NY	34.64
Rail Segment (CR/CSX)	Newburgh, NY to Selkirk, NY	16.60
Rail Segment (CR/NS)	Suffern, NY to Campbell Hall, NY	95.81
Rail Segment (CR/NS)	Campbell Hall, NY to Port Jervis, NY	96.70
Rail Segment (CR/NS)	Port Jervis, NY to Binghampton, NY	9.55
Truck Diversion (both)	County-Wide	-59.16
Total Acquisition-Related Net NO_x Emissions Increase		194.14

Table 5-NY-14
Orange County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emission (tons/year)
NO_x Emissions Screening Level		50.00/ 25.00[a]
Existing (1995) County Total NO_x Emissions		17,130.03
Percent Increase in County NO_x Emissions		1.13%

[a] 50 tons/year is the emissions screening threshold for a Moderate ozone nonattainment area inside an Ozone Transport Region, and 25 tons/year is the emissions screening threshold for a Severe ozone nonattainment area (see Appendix E). Orange County has both severe and moderate areas.

5-NY.11.2 Summary of Potential Effects and Preliminary Recommended Mitigation

While there are localized increases in emissions in New York, the increases are not likely to affect compliance with air quality standards. Therefore, SEA has determined that air quality will not be significantly affected and no mitigation is necessary. See system-wide and regional discussion in Section 4.12, "Air Quality."

5-NY.12 NEW YORK NOISE

To analyze the potential noise impacts of the proposed Acquisition, SEA evaluated rail line segments, rail yards and intermodal facilities that would meet or exceed the Board's thresholds for environmental analysis of noise. Although new construction projects and rail line abandonments can result in noise increases, the noise effects would be temporary and therefore, SEA did not evaluate them.

5-NY.12.1 Proposed Activities

Train noise sources include diesel locomotive engine and wheel/rail interaction noise (or wayside noise) and horn noise. Wayside noise affects all locations in the vicinity of the rail facility, and generally diminishes with distance from the source. Horn noise is an additional noise source at grade crossings, and also generally diminishes with distance. SEA performed an analysis to identify rail line segments, rail yards and intermodal facilities where the proposed changes in operations meet or exceed the Board's environmental analysis thresholds at 49 CFR 1105.7(e)(6). Where the proposed rail activity would exceed these thresholds, SEA calculated the 65 dBA L_{dn} noise contours for the pre- and post-Acquisition conditions. SEA based the noise level impact assessment on the projected activity level data provided by the railroads. SEA counted sensitive receptors (e.g., schools, libraries, hospitals, residences, retirement

communities, and nursing homes) within the noise contours for both pre-Acquisition and post-Acquisition operating conditions.

The NS rail line segments that would experience increases in traffic or activity meeting the Board's environmental analysis thresholds for New York are listed in Table 5-NY-15. Table 5-NY-16 shows the facilities with noise sensitive receptors exceeding 65 dBA L_{dn}.

The counties where these facilities are located are listed in Section 5-NY.2 on Proposed Conrail Acquisition Activities in New York.

Table 5-NY-15
Rail Segments in New York That Meet or Exceed Board Thresholds for Noise Analysis

Site ID	Segment		Trains Per Day			Percent Change in Gross Ton Miles
	From	To	Pre-Acquisition	Post-Acquisition	Increase	
N-060	Corning	Geneva	0.2	1.6	1.4	500
N-061	Ebenezer Jct.	Buffalo	0.0	11.4	11.4	N/A
N-070	Ashtabula	Buffalo	13.0	25.1	12.1	121

Table 5-NY-16
Noise Sensitive Receptors In New York Exceeding 65 dBA L_{dn}

Site ID	Name	Pre-Acquisition	Post-Acquisition	Increase
Rail Line Segments				
N-060	Corning-Geneva	0	252	252
N-061	Ebenezer Jct.-Buffalo	0	0	0
N-070	Ashtabula-Buffalo	1646	2416	770

5-NY.12.2 Summary of Potential Effects and Preliminary Recommended Noise Mitigation

There are different noise mitigation techniques used to reduce horn noise and wayside noise. These different types of noise and mitigation techniques are as follows:

Grade Crossing Noise Effects. FRA has indicated that it will propose new rules on train horn blowing procedures in 1998. These new rules may allow communities to apply for an exception to horn blowing at certain grade crossings that meet explicit criteria. These criteria relate to so-called "quiet zones" where FRA would no longer require train engineers to sound the train horn at grade crossings with special upgraded safety features. Examples of such safety features include four-quadrant gates and median barriers that preclude motorists from entering the crossings while the crossing arm is down. Until FRA develops and implements these regulations, these measures are not feasible for SEA to require as mitigation. However,

communities will have the opportunity to qualify for "quiet zones" once the FRA regulations are in place.

Wayside Noise Effect. Wayside noise is the sound of a train as it passes by. Wayside noise is comprised of steel wheel/ rail interaction noise, and locomotive diesel engine noise. This type of noise can be reduced by constructing barriers between the railway noise source and adjoining land uses, and by installing building sound insulation. Noise barriers include earth berms and walls that block the sound. Rail lubrication can be used to reduce "wheel squeal" noise on curved track. Building sound insulation consists of special windows and other building treatments that reduce interior noise. Noise barriers are the preferred type of noise mitigation for this project since barriers can be built on railroad property. Additional discussion of noise mitigation measures is included in Appendix F, "Noise Methods."

As noted above, for receptors near grade crossings that would experience increases in noise resulting from horn sounding, mitigation is not currently feasible. For areas affected by wayside noise, SEA considered rail line segments eligible for noise mitigation for noise sensitive receptors exposed to at least 70 dBA L_{dn} and an increase of at least 5 dBA L_{dn} due to increased rail activity.

It is SEA's preliminary conclusion that no rail line segments, rail yards, or intermodal facilities in the state of New York warrant noise mitigation according to the project mitigation criteria.

5-NY.13 NEW YORK CULTURAL RESOURCES

Cultural resources include historic and archaeological features. SEA determined that potential effects to cultural resources would most likely occur during new construction activities.

Based on site visits and evaluation of railroad documents, SEA identified cultural resources that may be affected by Acquisition-related construction. SEA included qualified professionals in the fields of architectural history and archaeology specific to the State of New York. In a letter dated March 11, 1997, the New York State Historic Preservation Office (SHPO) declared that there will be no effect upon cultural resources eligible for the National Register of Historic Places (NRHP). Refer to Appendix M for agency correspondence.

5-NY.13.1 Construction

Construction: Blasdell Connection (Erie County, NY) (NS)

Acquisition-related construction will take place at Blasdell, New York. SEA identified an abandoned historic bridge that formerly carried two rail lines over the former Erie-Lackawana Railroad at the site. The former rail connection will be re-established and the historic bridge will be put back into service as part of the proposed Conrail Acquisition. SEA determined this action will serve to preserve the bridge and would not cause adverse effects.

Historical Background. A heavy, two-span riveted Pratt through-truss bridge remains on a central, concrete pier with concrete abutments over the former Erie Lackawanna and Nickel Plate rail lines. The bridge formerly carried two rail lines which have been removed. The bridge is adjacent to a similar, but earlier through-truss bridge which still carries one active track of the Conrail Buffalo line.

Resources Identified. SEA determined that the two-span riveted Pratt through-truss bridge is eligible for the NRHP.

Potential Effects. The railroads will place the bridge back in service as part of the proposed Conrail Acquisition. Therefore, SEA determined this action would result in no adverse effects on the bridge. SEA has written a letter to the SHPO requesting concurrence in a finding of no effect. Refer to Appendix M for agency correspondence.

Since SEA determined there would be no potential impacts to cultural resources, SEA did not recommend mitigation.

Construction: Gardenville Junction Connection (West Seneca, New York) (Conrail)

Acquisition-related construction would take place at West Seneca and Blasdell, New York. At West Seneca a 1,700 foot connection would be constructed from the Conrail Buffalo Line to the Conrail Ebenezer Secondary Line at Gardenville Junction. SEA did not find historic resources at this location and all construction would be on a previously disturbed former rail bed.

5-NY.13.2 Proposed Abandonments

There are no proposed abandonments related to the proposed Conrail Acquisition in New York.

5-NY.14 NEW YORK HAZARDOUS MATERIALS AND WASTE SITES

In analyzing the effects on hazardous waste sites for the proposed Conrail Acquisition, the primary issue addressed was whether proposed construction and abandonment activities would disturb contaminated areas. SEA identified potential impacts on hazardous waste sites and related environmental concerns for each location where proposed Acquisition-related construction or abandonment activities would take place.

SEA investigated the following sites in New York for potential hazardous materials or waste impacts:

- Blasdell Connection.
- Gardenville Junction.

5-NY.14.1 Construction: Blasdell Connection (Erie County, NY) (NS)

Existing Environment. The Environmental Data Report (EDR) (1997) identified one hazardous waste site or related environmental concern within 500 feet of the proposed connection. In addition, the EDR report identified 18 sites which could not be mapped due to inadequate address information. SEA could not locate these sites. SEA supplemented EDR information with a state official contact (New York State Department of Environmental Conservation Inspector) and a site visit on July 24, 1997. SEA determined that there is one site of concern within 500 feet of the connection site.

The EDR Report identifies this site with three Leaking Undergound Storage Tank (LUST) releases at Lisa Lane approximately 350 feet from the proposed connection. These releases were (1) a 1990 release into the sewer that was cleaned up to applicable standards, (2) a release that did not require corrective actions, and (3) a release where corrective actions were taken.

Potential Effects and Preliminary Recommended Mitigation. SEA identified one site with environmental concern within 500 feet of the proposed connection. This site is in compliance with the state of New York's regulations and has been remediated. In addition, the locations of the 18 sites that could not be mapped are unknown. SEA does not anticipate that the proposed connection would disturb known hazardous materials. If hazardous materials are encountered during construction, NS would follow appropriate regulations and procedures described in Chapter 3, "Analysis Methods and Potential Mitigation Strategies," and Appendix H, "Hazardous Materials and Waste Sites." Because existing regulatory requirements of other agencies and standard construction practices of the railroad adequately address potential disturbance of contaminated areas, it is SEA's preliminary determination that no additional mitigation is necessary.

5-NY.14.2 Construction: Gardenville Junction Connection (Erie County, NY) (NS)

Existing Environment. The EDR (1997) report identified no hazardous waste sites or related environmental concerns within 500 feet of the proposed connection. However, the EDR report identified 11 sites that could not be mapped due to inadequate address information. SEA could not locate these sites. SEA supplemented this information through contact with state and local officials (New York State Department of Environmental Conservation Inspector Kollatz and Police Chief Miskoski), and a site visit on July 23, 1997. SEA determined that there are no known hazardous waste sites or related environmental concerns within 500 feet of the proposed connection.

Potential Effects and Preliminary Recommended Mitigation. SEA identified no hazardous waste sites within 500 feet of the proposed connection. However, the locations of the 11 sites that could not be mapped are unknown. SEA does not anticipate that the proposed connection would disturb known hazardous materials. If hazardous materials are encountered during construction, NS would follow appropriate regulations and procedures described in Chapter 3,

"Analysis Methods and Potential Mitigation Strategies," and Appendix H, "Hazardous Materials and Waste Sites." Because existing regulatory requirements of other agencies and standard construction practices of the Applicant adequately address potential disturbance of contaminated areas, it is SEA's preliminary determination that no additional mitigation is necessary.

5-NY.15 NEW YORK NATURAL RESOURCES

SEA focused the natural resources analysis on any proposed physical alteration affecting water resources, wetlands, biological resources, and wildlife habitats. SEA determined that the potential for impacts to natural resources would most likely be associated with site-specific projects related to the proposed abandonment of rail lines and construction of new connector lines, rail yards, and intermodal facilities.

SEA evaluated two proposed construction sites in the state of New York. SEA contacted the appropriate Federal and state regulatory and review agencies for natural resources regarding the proposed projects that occur within their jurisdictions. Specifically, for the state of New York, SEA coordinated with:

- U.S. Department of Agriculture Forest Service.
- U.S. Department of Agriculture Natural Resources Conservation Service.
- U.S. Department of the Army Corps of Engineers.
- U.S. Department of Interior Fish and Wildlife Service (USFWS).
- U.S. Department of Interior National Park Service.
- U.S. Environmental Protection Agency.
- New York Department of Environmental Conservation.

SEA determined that potential impacts to natural resources could occur at the Blasdell Construction and the Gardenville Junction Construction.

Tables 5-NY-17 and 5-NY-18 present the Federally protected animal and plant species that occur in New York, as identified by the USFWS Division of Endangered Species (August 1997). The tables indicate that no species of concern occur in Erie County where the two construction projects would occur. Appendix I, "Natural Resources," includes brief descriptions of suitable habitat for these species. "Threatened" describes a species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range; "Endangered" describes a species that is in danger of extinction within the foreseeable future throughout all or a significant portion of its range. The USFWS lists piping plover as endangered within the Great Lakes watershed in the State of New York; elsewhere, it lists this species as threatened. Additionally, the USFWS lists the Green Sea Turtle as threatened in the state of New York.

Table 5-NY-17
Federally Protected Animal Species Listed for New York

Group	Common Name	Scientific Name	Status	Erie County
Vertebrates				
Mammal	Indiana Bat	*Myotis sodalis*	Endangered	
Bird	Bald Eagle	*Haliaeetus leucocephalus*	Threatened	
Bird	American Peregrine Falcon	*Falco peregrinus anatum*	Endangered	
Bird	Piping Plover	*Charadrius melodus*	Endangered, Threatened	
Bird	Roseate Tern	*Sterna dougalli dougalli*	Endangered	
Reptile	Kemp's (=Atlantic) Ridley Sea Turtle	*Lepidochelys kempii*	Endangered	
Reptile	Green Sea Turtle	*Chelonia mydas*	Threatened	
Reptile	Hawksbill Sea Turtle	*Eretmochelys imbricata*	Endangered	
Reptile	Leatherback Sea Turtle	*Dermochelys coriacea*	Endangered	
Reptile	Loggerhead Sea Turtle	*Caretta caretta*	Threatened	
Invertebrates				
Clam	Dwarf Wedge Mussel	*Alasmidonta heterodon*	Endangered	
Snail	Chittenango Ovate Amber Snail	*Succinea chittenangoensis*	Threatened	
Insect	Karner Blue Butterfly	*Lycaeides melissa samuelis*	Endangered	

Source: USFWS - Cortland Field Office

Table 5-NY-18
Federally Protected Plant Species Listed for New York

Family Name	Common Name	Scientific Name	Status	Erie County
Ranunculaceae	Northern Wild Monkshood	*Aconitum noveboracense*	Threatened	
Scrophulariaceae	Sandplain Gerardia	*Agalinis acunta*	Endangered	
Amaranthaceae	Seabeach Amaranth	*Amaranthus pumilus*	Threatened	
Crassulaceae	Leedy's Roseroot	*Sedum inegrifolium* ssp. *leedyi*	Threatened	
Asteraceae	Houghton's Goldenrod	*Solidago houghtonii*	Threatened	
Polypodiaceae	American Hart's-tongue Fern	*Asplenium scolopendrium* var. *americana* (=*Phyllitis japonica*)	Threatened	

Source: USFWS - Cortland Field Office

5-NY.15.1 Summary of Potential Effects and Preliminary Recommended Mitigation

Construction: Gardenville Junction Construction (Erie County, NY) (NS)

The proposed action involves construction and operation of approximately 1700 feet of new track. Figure 5-NY-3 depicts the site and the surrounding conditions.

Existing Conditions - Water Resources. Based on review of U.S. Geological Survey topographic mapping and National Wetland Inventory mapping, and observations made during the site visit, SEA determined that two potential wetlands are located within 500 feet of the proposed Gardenville Junction construction area. SEA observed a small potential wetland within a forested area, located approximately 40 feet east, and down-grade, of the proposed construction site at Gardenville Junction.

In addition, SEA observed a pond and associated wetlands, located down-grade of the proposed site and northeast of the intersection of the existing Conrail lines, on the east side of the Conrail Ebenezer Secondary line. However, the existing north-south Conrail line separates this pond and its wetland from the proposed construction site at Gardenville Junction. The National Wetland Inventory mapping indicates that this wetland is a large palustrine open water/emergent wetland. These maps also show that a small palustrine scrub-shrub wetland is located between the proposed construction site and the existing Conrail line.

Based on review of Federal Emergency Management Agency Flood Insurance Rate Maps, SEA determined that the Gardenville Junction site is not located within the 100-year floodplain.

Potential Effects - Water Resources. SEA identified wetlands and water resources that would likely be affected by the proposed construction at Gardenville Junction. The extent of the potential impacts will be limited to one wetland site 40 feet east of the project area.

SEA also evaluated potential soil erosion impacts resulting from construction activities. SEA concluded that potential impacts of soil erosion resulting from cleared vegetation and exposed soil would not be significant with the use of Best Management Practices to control runoff and surface instability. SEA determined that stormwater drainage patterns would not be altered by the proposed project at Gardenville Junction. Therefore, NS would potentially require authorization under Section 404 of the Clean Water Act, for the discharge of fill material into "waters of the United States." Additionally, a National Pollutant Discharge Elimination System stormwater discharge permit may not be required due to potential land disturbance impacts of less than five acres.

Since the project is not located within the 100-year floodplain, SEA concluded that the proposed construction at Gardenville Junction would not adversely affect floodplains.

Biological Resources

The existing Gardenville Junction site is primarily vacant, although portions of it are in industrial use.

Existing Conditions - Vegetation. Weedy annuals and miscellaneous grasses cover the vacant areas of the site, some of which are maintained as lawns. SEA observed a small wooded area located on the eastern portion of the site; the vegetation consists of scrub-shrub and deciduous trees. SEA also observed emergent wetland vegetation associated with the ponds located within this wooded area.

Potential Effects - Vegetation. The proposed construction site at Gardenville Junction is located within an existing railroad right-of-way, which contains sparse vegetation consistent with such disturbed areas. Therefore, SEA concluded that the proposed Gardenville Junction construction activity would only affect commonly occurring vegetation. SEA also concluded that these plant species would naturally revegetate areas adjacent to the right-of-way once NS completes construction at the site.

SEA determined that the clearing or trimming of trees associated with the proposed construction at Gardenville Junction would adversely affect the wooded area located between the NS and Conrail rights-of-way. NS would limit ground disturbance required for construction operations to the existing right-of-way, but would also need to clear some weedy plants, grasses, and shrubs. NS would re-seed the area following completion of construction activities. None of the

vegetation that would be affected by the proposed construction at Gardenville Junction is unique to the area.

Existing Conditions - Wildlife. During the site visit, SEA determined that wildlife habitat on the proposed construction site at Gardenville Junction is limited within the grassy areas. These areas provide limited and marginal habitat for wildlife, but do offer cover and food for small mammals and some songbirds. SEA further determined that the wooded area on the eastern side of the Gardenville Junction site, as well as the surrounding agriculture fields, wood lots, and wetlands provide higher quality habitat for a variety of species, including waterfowl, large mammals, raptors, reptiles, and amphibians. The pond area is suitable habitat for fish.

Potential Effects - Wildlife. SEA determined that the proposed construction at Gardenville Junction would not adversely affect wildlife populations. However, SEA determined that wildlife within and adjacent to the proposed construction would be temporarily displaced during construction. SEA concluded that wildlife population would re-inhabit the construction site once construction is completed. In addition, SEA concluded that proposed project would not adversely affect the movement or migration of wildlife.

Existing Conditions - Threatened and Endangered Species. Based on coordination with representatives of the USFWS Cortland, New York field office, SEA determined that no Federally listed endangered or threatened species are known to exist in Erie County. During the site visit, SEA did not observe any Federally listed species known to inhabit the state of New York, nor did SEA find required habitat characteristics of any Federally listed species. Based on these findings, SEA determined that there is minimal potential for the presence of Federally listed threatened or endangered species on the Gardenville Junction site.

Potential Effects - Threatened and Endangered Species. Since Federally listed threatened or endangered species, or the habitat needed to support them, are not located on or within the vicinity of the proposed action at Gardenville Junction, SEA determined that there would be no impacts to these protected resources. SEA also determined that the proposed action would not adversely affect any critical habitat for any listed species.

Existing Conditions - Parks, Forests, Preserves, Refuges, and Sanctuaries. SEA contacted representatives of the U.S. Fish and Wildlife Service, National Park Service, and the U.S. Forest Service to identify land within the jurisdiction of these Federal agencies. Based on this coordination, SEA determined that there are no Federal or state parks, forests, preserves, refuges, or sanctuaries located within or adjacent to the proposed construction site at Gardenville Junction.

Potential Effects - Parks, Forests, Preserves, Refuges, and Sanctuaries. Since there are no Federal or state parks, forests, preserves, refuges, or sanctuaries located within the vicinity of the proposed construction at Gardenville Junction, SEA determined that there would be no adverse impacts to this type of resource.

Preliminary Recommended Mitigation: Gardenville Junction

Due to Best Management Practices used in the railroad's construction specifications and regulatory programs governing effects on wetlands, water resources, and protected species, it is SEA's preliminary determination that no mitigation is necessary. However, as a condition of approval, SEA would require NS to conform to its standard specifications during construction. These standard specifications are presented in Chapter 3, Section 3.15 "Natural Resources."

Construction: Blasdell Connection (Erie County, NY) (NS)

The proposed activities at the Blasdell site involve construction of approximately 5,200 feet of new connection. Figure 5-NY-2 depicts the site and the surrounding conditions.

Existing Condition - Water Resources. Based on review of U.S. Geological Survey topographic mapping and USFWS, National Wetland Inventory mapping, and on observations made during a site visit, SEA determined that two non-tidal wetlands exist within 500 feet of the proposed construction area at Blasdell. SEA observed one area of palustrine forested wetlands, located approximately 100 feet east of the existing Conrail line. The National Wetland Inventory Map describes this area as containing broad-leaved deciduous vegetation with a seasonally saturated water regime. SEA observed another area of palustrine emergent wetland, located approximately 650 feet northwest of the existing Conrail line. The National Wetland Inventory map describes this wetland as containing narrow-leaved persistent vegetation with a seasonal water regime.

Based on review of Federal Emergency Management Agency Flood Insurance Rate Maps, SEA determined that the Blasdell construction site is not located within the 100-year floodplain.

Potential Effects - Water Resources. SEA determined that the proposed construction at Blasdell may affect those wetland areas located between the existing NS and Conrail lines. SEA determined that the proposed construction would cause the placement of fill material into these wetland systems, thus requiring NS to obtain authorization under Section 404 of the Clean Water Act. NS may be required to obtain a National Pollutant Discharge Elimination System stormwater permit.

SEA also evaluated potential soil erosion impacts resulting from construction activities. SEA concluded that impacts of soil erosion resulting from cleared vegetation and exposed soil would not be significant with the use of Best Management Practices to control runoff and surface instability.

SEA determined that storm water drainage patterns would not be altered by the proposed project at Blasdell if NS would place a culvert in the rail bed where the proposed connection would cross a wetland area (near Mile Post B7.2).

Since the proposed construction at Blasdell is not located within the 100-year floodplain, SEA determined that there would be no impacts to the 100-year floodplain.

Biological Resources

Land use at the existing Blasdell construction site is primarily urban, surrounded by undeveloped land.

Existing Conditions - Vegetation. SEA observed that dominant vegetation on the Blasdell construction site consists of weed species, growing in the existing gravel ballast, with a few areas of native grasses, shrubs, and deciduous trees. SEA also observed an area of overgrowth, consisting of small trees and shrubs, located between the existing NS and Conrail lines, south of Lake Avenue.

Potential Effects - Vegetation. The proposed construction site at Blasdell is located within an existing railroad right-of-way, which contains sparse vegetation consistent with such disturbed areas. Therefore, SEA determined that the proposed construction activity would only affect commonly occurring vegetation. However, SEA further determined that the proposed construction at Blasdell would result in the partial removal of a forested area, located between the existing NS and Conrail rights-of-way. SEA concluded that these plant species would revegetate the area adjacent to the new railroad right-of-way once NS completes construction at Blasdell.

Existing Conditions - Wildlife. During the site visit, SEA observed that most of the Blasdell construction site and surrounding area has been disturbed. SEA determined that there is limited wildlife habitat found on the proposed construction site's grassy areas; however, in the forested land and the wetlands surrounding the site, wildlife habitat is suitable for large and small mammals, reptiles and amphibians, waterfowl, and various songbirds.

Potential Effects - Wildlife. Because of the existing limited habitat, SEA concluded that the proposed Blasdell construction would not cause significant impacts to wildlife. In addition, SEA further concluded that the proposed Blasdell construction would not adversely affect the movement or migration of wildlife.

Existing Conditions - Threatened and Endangered Species. Based on information provided by representatives of the USFWS in the Cortland field office, SEA determined that no Federally listed endangered or threatened species are known to exist in Erie County, the county where the proposed Blasdell connection is located. During the site visit, SEA evaluated the construction area for its potential to support any of the Federally listed species found in New York. SEA did not observe any of the listed species or their respective habitats. Based on these findings, SEA determined that there is minimal potential for the presence of Federally listed threatened or endangered species at the Blasdell construction site.

Potential Effects - Threatened and Endangered Species. Since there are no Federally listed threatened or endangered species, or the habitat needed to support them, in or near the proposed Blasdell construction, SEA concluded that there would be no adverse impacts to any of these Federally protected species. SEA also concluded that the proposed action would not adversely affect any critical habitat for any listed species.

Existing Conditions - Parks, Forests, Preserves, Refuges, and Sanctuaries. SEA contacted representatives of the U.S. Fish and Wildlife Service, the National Park Service, and the U.S. Forest Service to identify land within the jurisdiction of these Federal agencies. Based on this coordination, SEA determined that there are no state or Federal parks, forests, preserves, refuges, or sanctuaries are in or adjacent to the proposed Blasdell construction site.

Potential Effects - Parks, Forests, Preserves, Refuges, and Sanctuaries. Because there are no Federal or state parks, forests, preserves, refuges, or sanctuaries located within or adjacent to the proposed construction at Blasdell, SEA concluded that proposed construction activities would not adversely affect these types of resources.

Preliminary Recommended Mitigation: Blasdell Connection

Due to Best Management Practices used in the railroad's construction specifications and regulatory programs governing effects on wetlands, water resources, and protected species, it is SEA's preliminary determination that no mitigation is necessary. However as a condition of approval, SEA would require NS to conform to its standard specifications during construction. These standard specifications are presented in Chapter 3, Section 3.15 "Natural Resources."

5-NY.16 NEW YORK LAND USE/SOCIOECONOMICS

For the land use/socioeconomics analysis, SEA evaluated potential changes in the physical environment related to the proposed Conrail Acquisition. The issues included consistency with current land use plans and existing Coastal Zone Management plans, potential effects on prime farmland, and suitability of abandoned rights-of-way for alternative public uses.

SEA determined that potential impacts to land use/socioeconomics could occur at the Gardenville Junction Construction and the Blasdell Construction locations.

SEA has found that in the State of New York, the sites of the proposed new rail line connection constructions associated with the proposed Conrail Acquisition are not within coastal zones. According to the Bureau of Indian Affairs, there are no Federally recognized Native American tribes or reservations in the vicinity of the two construction areas. However, there is one Indian Reservation in Western New York that may be affected by increased rail traffic on one rail line segment. This potential impact is also discussed in this section.

5-NY.16.1 Summary of Potential Effects and Preliminary Recommended Mitigation

Construction: Blasdell (Erie County, NY) (NS)

The proposed action at the Blasdell site is the construction and operation of a new rail line connection between the existing NS and Conrail tracks.

The area of the proposed Blasdell construction site is primarily undeveloped with adjacent residential, recreational and industrial areas. Approximately 11.9 acres of land would be required for the proposed new connection. The new connection is the reestablishment of a rail connection that previously existed on this site. Part of the new right-of-way would border a park on Lake Street, but no parkland would be taken nor would there be any loss of use of the park which consists of a baseball field adjacent to the proposed construction site. A new rail overpass across Lake Street would also be constructed, thus precluding any potential impacts on local traffic.

Existing Land Use Plan/Zoning. The area around the proposed construction site is zoned industrial and residential. The Village of Blasdell has zoned the site for manufacturing.

Consistency with Local Land Use Plan. According to the County of Erie Department of Environment and Planning, the proposed construction is consistent with the local future land use plans.

Prime Farmland. NRCS has classified soils at the proposed construction site as prime farmland. However, the area is urban, and development of the site for existing rail use and of adjacent property for other uses has rendered the area unusable for agriculture.

Based on the findings described above, it is SEA's preliminary determination that there would be no significant impacts to land use associated with the proposed Acquisition at the Blasdell site. Because there are no significant impacts, SEA does not recommend mitigation.

Construction: Gardenville Junction (Erie County , New York) (NS)

The proposed action at the Gardenville site is the construction and operation of a new rail line connection between the existing Conrail tracks.

Existing Land Use. The proposed Gardenville Junction site is undeveloped land in the Town of West Seneca. The area around the proposed construction site is dominated by rail, transportation, open space and utility uses. The proposed activity would be built on vacant rail right-of-way that is the former site of a rail connection.

Existing Land Use Plan/Zoning. The Town of West Seneca identifies this area as "general manufacturing" in the 1963 Master Plan. The site is currently zoned for general manufacturing.

Consistency with Local Land Use Plan. According to the County of Erie, Department of Environment and Planning, and the Town of West Seneca, the proposed construction is consistent with the local future land use plans.

Prime Farmland. According to the Erie County Soils Survey, the site contains a prime agricultural soil; however, there is no current agricultural activity within one-half mile of the site.

Based on the findings described above, it is SEA's preliminary determination that there would be no significant impacts to land use associated with the proposed Acquisition at the Gardenville site. Because there are no significant impacts, SEA does not recommend mitigation.

Native American Issues. The NS Ashtabula - Buffalo (N-070) rail line segment, which would have increases in rail traffic that exceed the Board's thresholds for environmental analysis, traverses the Federally designated Cattaraugus Indian Reservation in Western New York.

The Cattaraugus Indian Reservation encompasses approximately 21,680 acres along the Cattaraugus Creek and Lake Erie. The Reservation is approximately 30 miles south of Buffalo, and is essentially rural with small village centers located adjacent to its boundaries. The small towns and villages of Fredonia and Angola are located along the western boundary of the Reservation near the rail segments described above. The Seneca Nation of Indians inhabits the Reservation, with a population of approximately 2,180 people. The Reservation contains a 40-acre industrial park in the northwestern corner located between Route 5 and the existing Conrail tracks. The Reservation is also the center of many cultural activities throughout the year related to Native American history and culture.

The NS Ashtabula – Buffalo segment (N-070) would experience an increase in train traffic from 13.0 trains/day to 25.2 trains/day (increase of 12.2 trains/day) as a result of the Conrail Acquisition. There would be an increase in transportation of hazardous waste along this rail line segment of from 7,000 to 26,000 carloads per year, which would make this segment a "key route."

Mitigation Measures. NS would be required to adhere to provisions of the Association of American Railroads (AAR) for transport of hazardous materials. These provisions include: 1) restricting speeds of trains along this segment to 50 mph; 2) upgrading the track to Class 2 or better; 3) installation of wayside defect detectors along rail lines; and, 4) establishing a Hazardous Materials Response Plan which includes accident simulations with local emergency response providers. SEA recommends that NS coordinate the preparation of the Plan with the Reservation and assist the Reservation with emergency response preparedness as may be requested.

In addition to the mitigation measures described above, SEA will conduct additional public outreach and noticing of the Draft EIS availability with regard to the Cattaraugus Indian Reservation and Seneca Nation of Indians.

5-NY.17 NEW YORK ENVIRONMENTAL JUSTICE

As part of its analysis, SEA examined activities associated with the proposed Conrail Acquisition for environmental justice impacts (disproportionately high and adverse impacts to minority and low-income populations) in accordance with Executive Order 12898. As described in the Environmental Justice Methodology in Chapter 3, "Analysis Methods and Potential Mitigation Strategies," SEA first categorized the nature of the populations in areas where Acquisition-related activities are proposed. SEA determined whether the population in such areas met the following environmental justice thresholds: (1) greater than 50 percent of the population is minority or low-income, or (2) the minority or low-income population percentage is 10 percent greater than the minority or low-income population percentage in the county.

Next, SEA ascertained whether this population fell within an area of potential effect. SEA defined a typical zone on either side of a rail line segment or proposed construction site, or bordering a railroad intermodal facility or rail yard, as an area of potential effect. In general, the extent of an area of potential effect may vary depending on the nature of the changes in rail activity associated with it, but such areas typically extend 400 to 1500 feet out from the rail line segment or facility being analyzed.

SEA then evaluated these areas of potential effect for proposed Acquisition-related activities that would meet or exceed the Board's thresholds for environmental analysis. In this analysis, SEA evaluated potential impacts on safety, transportation, air quality, noise, cultural resources, hazardous waste sites, hazardous materials transport, natural resources, and land use/socioeconomic effects. SEA also visited the sites of proposed construction for new rail line connections, rail line segments, intermodal facilities, and rail yards.

SEA developed and executed expanded public outreach efforts for those jurisdictions that met both SEA's thresholds for environmental justice and the Board's thresholds for environmental significance. SEA designed the public outreach process to seek widespread notice and dissemination of SEA's environmental impact analysis; provide additional opportunities for community input to the NEPA process; solicit information about cumulative effects in minority and low-income communities; and allow minority and low-income communities to assist in fashioning appropriate alternatives and mitigation measures. SEA is placing additional copies of the Draft EIS in jurisdictions with high proportions of minority and low-income populations that do not have significant environmental impacts which could result from the proposed Acquisition.

Information related to the Native-American lands identified in the state of New York is formed in the Land Use Section of Chapter 5. This section presents the results of those evaluations and analysis. A complete list of all the sites analyzed for environmental justice impacts is presented in Appendix K.

5-NY.17.1 New York Environmental Justice Setting

New constructions and rail yards and intermodal facilities with proposed changes in New York did not meet either the minority or low-income population thresholds for further environmental justice analysis

Rail Line Segments

Table 5-NY-19 presents the existing minority and low-income composition of the area of potential effect surrounding the three rail line segments with proposed changes that meet the environmental justice population thresholds.

5-NY.17.2 Summary of Potential Effects and Preliminary Recommended Mitigation

Table 5-NY-20 summarizes the rail line segment that met either the minority or low-income population thresholds, and for which, based on currently available information and after reviewing the findings of each of the resource analyses (noise, air quality, transportation, etc.), SEA identified the following significant potential environmental effects. Sites and rail line segments that did not meet either of these criteria are not discussed further in this section. Public Outreach efforts are described below for those sites or rail line segments for which significance thresholds have been exceeded. Mitigation strategies for New York are described at the end of this section.

Table 5-NY-19
New York Environmental Jusitice Summary for Rail Line Segments

Area of Potential Effect	Total Population	Total Minority Percentage	Total Low-Income Percentage	Population of Concern	
				Minority Population	Low Income Population
Chemung, Ontario, Schuyler, Seneca, Steuben, Yates Counties	364,539	4.3%	10.9%	NA	
Corning - Geneva (N-060)	1,794	10.6%	24.7%	No	Yes
Erie County	968,532	15.1%	12.2%	NA	
Buffalo - CP Sycamore (C-050)	2,109	23.8%	37.1%	No	Yes
CP Sycamore - Black Rock (C-052)	6,683	43.8%	25.6%	Yes	Yes

Table 5-NY-20
New York Potential Environmental Justice Impacts Summary

Location (Area of Potential Effect)	Resource Impacts							
	Noise	Air Quality	Hazardous Materials Transport	Hazardous Materials	Natural Resources	Transportation/ Safety	Land Use	Cultural Resources
Rail Line Segments								
Corning - Geneva (N-060)	Y*	NA	N	N	NA	N	NA	NA

Y*= Impact that does not meet Board thresholds for Significance
Y = Impact that meets Board thresholds for Significance
N = No impact
NA = Not applicable/No Environmental Analysis performed according to Scope

Impact Analysis - Rail Line Segments

Corning - Geneva. Based on currently available information, SEA has identified potential noise effects along this NS rail line segment, which runs north/south from Corning, New York, to Geneva along Seneca Lake, through the communities of Dresden and Canandaigua. Up to 252 noise receptors could be affected by the proposed increase in train traffic from 0.2 to 1.6 trains per day.

Populations along this rail line segment that exceed the environmental justice thresholds are primarily located within Ontario and Steuben counties. The total low-income population percentage within the area of potential effect is more than ten percent greater than the total low-income population percentage within all of the counties traversed by the rail line segment. Based on the potential noise effects identified and the characteristics of the population affected, the proposed increase in activity along this rail line segment may result in a potential environmental justice effect. In accordance with the Executive Order on Environmental Justice, SEA is conducting additional studies to determine if Environmental Justice population are impacted by noise.

Mitigation

SEA is currently developing additional mitigation strategies in coordination with the local communities surrounding the rail line segment and will report on these strategies in the Final EIS. As SEA continues to perform public outreach and additional site-specific noise analysis, SEA will determine the extent and nature of the potential environmental justice impacts. If an environmental justice impact exists, SEA will determine if mitigation would be practicable. This coordination with the local communities as part of the on-going public outreach process will be reported in the Final EIS.

5-NY.18 NEW YORK CUMULATIVE EFFECTS

Within the State of New York, the Applicants propose the following activities that meet or exceed the Board's thresholds for environmental analysis: increased traffic on 12 rail line segments, increased traffic at 1 rail yard, and 2 proposed construction projects. Table 5-NY-21 addresses other potential actions brought to SEA's attention that, when combined with the proposed Acquisition, could contribute to a cumulative impact. SEA was made aware of these activities through site visits and public comment. Local agencies provided the information below to SEA within the schedule specified in the scope for review and analysis.

Cumulative Effects Findings

The presence of the West Shore Major Investment Study (MIS) and the Haverstraw initiatives may indicate a potential cumulative effect related to the proposed Acquisition. SEA has determined that there is evidence of a potential cumulative effect associated with the Rockland County issue. SEA has also determined that the desired access improvement to the east side of the Hudson River would facilitate freight transport for lower New England.

Table 5-NY-21
Information Provided to SEA About Other Activities or Projects

Action-Type	Site	Information from Site Visit or Public Comment	Relationship to Proposed Acquisition
Rail Line Segment	Dunkirk (NY)	Trying to acquire old Conrail Depot. City has plan to renovate for Amtrak Service.	Related.
Rail Line Segment	County of Rockland (NY)	NJ Transit West Shore MIS underway. Revitalization efforts are underway to consolidate rail corridors through the downtown and riverside of Village of Haverstraw.	Related.
Rail Line Segment	New York City (NY)	The City and the State of Connecticut desire a tunnelled access to the East Side at Hudson River and Long Island Sound to improve rail freight mobility.	Related.

As discussed in Chapter 6, "Agency Coordination and Public Outreach," SEA conducted extensive scoping and data collection for this Draft EIS. At this point in its investigation, SEA is unaware of any other activities that would require a cumulative effects analysis. Therefore, based on its independent analysis and all information available to date, SEA has made a

preliminary conclusion that there would be no other significant cumulative effects associated with the proposed Acquisition in the State of New York.

Cumulative Effects Mitigation Measures

SEA has encouraged the Applicants to meet with the agency responsible for the MIS and with the local jurisdiction to determine if they would be adversely affected by the proposed Acquisition. Elsewhere, no mitigation measures are necessary, due to a lack of cumulative effects.

5-NY.19 NEW YORK AREAS OF CONCERN

This Draft EIS examines system-wide and site-specific issues. An important part of SEA's analysis of the proposed Acquisition is the evaluation and consideration of environmental comments. The following table provides a list of agencies and local governments that have submitted environmental comments for the State of New York. A complete list of entities that have submitted environmental comments to SEA on or before October 31, 1997 is provided in Appendix O of this document.

Table 5-NY-22
Agencies in New York Submitting Environmental Comments

Entity	Nature of Comment(s)
Capital District Transportation Commission	Commuter operations, air, and safety
Department of Transportation	Commuter operations, safety, at-grade crossing delay, and air
Department of Coastal Resources & Waterfront Revitalization	Land use, environmental justice, and general environmental concerns
Dunkirk, City of	Traffic congestion and emergency response
Empire State Passengers Association	Commuter operations
Metro-North Railroad	Commuter operations
New York, State of	Commuter operations
Orange County	At-grade crossing safety, traffic congestion, and commuter operations
Rockland, County of	Commuter operations, hazardous materials, noise, and air
Rutgers University - School of Law	Land use, air, and environmental justice
South Western Regional Planning Agency	Traffic congestion, energy, air, noise, and environmental justice

Table 5-NY-22
Agencies in New York Submitting Environmental Comments

Entity	Nature of Comment(s)
Tri-State Campaign	Air

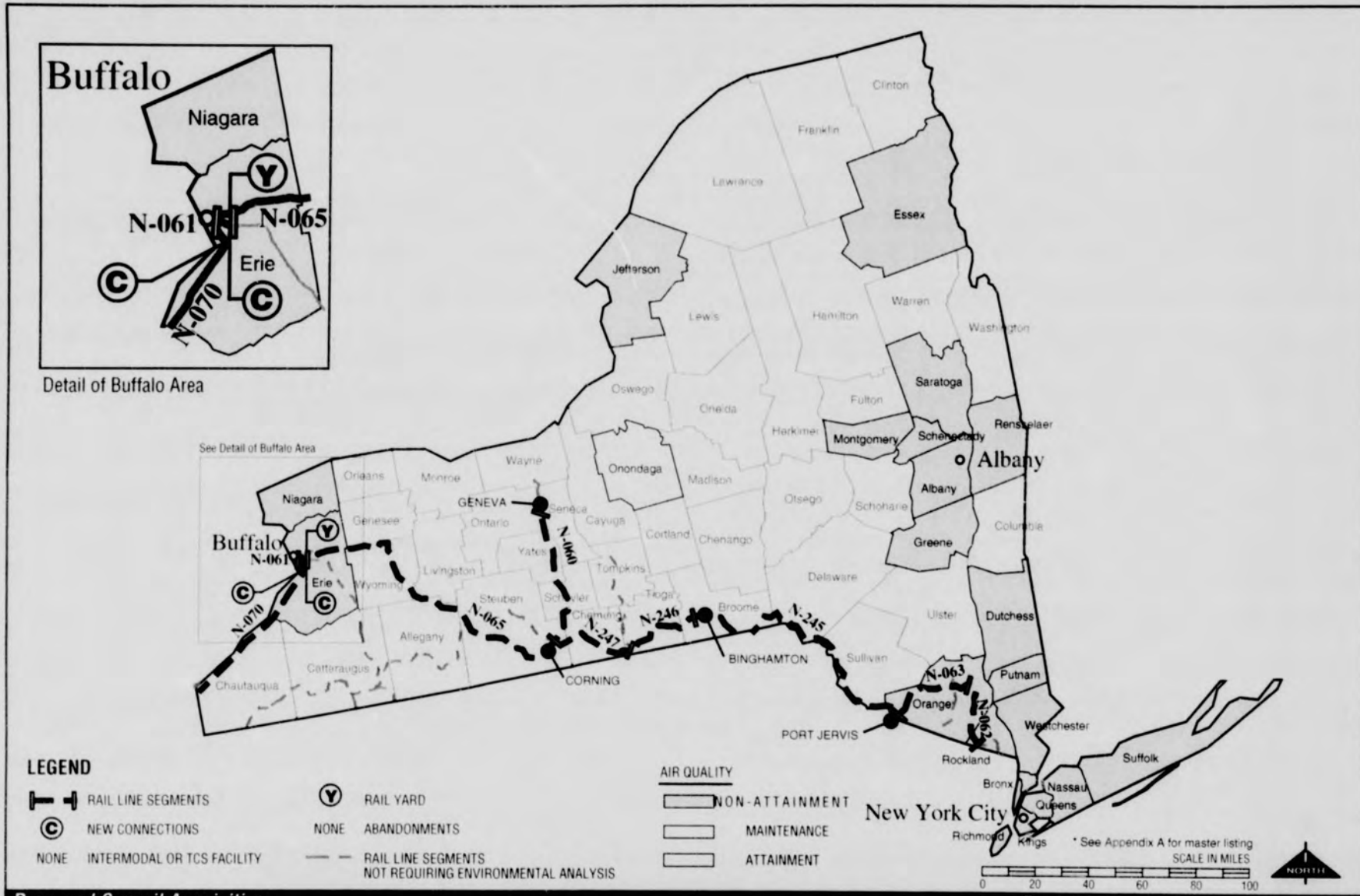
SEA appreciates these comments and considers all comments in its environmental analysis and the development of potential system-wide and/or site-specific mitigation. For issue areas that do not meet the Board's environmental analysis thresholds or are not Acquisition-related, SEA has not conducted detailed analysis. SEA encourages parties to submit site-specific, Acquisition-related comments. SEA will review all comments submitted during the 45-day comment period on this Draft EIS in the preparation of the Final EIS.

Proposed Conrail Acquisition *Draft Environmental Impact Statement*

FIGURE 5-NY-1a

RAIL LINE SEGMENTS, NEW CONNECTIONS, INTERMODAL FACILITIES, RAIL YARDS AND ABANDONMENTS REQUIRING ENVIRONMENTAL ANALYSIS

NEW YORK - CSX

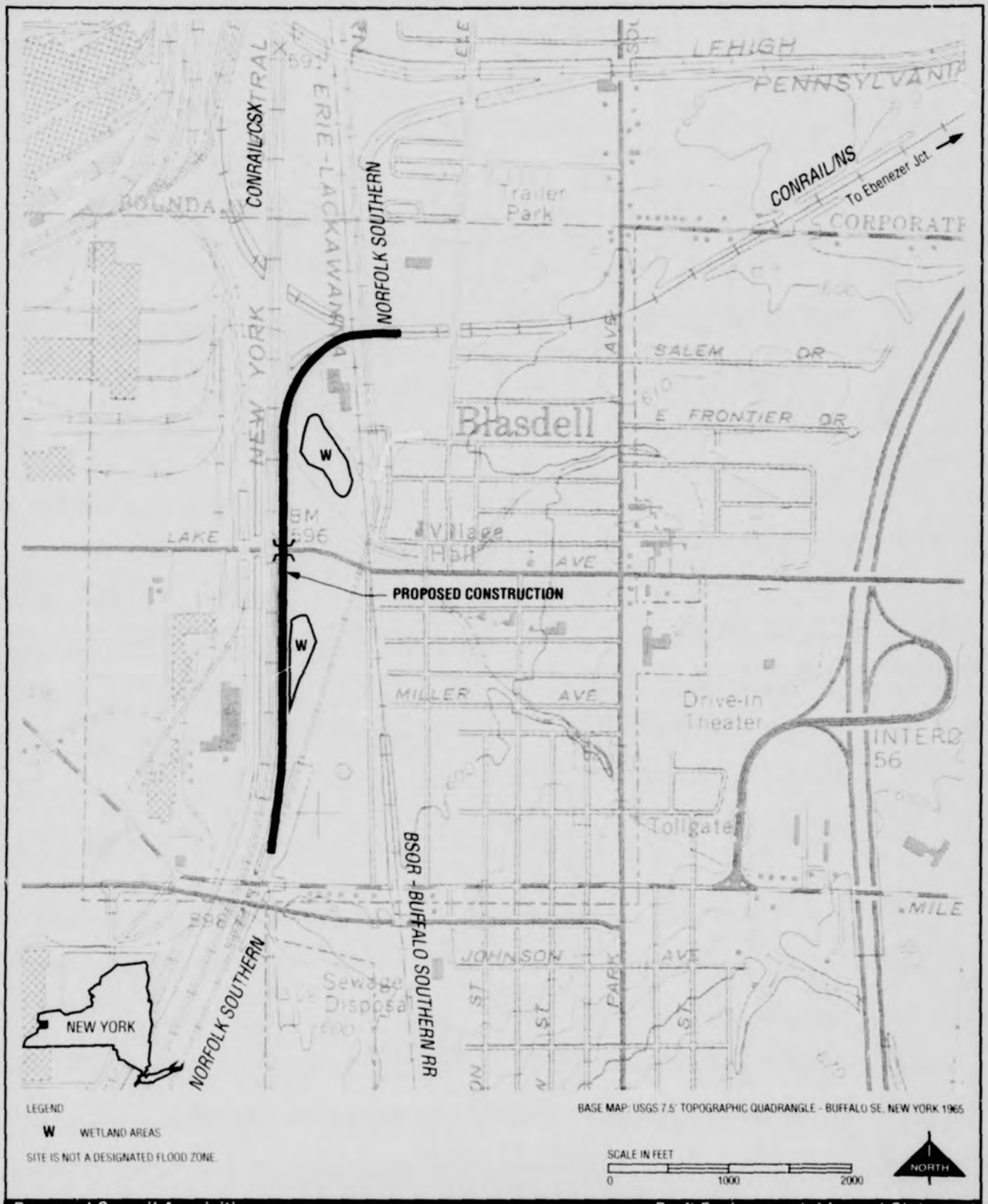


Proposed Conrail Acquisition *Draft Environmental Impact Statement*

FIGURE 5-NY-1b

RAIL LINE SEGMENTS, NEW CONNECTIONS, INTERMODAL FACILITIES, RAIL YARDS AND ABANDONMENTS REQUIRING ENVIRONMENTAL ANALYSIS

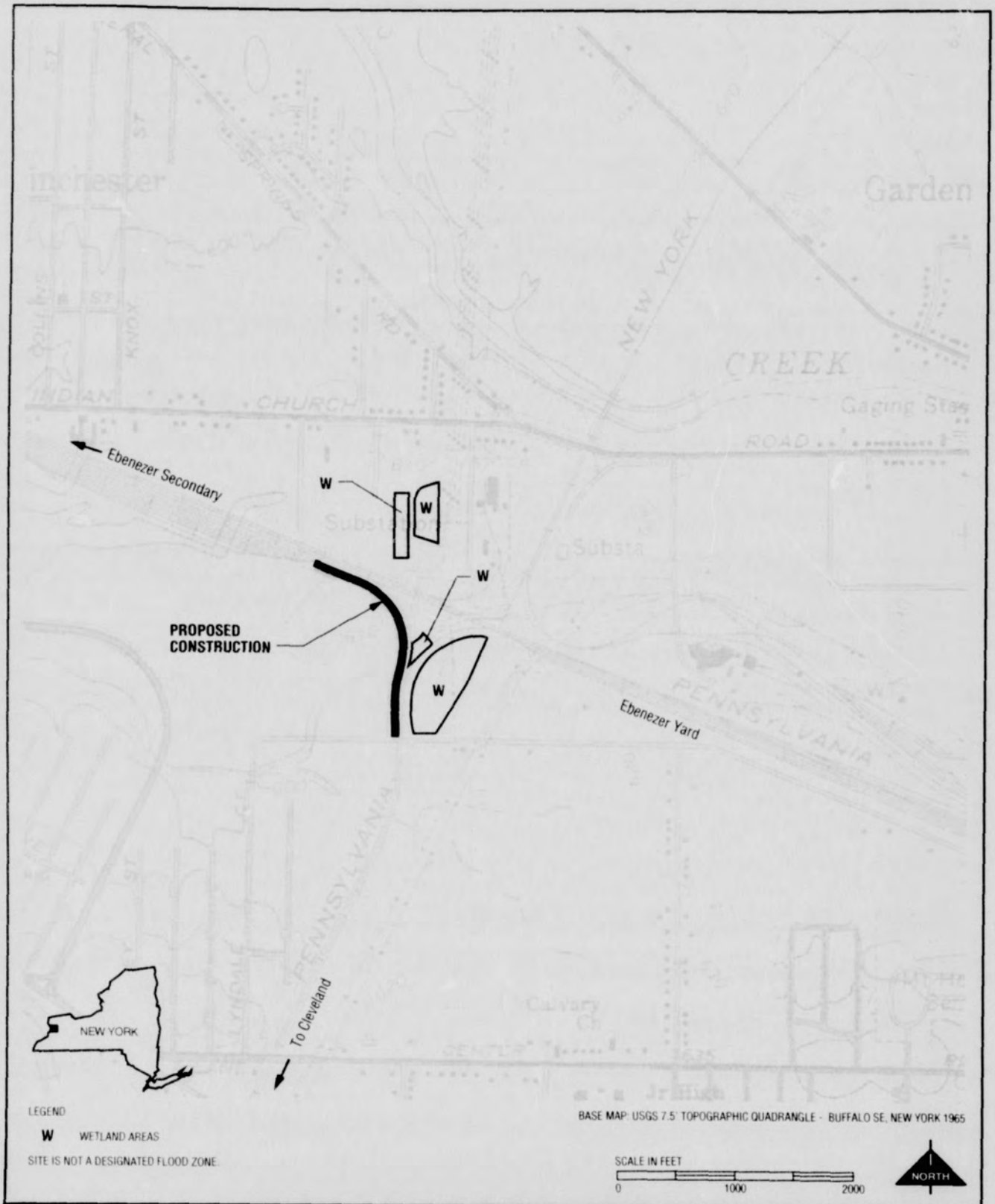
NEW YORK - NORFOLK SOUTHERN



Proposed Conrail Acquisition *Draft Environmental Impact Statement*

FIGURE 5-NY-2

BLASDELL, ERIE COUNTY, NEW YORK
NORFOLK SOUTHERN



Proposed Conrail Acquisition *Draft Environmental Impact Statement*

FIGURE 5-NY-3

GARDENVILLE JUNCTION, BUFFALO, ERIE COUNTY, NEW YORK
NORFOLK SOUTHERN

Table 5-NY-6
New York
Highway/Rail At-Grade Crossing Accident Frequency

County	Railroad Segment	FRA ID	Street Name	Present Safety Device	ADT	Number of Roadway Lanes	Maximum Speed	Total Accidents 1991-1995	Freight Trains		Accidents Per Year			
									Pre-Acquisition	Post Acquisition	Pre-Acquisition	Post Acquisition	Change	Post Acquisition With Mitigation
CHAUTAUQUA	N-070	471743Y	ALLEGHENY ROAD	Gate	1,575	2	60	0	13.0	25.1	0.0194	0.0251	0.0057	
CHAUTAUQUA	N-070	471744F	HANFORD	Gate	644	2	60	0	13.0	25.1	0.0155	0.0202	0.0047	
CHAUTAUQUA	N-070	471750J	CENTER RD/ E SHERIDAN RD	Gate	431	2	60	0	13.0	25.1	0.0139	0.0182	0.0043	
CHAUTAUQUA	N-070	471755T	NEWELL ROAD	Gate	2,000	2	60	0	13.0	25.1	0.0206	0.0266	0.0060	
CHAUTAUQUA	N-070	471756A	WERLE ROAD	Gate	169	2	60	0	13.0	25.1	0.0108	0.0143	0.0035	
CHAUTAUQUA	N-070	471757G	MIDDLE ROAD	Gate	1,765	2	60	0	13.0	25.1	0.0200	0.0258	0.0058	
CHAUTAUQUA	N-070	471758N	ROBERT ROAD	Gate	4,757	2	40	0	13.0	25.1	0.0255	0.0324	0.0070	
CHAUTAUQUA	N-070	471759V	TOWNSEND STREET	Gate	294	2	40	0	13.0	25.1	0.0126	0.0165	0.0040	
CHAUTAUQUA	N-070	471760P	NEVINS STREET	Gate	338	2	40	1	13.0	25.1	0.0503	0.0577	0.0074	
CHAUTAUQUA	N-070	471761W	HOYT STREET	Gate	192	2	40	0	13.0	25.1	0.0112	0.0148	0.0036	
CHAUTAUQUA	N-070	471762D	LORD STREET	Gate	290	2	40	0	13.0	25.1	0.0125	0.0165	0.0040	
CHAUTAUQUA	N-070	471763K	FRANKLIN STREET	Gate	1,572	2	40	0	13.0	25.1	0.0194	0.0251	0.0057	
CHAUTAUQUA	N-070	471764S	LINCOLN STREET	Gate	793	2	40	0	13.0	25.1	0.0163	0.0213	0.0049	
CHAUTAUQUA	N-070	471765Y	KING STREET	Gate	695	2	40	0	13.0	25.1	0.0158	0.0206	0.0048	
CHAUTAUQUA	N-070	471766F	LAMPHERE STREET	Gate	9,300	2	40	0	13.0	25.1	0.0298	0.0375	0.0077	
CHAUTAUQUA	N-070	471767M	MAIN STREET	Gate	2,778	2	40	0	13.0	25.1	0.0224	0.0287	0.0063	
CHAUTAUQUA	N-070	471772J	TEMPLE ROAD	Gate	416	2	60	0	13.0	25.1	0.0138	0.0181	0.0043	
CHAUTAUQUA	N-070	471774X	VAN BUREN ROAD	Gate	509	2	60	0	13.0	25.1	0.0145	0.0190	0.0045	
CHAUTAUQUA	N-070	471775E	BERRY RD	Gate	589	2	60	0	13.0	25.1	0.0151	0.0197	0.0046	
CHAUTAUQUA	N-070	471776L	LAKE ROAD	Gate	212	2	60	0	13.0	25.1	0.0115	0.0152	0.0037	
CHAUTAUQUA	N-070	471778A	MARTIN ROAD	Gate	57	2	60	0	13.0	25.1	0.0080	0.0107	0.0027	
CHAUTAUQUA	N-070	471782P	CENTRAL AVENUE	Gate	509	2	40	0	13.0	25.1	0.0145	0.0190	0.0045	
CHAUTAUQUA	N-070	471783W	MATHEWS ROAD	Gate	197	2	60	0	13.0	25.1	0.0113	0.0149	0.0036	
CHAUTAUQUA	N-070	471784D	PECOR STREET	Gate	339	2	60	1	13.0	25.1	0.0503	0.0577	0.0074	
CHAUTAUQUA	N-070	471785K	ONTHANK ROAD	Passive	134	1	60	0	13.0	25.1	0.0311	0.0412	0.0100	
CHAUTAUQUA	N-070	471786S	WALKER ROAD	Gate	259	2	60	0	13.0	25.1	0.0121	0.0160	0.0039	
CHAUTAUQUA	N-070	471788F	EAST FOREST ROAD	Passive	49	1	60	0	13.0	25.1	0.0134	0.0185	0.0051	
CHAUTAUQUA	N-070	471791N	PRATT ROAD	Gate	268	2	60	0	13.0	25.1	0.0123	0.0161	0.0039	
CHAUTAUQUA	N-070	471794J	MCKINLEY ROAD	Gate	655	2	60	0	13.0	25.1	0.0155	0.0203	0.0048	
CHAUTAUQUA	N-070	471796X	EAST PEARL STREET	Gate	425	2	60	0	13.0	25.1	0.0139	0.0182	0.0043	
CHAUTAUQUA	N-070	471797E	WEST PEARL STREET	Gate	240	2	60	0	13.0	25.1	0.0119	0.0157	0.0038	
CHAUTAUQUA	N-070	471799T	FRANKLIN STREET	Flasher	250	2	50	0	13.0	25.1	0.0185	0.0247	0.0062	
CHAUTAUQUA	N-070	471802Y	NORTH GALE STREET	Gate	750	1	60	0	13.0	25.1	0.0142	0.0186	0.0044	
CHAUTAUQUA	N-070	471803F	WALKER ROAD	Gate	117	2	60	0	13.0	25.1	0.0098	0.0130	0.0032	
CHAUTAUQUA	N-070	471804M	LIGHT ROAD	Passive	36	2	60	0	13.0	25.1	0.0367	0.0479	0.0112	
CHAUTAUQUA	N-070	471805U	ROGERVILLE ROAD	Gate	97	2	60	0	13.0	25.1	0.0093	0.0124	0.0030	
CHAUTAUQUA	N-070	471814T	CEMETARY RD	Gate	250	2	60	0	13.0	25.1	0.0120	0.0159	0.0038	
CHAUTAUQUA	N-070	471815A	KLONDYKE ROAD	Flasher	88	2	60	0	13.0	25.1	0.0126	0.0172	0.0045	

Table 5-NY-6
New York
Highway/Rail At-Grade Crossing Accident Frequency

County	Railroad Segment	FRA ID	Street Name	Present Safety Device	ADT	Number of Roadway Lanes	Maximum Speed	Total Accidents 1991-1995	Freight Trains		Accidents Per Year			
									Pre-Acquisition	Post Acquisition	Pre-Acquisition	Post Acquisition	Change	Post Acquisition With Mitigation
CHAUTAUQUA	N-070	471818V	SO. BROCKWAY ROAD	Gate	304	2	60	0	13.0	25.1	0.0127	0.0167	0.0040	
CHAUTAUQUA	N-070	471821D	SHAVER STREET	Gate	361	2	60	1	13.0	25.1	0.0507	0.0582	0.0075	
CHAUTAUQUA	N-070	471822K	STATE STREET	Gate	520	2	60	0	13.0	25.1	0.0146	0.0191	0.0045	
CHAUTAUQUA	N-070	471823S	GOODRICK STREET	Flasher	328	2	60	1	13.0	25.1	0.0644	0.0765	0.0121	
CHAUTAUQUA	N-070	471824Y	MAPLE AVENUE	Flasher	378	2	60	0	13.0	25.1	0.0214	0.0284	0.0070	
CHAUTAUQUA	N-070	471825F	LOOMIS STREET	Passive	154	2	60	1	13.0	25.1	0.0960	0.1156	0.0196	0.0112
CHAUTAUQUA	N-070	471853J	PHILLIPS ROAD	Gate	82	2	60	0	13.0	25.1	0.0089	0.0118	0.0029	
CHAUTAUQUA	N-070	471858T	STATION ROAD	Flasher	231	2	60	1	13.0	25.1	0.0601	0.0711	0.0109	
ERIE	N-061	519388C	MEYER RD.	Passive	36	1	10	0	0.0	11.4	0.0005	0.0155	0.0150	
ERIE	N-061	519511Y	WILLETT ROAD	Flasher	269	2	10	0	0.0	11.4	0.0003	0.0193	0.0190	
ERIE	N-070	471711T	LAKE AVENUE	Gate	7,363	2	60	1	13.0	25.1	0.0777	0.0911	0.0135	
ERIE	N-070	471713G	BAYVIEW ROAD	Gate	1,023	2	60	0	13.0	25.1	0.0174	0.0226	0.0052	
ERIE	N-070	471716C	ROGERS ROAD	Gate	3,398	2	60	1	13.0	25.1	0.0692	0.0810	0.0118	
ERIE	N-070	471717J	CLOVERBANK ROAD	Gate	1,791	2	60	0	13.0	25.1	0.0201	0.0259	0.0058	
ERIE	N-070	471719X	PLEASANT AVENUE	Gate	1,193	2	60	0	13.0	25.1	0.0181	0.0235	0.0054	
ERIE	N-070	471721Y	LAKE VIEW ROAD	Gate	3,265	2	60	0	13.0	25.1	0.0233	0.0298	0.0065	
ERIE	N-070	471722F	NORTH CREEK ROAD	Gate	648	2	60	0	13.0	25.1	0.0155	0.0202	0.0047	
ERIE	N-070	471726H	STURGEON PT. RD.	Gate	3,000	2	60	0	13.0	25.1	0.0228	0.0292	0.0064	
ERIE	N-070	471727P	BURNS ROAD	Gate	750	2	60	0	13.0	25.1	0.0161	0.0210	0.0049	
ERIE	N-070	471728W	EVAN CTR EDEN RD	Gate	3,283	2	60	0	13.0	25.1	0.0233	0.0298	0.0065	
ERIE	N-070	471729D	GOWANS ROAD	Gate	406	2	60	0	13.0	25.1	0.0137	0.0180	0.0043	
ERIE	N-070	471733T	CAIN ROAD	Gate	358	2	60	0	13.0	25.1	0.0132	0.0174	0.0042	
ERIE	N-070	471739J	ERIE ROAD	Flasher	750	2	60	0	13.0	25.1	0.0270	0.0352	0.0082	

Table 5-NY-9
New York
Highway/Rail At-Grade Crossing Vehicle Delay and Queues

County	Seg. No.	Crossing FRA ID	Roadway Name	Number of Roadway Lanes	ADT	*Pre Acquisition*								*Post Acquisition*								
						Trains per day	Train Speed (mph)	Train Length (feet)	No. of Veh. Delayed per day	Max. No. of Veh. in Queue per lane	Crossing Delay per stopped veh (min./veh)	Avg. Delay per Vehicle (All vehicles) (sec/veh)	Level of Service	Trains per day	Train Speed (mph)	Train Length (feet)	No. of Veh. Delayed per day	Max. No. of Veh. in Queue per lane	Crossing Delay per stopped veh (min./veh)	Avg. Delay per Vehicle (All vehicles) (sec/veh)	Level of Service	Level of Service with Mitigation
Albany	C-054	508705Y	COOKS CROSSING	2	7,450	38.7	40	5,600	419	16	2.51	16.93	C	45.2	40	6,200	529	17	2.72	23.13	C	
Chautauqua	N-070	471766F	LAMPHERE ST.	2	9,300	13.0	35	4,869	175	19	2.63	5.93	B	25.2	35	5,000	346	20	2.69	11.97	B	
Erie	C-051	520057S	SHELDON AVE.	2	5,808	40.6	50	5,600	290	10	2.04	12.23	B	45.9	50	6,200	353	11	2.20	16.03	C	
Erie	N-070	471711T	LAKE AVE.	2	7,363	13.0	50	4,869	107	12	1.93	3.35	A	25.2	50	5,000	211	12	1.96	6.74	B	

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5-NC
NORTH CAROLINA

This section provides background information for resources in North Carolina. Tables list the proposed Conrail Acquisition-relatedactivities in North Carolina that meet or exceed the Board's thresholds for environmental analysis. This section presents the various technical analyses conducted for these activities in North Carolina. The analyses highlight the potential environmental impacts and proposed mitigation actions that SEA recommends as part of the Draft EIS study.

5-NC.1 NORTH CAROLINA SETTING

North Carolina is located on the Atlantic Coast of the southern United States. Principal products of North Carolina include textiles, tobacco, furniture, electrical equipment, chickens, hogs, turkeys, stone, phosphate, and lithium. The railroad network throughout the state provides a means of transporting and distributing many of these goods and of importing other products into the state.

Transportation Facilities

Major interstate highways in North Carolina are I-95, a major north/south route for the eastern United States; I-85, a north/south facility; I-40, an east/west facility; and I-77, a north/south facility. Cities served by these interstates include Fayetteville, Greensboro, Charlotte, Durham and Raleigh. The two major seaports serving the state are Port of Wilmington and Port of Morehead City.

Railroad Facilities

Twenty-seven railroads operate in North Carolina, covering a total of 3,295 route miles. There are two Class I Railroads, CSX and NS, that operate in the state. Of the 3,295 route miles:

- CSX operates 1,145 route miles in North Carolina, which is 35 percent of the state's total rail miles.

- NS operates 1,460 route miles in North Carolina, which is 44 percent of the state's total rail miles.

Cities in North Carolina served by these railroads include Charlotte, Raleigh, Rocky Mount, and Wilmington.

CSX operates facilities in several locations, including Hamlet, Rocky Mount, Fayetteville, Greenville, and Raleigh. In addition, CSX operates an intermodal facility in Charlotte and Wilmington and serves the Port of Wilmington. NS operates intermodal facilities in Charlotte and Greensboro, and serves the Port of Morehead City. NS also has other facilities in Linwood, Winston-Salem, Greensboro, Raleigh, Morehead City, and Charlotte.

Intercity Passenger and Commuter Rail Services

Amtrak operates three daily passenger service routes in North Carolina. Six passenger trains between New York and Florida serve Rocky Mount, Fayetteville, Wilson, Selma, Raleigh, Southern Pines, and Hamlet, utilizing primarily CSX tracks. Amtrak's Southern Crescent between New York City and New Orleans, Louisiana, serves Greensboro, High Point, Salisbury, Charlotte, and Gastonia, utilizing NS tracks. The Amtrak Carolinian/Piedmont route connects the CSX and NS routes serving, in addition, Cary, Durham, and Burlington via Raleigh. No commuter service is operated in North Carolina.

5-NC.2 PROPOSED CONRAIL ACQUISITION ACTIVITIES IN NORTH CAROLINA

In the Operating Plans submitted to the Board, the Applicants indicate that no CSX or NS rail yards or intermodal facilities in North Carolina would experience increased traffic or activity that would meet or exceed the Board's thresholds for environmental analysis and that there are no new connections or proposed abandonments. CSX and NS anticipate that, due to predicted truck-to-rail diversions, North Carolina would experience a benefit in the areas of emissions, noise, and safety.

Table 5-NC-1 shows the single rail line segment in North Carolina that met the Board's thresholds for environmental analysis. Figure 5-NC-1, presented at the end of this state discussion, shows the general location of the Applicants' facilities in North Carolina, including those rail line segments SEA studied for additional analysis.

5-NC.3 SUMMARY OF ANALYSIS

Based on the nature of the proposed Conrail Acquisition-related activities in North Carolina that met the Board's thresholds for environmental analysis and the scope for the Draft EIS, SEA determined that a site-specific analysis did not apply for the following technical areas:

- Transportation (Passenger Rail Service; Highway/Rail At-Grade Crossing Delay; Roadway Effects from Rail Facility Modifications).

Table 5-NC-1
North Carolina Rail Line Segments Which Meet or Exceed Board Environmental Thresholds

Site ID	From	To	Description	Length in Miles	County	Setting
C-103[a]	S. Richmond, VA	Weldon, NC	CSX Northend Mainline	1	Halifax	Commercial/ Residential
				8	Northampton	Residential

[a] This segment passes through a nonattainment area in Richmond but does not pass through any nonattainment areas in North Carolina; therefore, SEA did not analyze air quality in North Carolina.

C = CSX

- Energy.
- Air Quality.
- Noise.
- Cultural Resources.
- Hazardous Waste Sites.
- Natural Resources.
- Land Use/Socioeconomics.
- Environmental Justice.

Details of the environmental analysis for North Carolina follow.

5-NC.4 NORTH CAROLINA SAFETY: PASSENGER RAIL OPERATIONS

In North Carolina, passenger trains share certain tracks with freight trains. SEA evaluated the potential for increased accidents between freight trains and passenger trains, for both intercity and commuter trains. Because changes in the frequency of rail accidents are directly related to changes in overall train activity, SEA's analysis concentrated on rail line segments carrying both passenger and freight trains that would experience an increase in freight train traffic of one or more trains per day.

In Chapter 4, "System-Wide and Regional Setting, Impacts and Proposed Mitigation," SEA addresses the issue of potential increased risk to passenger train operations associated with the proposed Conrail Acquisition. System-wide, SEA identified 197 freight rail line segments that also carry passenger trains. Of these, SEA analyzed 93 rail line segments that would experience an increase of one or more freight trains per day resulting from the proposed Acquisition. Six of these rail line segments are located in North Carolina; these rail line segments are part of the Amtrak Florida passenger train routes.

The Federal Railroad Administration (FRA) requires reports from railroads concerning all train accidents resulting in personal injury or causing property damage greater than $6,300 (1996 FRA reporting threshold). FRA requires the same reporting for passenger train accidents. A nationwide average of fewer than 200 passenger train accidents per year (for both Amtrak intercity and urban area commuter trains) has occurred over the last three years. Most of these accidents were relatively minor and rarely involved any fatalities, but because the safety of passengers as well as property is frequently involved, their occurrence is of serious concern.

Given the limited number of passenger rail accidents, SEA was unable to accurately predict the severity, location, or timing of actual accidents. SEA therefore focused on estimating the potential risks of an accident. In this safety analysis, SEA used increased freight activity on rail line segments to estimate the changes in passenger train accident risks. To assess significance, SEA first determined whether the proposed Acquisition-related change in the projected accident rate was greater than an annual increase of 25 percent. SEA then determined if the predicted accident frequency was less than one accident in 150 years. Thus, SEA determined a potential impact to be significant if the projected annual increase in accidents was greater than 25 percent and the frequency was less than one accident in 150 years.

5-NC.4.1 Summary of Potential Effects and Preliminary Recommended Mitigation

The pre-Acquisition accident interval for each rail line segment is shown in Table 5-NC-2. Accidents pose potential threats to passengers on the train; therefore, for each rail line segment, risk is expressed as the expected interval between events over the length of the rail line segment. Table 5-NC-2 shows the expected change in years between accidents for the individual rail line segments.

SEA determined that the increase on two rail line segments, Weldon to Rocky Mount and South Richmond, Virginia, to Weldon, exceed SEA's criteria for significance. For these rail line segments, SEA anticipates that potential conflicts could be minimized by reinforcing passenger trains' priority over freight trains. It is SEA's preliminary recommendation that all freight trains, both opposing and moving in the same direction as passenger trains, be clear of the main track at least 15 minutes prior to the estimated arrival of the passenger train. This allows the passenger train to pass safely and without delay.

Table 5-NC-2
Estimated Change in Years Between Accidents for Passenger Rail Operations

Site ID	From	To	Miles in State	Pre-Acquisition Accident Interval	Post-Acquisition Accident Interval[a]
C-336	Contentnea Jct.	Selma	22	183	159
C-339	Pembroke	Dillon, SC	16	372	339
C-335	Rocky Mt.	Contentnea Jct.	19	855	758
C-337	Selma	Fayetteville	49	123	116[b]
C-103	S. Richmond, VA	Weldon	9	49	39
C-334	Weldon	Rocky Mt.	37	101	78

[a] Accident Intervals shows years between accidents.
[b] Did not exceed accident percentage threshold.

5-NC.5 NORTH CAROLINA SAFETY: RAIL TRANSPORT OF HAZARDOUS MATERIALS

The primary concern with the rail transportation of hazardous materials is a spill or accidental release resulting from a train accident. SEA analyzed all rail line segments where the number of car loads containing hazardous materials would increase as a result of the proposed Acquisition. This resulted in SEA evaluating rail line segments that were below the Board's thresholds for environmental analysis.

The Association of American Railroads (AAR), in conjunction with the Chemical Manufacturer's Association (CMA), developed standards and practices to manage the risk of a hazardous material spill which the railroads have adopted. The practices include identifying "key routes" as those rail lines that handle in excess of 10,000 car loads of hazardous material each year. Key trains are trains with at least five car loads of poison inhalation hazard (PIH) material, or 20 car loads of other hazardous material. Key trains are restricted to 50 miles per hour maximum authorized speed and normally operate on Class 2 track or better. The AAR key route practices include special train handling procedures and extra inspection and special actions whenever wayside detectors indicate potential concerns. The standards and practices for key routes are shown in AAR Circular No. OT-55-B. A copy of this Circular is included in Attachment 10 of Appendix B, "Safety."

5-NC.5.1 Rail Line Segment Analysis

As a result of the proposed Conrail Acquisition, the railroads would change the routing of many car loads of hazardous material. The designation of key routes would change as the railroads

shift hazardous material traffic from one rail line to another. In addition, certain rail line segments that are currently key routes would carry increased volumes of cars containing hazardous material.

SEA applied two different criteria to determine whether the effects of rerouting hazardous material car loads are potentially significant:

1. The volume of hazardous materials transported on a rail line would be 10,000 or more car loads per year. The Acquisition-relatedchange in the volume of hazardous material car loads would upgrade a rail line segment to a key route designation.

2. The volume of hazardous material car loads would double, and exceed 20,000 or more car loads per year.

Rail line segments that meet the first criterion are considered "key routes" and warrant the base level mitigation. Rail line segments that meet the second criterion are termed "major key routes" by SEA and warrant expanded mitigation. Depending on the individual circumstances, a rail line segment could meet both criteria and therefore warrant both the base level and the expanded mitigation.

5-NC.5.2 Summary of Potential Effects and Preliminary Recommended Mitigation

Potential Effects. Based on the information provided by the Applicants and SEA's independent analysis, SEA determined that six rail line segments in North Carolina carrying increased amounts of hazardous material are of potential concern. Table 5-NC-3 shows these rail line segments, indicates the estimated annual car loads of hazardous material, both pre- and post-Acquisition, and identifies the key route status of each. SEA determined that four rail line segments currently carry less than 10,000 car loads of hazardous material per year but would increase to at least 10,000 car loads per year due to the proposed Acquisition. Two routes would at least double the volume of hazardous material transported, resulting in 20,000 or more car loads per year.

Preliminary Mitigation Recommendation. SEA recommends requiring CSX and NS to bring the rail line segments into compliance with AAR key route standards and practices for those segments that would become a new key route.

For the two segments in Table 5-NC-3 identified as major key routes, where the volume of hazardous material car loads would at least double and exceed 20,000 car loads, SEA recommends that CSX develop a Hazardous Materials Emergency Response Plan to contain and minimize the potential effects of any accidents or incidents. SEA will further recommend that CSX conduct hazardous materials accident simulations with the voluntary participation of emergency service providers along the rail line segments at least once every two years.

Table 5-NC-3
Rail Line Segments with Significant Increases in Annual Hazardous Material Car Loads

Site ID	Between	And	Miles in State	Estimated Annual Car Loads		Significance Thresholds	
				Pre-Acquisition	Post-Acquisition	New Key Route	Major Key Routes
C-339	Pewbroke, NC	Dillon, SC	16	7,000	11,000	X	
C-350	Hamlet, NC	Monroe, NC	53	26,000	60,000		X
C-351	Monroe, NC	Clinton, SC	19	14,000	49,000		X
C-357	Hamlet, NC	McBee, SC	1	4,000	12,000	X	
N-360	Salisbury, NC	Asheville, NC	142	7,000	10,000	X	
N-361	Asheville, NC	Leadvale, TN	34	8,000	11,000	X	

Participants in these plans include county and municipal government, local fire departments, and medical and other emergency response teams.Participants in these plans include county and municipal government, local fire departments, and medical and other emergency response teams.

5-NC.6 NORTH CAROLINA TRANSPORTATION: PASSENGER RAIL SERVICE

In North Carolina, passenger trains share certain tracks with freight trains. SEA evaluated potential Acquisition-relatedeffects on the ability of rail line segments to accommodate existing passenger rail service, both intercity and commuter rail, and reasonably foreseeable new or expanded passenger service. SEA identified those rail line segments that carry both freight and passenger trains and would experience an increase of one or more freight trains per day.

Amtrak

Amtrak currently operates three daily passenger service routes in North Carolina. Rocky Mount, Fayetteville, Wilson, Selma, Raleigh, Southern Pines, and Hamlet are served on the Amtrak route between New York City, New York, and Miami, Florida. Amtrak uses CSX rail lines in North Carolina for this route. Amtrak's Southern Crescent between New York City, New York and New Orleans, Louisiana, serves Greensboro, High Point, Salisbury, Charlotte and Gastonia areas on NS lines. The Amtrak Carolinian/Piedmont route connects the CSX and NS routes serving Cary, Durham and Burlinton via Raleigh. Section 4.7.1, "Intercity Passenger Rail Service," presents additional information regarding intercity passenger rail service effects in North Carolina.

Commuter Rail

No commuter rail service exists in North Carolina.

Future Service Under Study

The State of North Carolina is planning both intercity and commuter rail service in the Raleigh, Durham and Greensboro corridor. Plans include commuter service in the Durham to Raleigh corridor and high-speed service for the Raleigh, Durham and Greensboro corridor. The former Seaboard Air Line Railroad alignment is planned to be used for the high-speed service north of Raleigh. Much of this alignment has been abandoned or is only used for local freight service.

SEA determined that the future plans for commuter or intercity passenger rail service between Raleigh, Durham and Greensboro would not be affected by this transaction, given the general level of existing freight trains and the proposed decrease of 0.5 freight trains per day.

5-NC.6.1 Summary of Potential Effects and Preliminary Recommended Mitigation

Because there is no commuter rail service in North Carolina, SEA has determined there will be no adverse effects and no mitigation is required.

5-NC.7 NORTH CAROLINA CUMULATIVE EFFECTS

Within the State of North Carolina, the Applicants propose to increase traffic on one rail line segment to a level that meets or exceeds the Board's thresholds for environmental analysis.

Cumulative Effects Findings

As discussed in Chapter 6, "Agency Coordination and Public Outreach," SEA conducted extensive scoping and data collection for this Draft EIS. At this point in its investigation, SEA is unaware of any other activities that would require a cumulative effects analysis. Therefore, based on its independent analysis and all information available to date, SEA has made a preliminary conclusion that there would be no significant cumulative effects associated with the proposed Acquisition in the State of North Carolina.

Cumulative Effects Mitigation Measures

Due to a lack of cumulative effects, no mitigation measures are necessary.

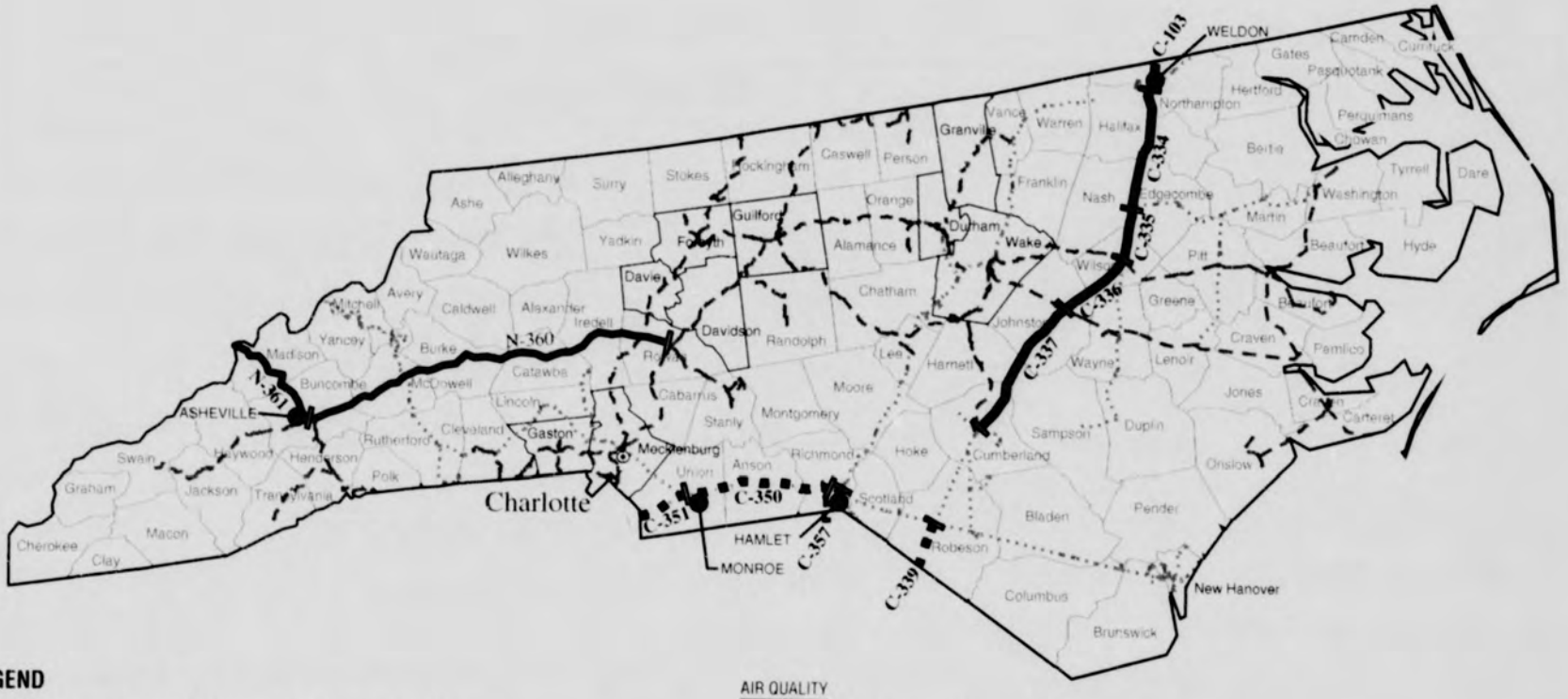
5-NC.8 NORTH CAROLINA AREAS OF CONCERN

This Draft EIS examines system-wide and site-specific issues. An important part of SEA's analysis of the proposed Acquisition is the evaluation and consideration of environmental comments. Table 5-NC-4 lists agencies and local governments that have submitted environmental comments for the State of North Carolina. A complete list of entities that submitted environmental comments to SEA on or before October 31, 1997 is provided in Appendix O of this document.

Table 5-NC-4
Agencies in North Carolina Submitting Environmental Comments

Entity	Nature of Comment(s)
Department of Cultural Resources	Cultural resources
Mitchell County	At-grade crossing safety, rail accidents, and hazardous materials
State Representative C.F. Buchanan	Hazardous materials and rail operations
Warren County Board of Commissioners	Safety

SEA appreciates these comments and considers all comments in its environmental analysis and the development of potential system-wide and/or site-specific mitigation. For issue areas that do not meet the Board's environmental analysis thresholds or are not Acquisition-related, SEA has not conducted detailed analysis. SEA encourages parties to submit site-specific, Acquisition-related comments. SEA will review all comments submitted during the 45-day comment period on this Draft EIS in the preparation of the Final EIS.



LEGEND

RAIL LINE SEGMENTS (CSX)	NONE	ABANDONMENTS	
RAIL LINE SEGMENTS (NS)	.....	RAIL LINE SEGMENTS NOT REQUIRING ENVIRONMENTAL ANALYSIS (CSX)	
NEW CONNECTIONS	– – –	RAIL LINE SEGMENTS NOT REQUIRING ENVIRONMENTAL ANALYSIS (NORFOLK SOUTHERN)	
INTERMODAL OR TCS FACILITY			
RAIL YARD			

AIR QUALITY

NONE	NON-ATTAINMENT
	MAINTENANCE
	ATTAINMENT

* See Appendix A for master listing

SCALE IN MILES

0 20 40 60 80 100

NORTH

Proposed Conrail Acquisition — *Draft Environmental Impact Statement*

FIGURE 5-NC-1

RAIL LINE SEGMENTS, NEW CONNECTIONS, INTERMODAL FACILITIES, RAIL YARDS AND ABANDONMENTS REQUIRING ENVIRONMENTAL ANALYSIS

NORTH CAROLINA - CSX AND NORFOLK SOUTHERN

5-OH
OHIO

This section provides background information for resources in Ohio. Tables list the proposed Conrail Acquisition-related activities in Ohio that meet or exceed the Board's thresholds for environmental analysis. Figures show general locations and surrounding areas of proposed Acquisition-related activities, and are presented at the end of this state discussion. This section also presents the various technical analyzes conducted for these conducted for these activities in Ohio. The analyses highlight the potential environmental impacts and proposed mitigation actions that SEA recommends as part of the Draft EIS study.

5-OH.1 OHIO SETTING

Ohio is a state located in the mid-west. Principal products of Ohio include transportation equipment, fabricated metal products, machinery, corn, soybeans, hay, winter wheat, dairy products, hogs, sheep, poultry, coal, natural gas, petroleum, stone, clay, and salt. The transportation network enables the movement of many of these goods throughout the country.

Transportation Facilities

Major interstate highways in Ohio are I-75, a north/south route; I-70, an east/west route; I-71, a north/south route; I-77, a north/south route; and I-90/80, an east/west route. These interstates serve major cities such as Dayton, Toledo, Columbus, Cincinnati, Cleveland, and Akron. Ports in Ohio include Ashtabula, Cleveland, Conneaut, Huron, Cincinnati, Lorain, Liverpool, and Toledo.

Railroad Facilities

Ohio has 33 railroads that operate in the state, covering a total of 5,117 route miles. Four Class I railroads operate in Ohio, three of which are Conrail, CSX, and NS. Grand Trunk Western Railroad, Inc. is the fourth Class I railroad in Ohio.

All three railroads serve major cities such as Cincinnati, Columbus, Cleveland, and Toledo. Of the 5,117 route miles:

- Conrail operates 1,700 route miles in Ohio, which is 33 percent of the state's total rail miles.
- CSX operates 1,464 route miles in Ohio, which is 29 percent of the state's total rail miles.
- NS operates 901 route miles in Ohio, which is 18 percent of the state's total rail miles.

Conrail intermodal terminals, for the rail-truck transfer of highway trailer and marine container intermodal shipments, are located in Cleveland, Cincinnati, Columbus, Marysville, and Toledo. Major Conrail yards are: Collinwood and Rockport, in Cleveland; Buckeye Yard, Columbus; and Stanley Yard in Toledo. A CSX intermodal terminal is located in Cincinnati. Queensgate Yard in Cincinnati is the major CSX yard. Other yards are located at Akron, Cleveland, Columbus, Dayton, Hamilton, Lima, Toledo, Willard, and Youngstown. CSX and Conrail also serves the Port of Toledo. NS operates intermodal terminals in Cleveland, Columbus, and Cincinnati. A major NS rail yard is in Bellevue, as well as in Cincinnati and Columbus.

Intercity Passenger and Commuter Rail Services

Amtrak operates four routes in Ohio: the Lakeshore Limited daily on Conrail's Chicago Line, the Capitol Limited daily on Conrail's Chicago and Cleveland Lines, the Three Rivers daily on CSX's east-west (former B&O) route, and the tri-weekly Cardinal. The Lakeshore Limited serves Cleveland, Elyria, Sandusky, Toledo, and Byran, Ohio. The Capitol Limited serves the above cities, in addition to Alliance, Ohio. The Three Rivers serves Youngstown and Fostoria, Ohio. The tri-weekly Cardinal serves Cincinnati and Hamilton, Ohio.

There are no commuter train operations in Ohio.

5-OH.2 PROPOSED CONRAIL ACQUISITION ACTIVITIES IN OHIO

In the Operating Plans submitted to the Board, the Applicants indicate that the expanded CSX and NS systems would strengthen rail service and maintain competition in Ohio.

Tables 5-OH-1 through 5-OH-5 show rail line segments, intermodal facilities, rail yards, new constructions, and proposed abandonments in Ohio. Figures 5-OH-1a and 1b show the general location of these facilities, and appear at the end of the state discussion. Following these tables are brief descriptions of the activities, where appropriate.

CSX plans major route upgrades in northern Ohio that would create a new high-capacity freight corridor between Chicago and the East Coast. CSX's Willard Yard is to become a key terminal in the expanded CSX system, while Cleveland and Cincinnati would be regional hubs for auto and intermodal traffic.

CSX would operate eight route combinations serving Ohio, including the northeast Gateway Service Route linking Cleveland to Chicago, Boston and New York; and the Memphis Gateway Service Route linking Memphis and eastern points via Cincinnati and Canton. CSX would provide two high-capacity rail lines running through Ohio between the east and midwest. The new system design also would alleviate rail congestion in the Cincinnati area.

Under the proposed Conrail Acquisition agreement, CSX would gain direct access to vehicle assembly plants at East Liberty and Marysville. Collinwood Yard in Cleveland also would be a major Midwestern rail hub for intermodal freight.

CSX proposes to construct three new rail line connections, expand one existing intermodal facility (Collinwood Yard) and construct one fueling facility at Willard. The three rail line connections in Greenwich, Crestline and Sidney, were covered in separate Environmental Assessments. The Ohio constructions are shown in Table 5-OH-4.

NS would operate at least seven route combinations in Ohio, including the Conrail lines between Cleveland and Chicago, Toledo and Detroit, Cleveland and Pittsburgh, and the Toledo - Bellevue - Columbus - Cincinnati route. NS would offer automotive service through Bellevue Yard and would extend its east-west routes with a new connection near Vermilion, located west of Cleveland.

NS plans to expand the Toledo, Cincinnati, and Columbus intermodal facilities. Through intermodal capacity improvements and routing efficiencies resulting from the proposed Conrail Acquisition, NS predicts truck-to-rail diversions will occur which would have a favorable impact upon highway congestion and air quality conditions.

NS proposes to construct three new rail line connections, Columbus, Oak Harbor, and Vermilion, which are considered in this Draft EIS as new facilities. The Bucyrus rail line connection was covered in a separate Environmental Assessment. These Ohio constructions are shown in Table 5-OH-4.

NS proposes to abandon 7.5 miles of rail line through Toledo and the 0.2-mile pivot bridge over the Maumee River in Toledo. The proposed abandonments would eliminate 18 highway/rail at-grade crossings.

Both CSX and NS plan to undertake extensive activities in Ohio as part of the proposed Conrail Acquisition. The proposed Conrail Acquisition-related activities that meet or exceed the Board's thresholds for environmental analysis in Ohio include increased train operations on a total of 36 rail line segments.

Table 5-OH-1
Ohio Rail Line Segments Which Meet or Exceed Board Environmental Thresholds

Site ID	From	To	Description	Length in Miles	County	General Setting
C-040	Carleton, MI	Toledo, OH	CSX Toledo to Saginaw	2	Lucas	Rural with sporadic development
C-060	Ashtabula, OH	Quaker, OH	Conrail Chicago Line	12	Ashtabula	Rural/Residential
				7	Cuyahoga	Rural/Residential
				28	Lake	Urban/Recreational
C-061	Berea, OH	Greenwich, OH	Conrail Indianapolis to Cleveland	3	Cuyahoga	Rural/Residential
				12	Huron	Rural
				27	Lorain	Urban
C-062	Bucyrus, OH	Adams, IN	Conrail Ft. Wayne Line Cleveland to Ft. Wayne & Chicago	26	Allen	Rural
				7	Crawford	Rural
				20	Hardin	Rural
				26	Van Wert	Rural
				20	Wyandot	Rural
C-063	Cincinnati, OH	Hamilton, OH	CSX Cincinnati Terminal Subdivision	5	Butler	Urban/Suburban
				16	Hamilton	Urban/Suburban
C-064	Crestline, OH	Bucyrus, OH	Conrail Cleveland to Ft. Wayne & Chicago	12	Crawford	Rural
C-065	Deshler, OH	Toledo, OH	CSX Toledo to Cincinnati	6	Henry	Rural
				30	Wood	Rural with sporadic development
C-066	Deshler, OH	Willow Creek, IN	CSX Willard/Garrett Subdivision	29	Defiance	Rural with sporadic development
				16	Henry	Rural

Table 5-OH-1
Ohio Rail Line Segments Which Meet or Exceed Board Environmental Thresholds

Site ID	From	To	Description	Length in Miles	County	General Setting
C-067	Greenwich, OH	Crestline	Conrail Indianapolis to Cleveland	2	Crawford	Rural with sporadic development
				4	Huron	Rural with sporadic development
				15	Richland	Rural with sporadic development
C-068	Greenwich, OH	Willard, OH	CSX New Castle Subdivision	12	Huron	Rural with sporadic development
C-069	Marcy, OH	Short, OH	Conrail Short Line	9	Cuyahoga	Urban
C-070	Marion, OH	Fostoria, OH	CSX Toledo to Columbus	8	Marion	Rural with sporadic development
				1	Hancock	Rural with sporadic development
				10	Delaware	Rural with sporadic development
				5	Seneca	Rural with sporadic development
				5	Franklin	Rural with sporadic development
				9	Wyandot	Rural
				2	Wood	Rural
C-071	Marion, OH	Ridgeway, OH	Conrail Crest Line to Indianapolis & St. Louis	9	Hardin	Rural
				14	Marion	Urban/Rural
C-072	Mayfield, OH	Marcy, OH	Conrail Short Line	3	Cuyahoga	Urban
C-073	Quaker, OH	Mayfield, OH	Conrail Short Line	6	Cuyahoga	Urban
C-074	Short, OH	Berea, OH	Conrail Short Line	4	Cuyahoga	Urban

Table 5-OH-1
Ohio Rail Line Segments Which Meet or Exceed Board Environmental Thresholds

Site ID	From	To	Description	Length in Miles	County	General Setting
C-075	Willard, OH	Fostoria, OH	CSX Willard Subdivision	6	Huron	Rural with sporadic development
				31	Seneca	Rural with sporadic development
C-081	New Castle, PA	Youngstown, OH	CSX Pittsburgh Subdivision	8	Mahoning	Urban/Industrial
N-070	Ashtabula, OH	Buffalo, NY	NS Cleveland to Buffalo	15	Ashtabula	Suburban/Rural
N-071	Bellevue, OH	Bucyrus, OH	NS Sandusky District	13	Crawford	Rural/Agriculture
				1	Huron	Rural/Agriculture
				19	Seneca	Rural/Agriculture
				1	Sandusky	Rural/Agriculture
N-072	Bellevue, OH	Vermilion, OH	NS Cleveland District	24	Erie	Urban/Suburban
				2	Huron	Rural/Agriculture
N-073	Bucyrus, OH	Fairgrounds Col, OH	NS Sandusky District	8	Crawford	Rural/Agriculture
				23	Delaware	Suburban/Rural
				9	Franklin	Suburban/Rural
				21	Marion	Urban/Rural
N-074	Cleveland, OH	Shortline Jct, OH	Conrail Flats Industrial Track	7	Cuyahoga	Urban/Industry
N-075	Cleveland, OH	Ashtabula, OH	NS Cleveland to Buffalo	11	Ashtabula	Urban/Suburban
				13	Cuyahoga	Urban/Industry
				26	Lake	Suburban/Industry
N-076	Ivorydale, OH	Cincinnati, OH	Conrail Cincinnati Line	6	Hamilton	Urban/Industry
N-077	Oak Harbor, OH	Miami, OH	NS Toledo Line	2	Lucas	Urban
				14	Ottawa	Rural

Table 5-OH-1
Ohio Rail Line Segments Which Meet or Exceed Board Environmental Thresholds

Site ID	From	To	Description	Length in Miles	County	General Setting
N-077	Oak Harbor, OH	Miami, OH	NS Toledo Line	6	Wood	Rural
N-078	Dayton, OH	Ivorydale, OH	NS Cleveland District	19	Butler	Urban/Industry
				9	Hamilton	Urban/Industry
				16	Montgomery	Urban/Industry
				4	Warren	Urban/Suburban
N-079	Oak Harbor, OH	Bellevue, OH	NS Buffalo to Chicago Line	1	Huron	Rural/Agriculture/ Recreation
				4	Ottawa	Rural/Agriculture/ Recreation
				22	Sandusky	Rural/Agriculture/ Recreation
N-080	Vermilion, OH	Cleveland, OH	NS Buffalo to Chicago Line	13	Cuyahoga	Urban/Industry
				3	Erie	Suburban/Industry/ Recreation
				21	Lorain	Suburban/Industry/ Recreation
N-081	White, OH	Cleveland, OH	Conrail Cleveland Line	11	Cuyahoga	Urban/Industry
N-082	Youngstown, OH	Ashtabula, OH	Conrail Youngstown Line	29	Ashtabula	Urban/Suburban
				4	Mahoning	Urban
				26	Trumbull	Rural with sporadic development
N-084	Alliance, OH	White, OH	Conrail Alliance to Cleveland	7	Cuyahoga	Urban/Suburban
				22	Portage	
				5	Stark	Industry/Residential
				12	Summit	

Table 5-OH-1
Ohio Rail Line Segments Which Meet or Exceed Board Environmental Thresholds

Site ID	From	To	Description	Length in Miles	County	General Setting
N-085	Bellevue, OH	Sandusky Docks, OH	NS Local Line	14	Erie	Industry/Urban
				1	Huron	
N-086	Miami, OH	Airline, OH	Conrail Local Line	2	Lucas	Industry/Residential
N-095	Rochester, PA	Youngstown, OH	Conrail	9	Mahoning	Urban/Residential

C = CSX
N = NS

Intermodal Facilities

There is one intermodal facility in Ohio which meets or exceeds Board thresholds for environmental analysis.

Discovery Park Intermodal Facility (Franklin County, OH) (NS). The NS intermodal facility is located in southeastern Columbus. (See Figure 5-OH-2, presented at the end of this state discussion.) The main gate for truck entry and exit movements is located on Watkins Road. Two major highways serve the facility: Interstate 270 and State Route 104. The primary route trucks use to and from Interstate 270 includes New World Drive and Alum Creek Road to Watkins Road. The primary route trucks use to and from State Route 104 is Groveport Road to Watkins Road. The facility currently handles approximately 131 trucks per day. Under the proposed Conrail Acquisition, this would increase by 53 to 184 trucks per day.

Table 5-OH-2
Ohio Intermodal Facilities Which Meet or Exceed Board Environmental Thresholds

Site ID	Location	County	Facility	Description	Setting
NM-11[a]	Bellevue	Erie, Huron	Bellevue	Increase of 65 trucks/day	Urban Industrial area within existing rail yard
NM-12	Columbus	Franklin	Discovery Park	Increase of 53 trucks/day	Urban Industrial area

[a] NS had planned to move its TCS facility from Crestline, OH, to Bellevue, OH. In October 1997, NS notified SEA that this intermodal facility would be moved to Sandusky, OH (Erie County) rather than Bellevue. SEA is analyzing the environment effects of this revised relocation plan and will document all impacts in the Final EIS.

Rail Yards

There are four rail yards in Ohio that meet or exceed Board thresholds for environmental analysis.

Stanley Rail Yard (Wood County, OH) (CSX). Stanley Yard is located in Toledo, Wood County, Ohio at 28531 East Broadway Street near the intersection of Walbridge Road and East Broadway Street.

Conneaut Rail Yard (Ashtabula County, OH) (NS). Conneaut Yard is located in Conneaut, Ashtabula County, Ohio near the intersection of Chestnut Street and Madison Street.

Homestead Rail Yard (Lucas County, OH) (NS). Homestead Yard is located in Toledo, Lucas County, Ohio at 3830 Corduroy Road.

Airline Junction Rail Yard (Lucas County, OH) (NS). Airline Junction Yard is located in south-central Toledo, Lucas County, Ohio at 2107 Hill Avenue. NS currently uses this facility for local service only.

Table 5-OH-3
Ohio Rail Yards Which Meet or Exceed Board Environmental Thresholds

Site ID	Location	County	Facility	Description	General Setting
CY-004	Toledo	Wood	Stanley	Increase of 406 rail cars/days	Industrial/Residential
NY-006	Conneaut	Ashtabula	Conneaut	Increase of 44 rail cars/day	Commercial/Residential
NY-007	Toledo	Lucas	Homestead	Increase of 143 rail cars/day	Urban/Industrial
NY-008	Toledo	Lucas	Airline Jct.	Increase of 520 rail cars/day (from 0)	Urban/Industrial/ Residential

Constructions

Construction: Columbus Connection (Franklin County, OH) (NS). The proposed Columbus connection would be located in north-central Columbus, Franklin County, Ohio, and would create connecting tracks that would provide efficient movement between Bellevue and Buckeye Yard. NS would construct the new connection between the western NS track, used for southbound traffic, and the north/south Conrail track. This connection also crosses a Conrail siding. The new connection would require approximately 1,400 feet of new rail line. (See Figure 5-OH-3 at the end of this state discussion.)

One option would be to construct an alternative connection that would connect the parallel north/south NS and Conrail lines. This alternative connection would be approximately 760 feet long, with approximate start at Park Overlook Drive and end at Proprietor's Road. NS did not consider this alternative reasonable as it would require the relocation of several electric transmission poles; SEA concurs. The no-action alternative would not meet the purpose or need of the proposed action. Therefore, NS did not consider it to be a reasonable alternative ; SEA concurs.

Construction: Oak Harbor Connection (Ottawa County, OH) (NS). The proposed Oak Harbor connection would be located in Ottawa County, 35 miles southeast of Toledo, Ohio and would create a connecting track between NS and Conrail to provide efficient access from the Detroit area to the NS Bellevue Yard. NS would construct a connection between existing Conrail and NS tracks, located outside of Oak Harbor. The design includes a highway/rail at-grade crossing of Toussaint Portage Road and approximately 5,000 feet of new rail line construction, requiring the acquisition of no more than 11.5 acres of new right-of-way. (See Figure 5-OH-4 at the end of this state discussion.)

CSX did not identify other build alternatives for the proposed construction as reasonable because of site condition. Any other alternative expansion would require demolition of structures and/or relocation of existing highways or streets. The no-action alternative would not meet the purpose or need of the proposed action. Therefore, CSX did not considered it to be a reasonable alternative; SEA concurs.

Construction: Willard Fueling Facility (Huron County, OH) (CSX). CSX's existing Willard Yard is located in the City of Willard, Huron County, OH, approximately 60 miles southwest of Cleveland. CSX proposes construction of a new fueling facility adjacent to Willard Yard to service increased train traffic that would be utilizing Willard Yard following the Conrail Acquisition. The new facility would service trains passing through the Willard Yard to points east and west of Willard, and CSX would construct it west of the Willard Yard. CSX selected this location because it is favorably located between a diamond crossing to the west and the yard lead tracks of CSX's Willard Yard to the east. It will require the acquisition of 10 acres of additional land.(See Figure 5-OH-7a and 7b at the end of this state discussion.)

An alternative location would be to the west of the proposed site. This location would require construction of an additional diamond crossing with associated signaling, which would block north-south NS train traffic while CSX trains are refueling and therefore the railroad did not consider it a reasonable alternative; SEA concurs. Another alternative would be to locate the facility to the east of CSX's Willard Yard. This alternative location would require relocation of existing crossovers between the #1 main track and the #2 main track to the east and would also require shortening of the existing lead tracks to the yard. For these reasons, CSX did not consider this alternative as reasonable; SEA concurs. The no action alternative would not meet the purpose or need of the proposed action. Therefore, CSX did not consider it to be a reasonable alternative; SEA concurs.

Table 5-OH-4
Ohio Constructions

Site ID	Location	County	Length in feet	Description	General Setting
CC-06	Greenwich[a]	Huron	4600 1044	Two connection tracks between Conrail and CSX connecting east bound Chicago to Akron and Cleveland	Rural/Agriculture
CC-07	Crestline[a]	Crawford	1507	Connects two Conrail tracks between Ft. Wayne and Cleveland	Residential/Commercial/ Industrial
CC-08	Sidney[a]	Shelby	3263	Connects Conrail and CSX tracks for northbound trains to proceed east to Columbus	Residential/Commercial

Table 5-OH-4
Ohio Constructions

Site ID	Location	County	Length in feet	Description	General Setting
NC-11	Bucyrus[a]	Crawford	2400	Connects between NS and Conrail for a new route from Columbus to Pittsburgh	Urban/Residential/ Commercial
NC-12	Columbus	Franklin	1400	Connects tracks between the western NS track and north/south Conrail track	Urban/Industrial
NC-13	Oak Harbor	Ottawa	5000	Connects tracks for access from Detroit area to Bellevue Yard	Agricultural
NC-14	Vermilion	Erie	5400	Connects tracks between NS and Conrail	Agricultural
CR-03	Collinwood, Cleveland	Cuyahoga	N/A	Related action for Collinwood Yard converted to new intermodal facility requiring 23 acres of land.	Commercial/Industrial
CR-04	Willard	Huron	N/A	Related action for construction of fueling facility	Rural/Agricultural

[a] By a Decision (Sub Nos. 1-7) issued November 25, 1997, the Board Approved, subject to certain environmental conditions, construction of those connections. Operations, however, have not been approved.

Abandonments

NS proposes two abandonments in Ohio for a total length of 7.7 miles. One of these is the Toledo Pivot Bridge; the other is the segment NA-03, Toledo to Maumee, known as the Toledo back belt. NS would remove track and salvage materials including rails, ties and ballast.

The U.S. Coast Guard requires the removal of an abandoned bridge. NS would dismantle the structure and remove it in accordance with Coast Guard regulations.

Table 5-OH-5
Ohio Proposed Abandonments

Site ID	Location	County	Facility Type	Size	Description	General Setting
NA-03	Toledo to Maumee	Lucas	Segment	7.5 miles	Approximately two trains/day to Toledo	Urban/Industrial/ Suburban
NA-04	Toledo Pivot Bridge	Lucas	Bridge	0.2 mile	NS access across Maumee River	Urban/Industrial/ Recreational

5-OH.3 OHIO SUMMARY OF ANALYSIS

Based on the nature of the proposed Conrail Acquisition-related activities in Ohio that meet the Board's thresholds for environmental analysis and the scope for the Draft EIS, SEA determined that a site-specific analysis did not apply for the following technical areas:

- Energy.

Details of the environmental analysis for Ohio follow.

5-OH.4 OHIO SAFETY: FREIGHT RAIL OPERATIONS

SEA conducted a statistical analysis to evaluate the potential change in safety on all rail line segments where the proposed Conrail Acquisition would result in eight or more additional freight trains per day. SEA identified 27 rail line segments within Ohio that would experience this level of increased activity. While increased freight train activity would increase the probability of a freight train accident, SEA did not consider an increase significant unless the predicted accident rate shortened the duration between accidents to one every 100 years or less per mile. Table 5-OH-6 presents results of the analysis, showing the approximate mileage of each rail line segment within the state.

Table 5-OH-6
Estimated Change in Years Between Accidents - Freight Rail Operations

Site ID	Between	And	Miles in State	Increase in Trains per Day	Pre-Acquisition Accident Interval[a]	Post-Acquisition Accident Interval[a]
C-040	Carleton, MI	Toledo, OH	2	11.2	207	133
C-061	Berea	Greenwich	42	39.7	301	94
C-062	Bucyrus	Adams, IN	99	8.0	769	333
C-064	Crestline	Bucyrus	12	8.0	697	319
C-065	Deshler	Toledo	36	13.6	8,084	321
C-066	Deshler	Willow Creek, IN	45	26.3	211	107
C-067	Greenwich	Crestline	21	16.8	301	165
C-068	Greenwich	Willard	12	22.7	160	93
C-069	Marcy	Short	9	29.4	310	114
C-070	Marion	Fostoria	40	9.6	256	162
C-071	Marion	Ridgeway	23	15.7	270	139
C-072	Mayfield	Marcy	3	40.4	1344	101
C-073	Quaker	Mayfield	6	37.0	666	101
C-074	Short	Berea	4	33.9	380	110
C-075	Willard	Fostoria	37	21.5	160	95
N-070	Ashtabula	Buffalo, NY	15	12.1	349	175
N-071	Bellevue	Bucyrus	34	8.5	170	126
N-072	Bellevue	Vermilion	26	11.4	290	163
N-073	Bucyrus	Fairgrounds	61	8.3	170	127
N-075	Cleveland	Ashtabula	50	23.6	349	118
N-077	Oak Harbor	Miami	22	13.5	101	82
N-079	Oak Harbor	Bellevue	27	19.5	597	161
N-080	Vermilion	Cleveland	37	20.6	336	127
N-081	White	Cleveland	11	17.2	407	174
N-082	Youngstown	Ashtabula	59	12.1	383	188
N-085	Bellevue	Sandusky Dock	15	10.3	3290	393
N-086	Miami	Airline	2	8.6	88	78

[a] Accident Interval figures show the years/mile.

The Federal Railroad Administration (FRA) requires all railroads to submit reports for all train accidents resulting in personal injury or causing property damage greater than $6,300 (1996 FRA reporting threshold). Train accidents meeting this reporting requirement are relatively infrequent. The FRA reported about 2,600 accidents (3.69 accidents per million train miles[1]) nationally in 1996. Most of these accidents were relatively minor; almost 90 percent of these accidents caused less than $100,000 in damage. In addition, most of the train accidents did not affect people or non-railroad property.

Accident risk predictions are best expressed by describing the elapsed time expected between any two consecutive events. The current national average is that a main line freight train accident occurs once every 117 years on each mile of route. FRA records, as described in Chapter 4, "System-Wide and Regional Setting Impacts," show a substantial decrease, both in total number of accidents and in accidents per million train miles, a standard industry measure. Because there are few accidents, and most of these accidents are relatively minor, it is not possible for SEA to accurately predict either the frequency or severity of actual accidents.

SEA estimated the change in the risk of an accident resulting from the increased activity on rail line segments as a result of the proposed Conrail Acquisition. Because SEA analyzed rail line segments that vary in length from one mile to more than 100 miles, and because freight train accidents typically have little impact on surrounding areas, SEA expressed all predicted risks of accidents on a route-mile basis. Section 3.2 "Safety: Freight Rail Operations," discusses the analysis process in greater detail.

5-OH.4.1 Summary of Potential Effects and Preliminary Recommended Mitigation

The rail line segments between Berea and Greenwich; Greenwich and Willard; Willard and Fostoria; Oak Harbor and Miami; and Miami and Airline meet SEA's criteria for significance. SEA notes that the three rail line segments between Berea and Greenwich; Greenwich and Willard; and Willard and Fostoria are part of the extensive capital improvements that CSX is currently completing. These improvements include double tracking, an improved signal system, and increased wayside defect detectors. CSX is completing these improvements in anticipation of the proposed Conrail Acquisition. SEA also notes that the remaining two rail line segments between Oak Harbor and Miami, and Miami and Airline are already double track and equipped with a modern train control signal system and wayside defect detectors. SEA considered site specific mitigation measures to reduce the risk of freight train accidents for these rail line segments.

[1] "Train miles" are calculated by multiplying the number of trains by the distance traveled. For example, on a typical 100 mile rail line, one million annual train miles results from operating 28 trains per day every day for 365 days.

One mitigation measure to reduce risk would be to increase the frequency of inspections of the rail line segments for internal rail flaws. This would be accomplished by basing the inspection intervals on train densities as measured by million-gross-ton-miles rather than on an annual inspection. This approach is consistent with the proposed FRA rule (49 CFR, Part 213.237 - Docket No. RST-90-1). In addition, the Applicants would provide annual training for track inspectors who are responsible for the particular rail line segments.

A second recommended mitigation measure would be to ensure that all rail equipment traveling the rail line segments is inspected by knowledgeable mechanical inspectors. This would be accomplished by providing annual training for the mechanical inspectors at the originating yards and initial terminal for trains traversing the rail line segments.

5-OH.5 OHIO SAFETY: PASSENGER RAIL OPERATIONS

In Ohio, passenger trains share certain tracks with freight trains. SEA evaluated the potential for increased accidents between freight trains and passenger trains, for both intercity and commuter trains. Because changes in the frequency of rail accidents are directly related to changes in overall train activity, SEA's analysis concentrated on rail line segments carrying both passenger and freight trains that would experience an increase in freight train traffic of one or more trains per day.

In Chapter 4, "System-Wide and Regional Setting, Impacts and Proposed Mitigation," SEA addresses the issue of potential increased risk to passenger train operations associated with the proposed Conrail Acquisition. System-wide, SEA identified 197 freight rail line segments that also carry passenger trains. Of these, SEA analyzed 93 rail line segments that would experience an increase of one or more freight trains per day resulting from the proposed Acquisition. Thirteen of these rail line segments are located in Ohio; these rail line segments are on Amtrak's Capital Limited, Lakeshore Limited, Cardinal, and Three Rivers passenger train routes.

The Federal Railroad Administration (FRA) requires reports from railroads concerning all train accidents resulting in personal injury or causing property damage greater than $6,300 (1996 FRA reporting threshold). FRA requires the same reporting for passenger train accidents. A nationwide average of fewer than 200 passenger train accidents per year (for both Amtrak intercity and urban area commuter trains) has occurred over the last three years. Most of these accidents were relatively minor and rarely involved any fatalities, but because the safety of passengers as well as property is frequently involved, their occurrence is of serious concern.

Given the limited number of passenger rail accidents, SEA was unable to accurately predict the severity, location, or timing of actual accidents. SEA therefore focused on estimating the potential risks of an accident. In this safety analysis, SEA used increased freight activity on rail line segments to estimate the changes in passenger train accident risks. To assess significance, SEA first determined whether the proposed Acquisition-related change in the projected accident

rate was greater that an annual increase of 25 percent. SEA then determined if the predicted accident frequency was less than one accident in 150 years. Thus, SEA determined a potential impact to be significant if the projected annual increase in accidents was greater than 25 percent and the frequency was less than one accident in 150 years.

5-OH.5.1 Summary of Potential Effects and Preliminary Recommended Mitigation

The pre-Acquisition accident interval for each rail line segment is shown in Table 5-OH-7. Accidents pose potential threats to passengers on the train; therefore, for each rail line segment, risk is expressed as the expected interval between events over the length of the rail line segment. Table 5-OH-7 shows the expected change in years between accidents for the individual rail line segments.

Table 5-OH-7
Expected Change in Years Between Accidents on Passenger Rail Line Segments

Site ID	From	To	Miles in State	Pre-Acquisition Accident Interval [a]	Post-Acquisition Accident Interval [a]
N-084	Alliance	White	46	1,636	1,435
C-060	Ashtabula	Quaker	47	885	788
C-063	Cincinnati	Hamilton	21	7,230	6,535
C-066	Deshler	Willow Creek, IN	45	115	239[b]
C-206	Fostoria	Deshler	26	486	2,016[b]
C-068	Greenwich	Willard	12	5,270	3,103
C-258	Hamilton	Indianapolis, IN	23	3,049	1,829
N-086	Miami	Airline	2	7,878	6,819
N-077	Oak Harbor	Miami	22	827	645
N-081	White	Cleveland	11	14,451	6,082
C-075	Willard	Fostoria	37	1,661	1,000
C-204	Youngstown	Sterling	79	771	741
C-081	New Castle	Youngstown	8	3,331	2,742

[a] Accident Intervals shows years between accidents.
[b] This is based on double tracking currently under construction.

Based on information provided by the railroads and SEA's independent analysis, SEA determined that the increased risk for passenger train accidents for these rail line segments did not exceed SEA's criteria for significance. As a result, SEA does not propose mitigation.

5-OH.6 OHIO SAFETY: HIGHWAY/RAIL AT-GRADE CROSSINGS

Increased train activity could affect the safety of roadway users at highway/rail at-grade crossings. To address potential changes in accident frequency, SEA compared existing accident frequency rates with accident frequency rates at all highway/rail at-grade crossings that would experience a Conrail Acquisition-related increase of eight or more trains per day. At these locations, SEA looked at the most recent five years of accident history available, and calculated the potential change in the number of years between accidents. SEA's analysis procedure considered the type of existing warning devices at the highway/rail at-grade crossings, including passive devices (signs or crossbucks), flashing lights, or gates.

To evaluate the significance of potential changes in accident frequency in Ohio, SEA categorized highway/rail at-grade crossings into two categories:

- Category A consisted of highway/rail at-grade crossings with a history of relatively frequent train-vehicle accidents. SEA considered highway/rail at-grade crossings in Ohio with accident frequency rates at or above the state's 50th highest accident frequency rate of one accident every six years (0.1621 accident frequency rate) to be Category A highway/rail at-grade crossings. To be conservative in the analysis process, SEA also considered highway/rail at-grade crossings with accident frequency rates at or above one accident every seven years (0.15 accident frequency rate) as Category A highway/rail at-grade crossings. For all Category A highway/rail at-grade crossings, SEA considered the relatively small accident frequency rate increase of one accident every 100 years (a 0.01 accident frequency rate increase) to be significant.

- Category B consisted of highway/rail at-grade crossings with a history of relatively infrequent train-vehicle accidents. SEA considered highway/rail at-grade crossings in Ohio with accident frequency rates less than one accident every seven years (less than 0.15 accident frequency rate) to be Category B highway/rail at-grade crossings. For these crossings, SEA considered an accident frequency rate increase of one accident every 20 years (a 0.05 accident frequency rate increase) to be significant.

Table 5-OH-8 presented at the end of this state discussion shows the results of SEA's analysis. A county-by-county summary of results follows.

5-OH.6.1 County Analysis

Allen County

SEA's safety analysis showed that for the 46 highway/rail at-grade crossings studied in Allen County, the predicted increases in accident frequency would range from 0.0036 to 0.0466. This translates into a range of increases from one accident every 278 years to one accident every 21 years. SEA determined that the predicted increase was significant at Lafayette Road. This at-grade crossing is classified as Category A. SEA found the predicted increases at the other locations to be below the criteria for significance.

Ashtabula County

SEA's safety analysis showed that for the 58 highway/rail at-grade crossings studied in Ashtabula County, the predicted increases in accident frequency would range from 0.0041 to 0.0405. This translates into a range of increases from one accident every 244 years to one accident every 25 years. SEA determined that the predicted increase was significant at Walter Main Road. This highway/rail at-grade crossing is classified as Category A. SEA found that the predicted increases at the other locations to be below the criteria for significance.

Crawford County

SEA's safety analysis showed that for the 59 highway/rail at-grade crossings studied in Crawford County, the predicted increases in accident frequency would range from 0.0020 to 0.0394. This translates into a range of increases from one accident every 500 years to one accident every 25 years. SEA determined that the predicted increases were significant at Biddle Road and at Chattield Road. These highway/rail at-grade crossings are classified as Category A. SEA found the predicted increases at the other locations to be below the criteria for significance.

Cuyahoga County

SEA's safety analysis showed that for the 56 highway/rail at-grade crossings studied in Cuyahoga County, the predicted increases in accident frequency would range from 0.0067 to 0.0314. This translates into a range of increases from one accident every 149 years to one accident every 32 years. SEA found these predicted increases to be below the criteria for significance.

Defiance County

SEA's safety analysis showed that for the 27 highway/rail at-grade crossings studied in Defiance County, the predicted increases in accident frequency would range from 0.0049 to 0.0298. This translates into a range of increases from one accident every 204 years to one accident every 34

years. SEA determined that the predicted increase resulting from the proposed Conrail Acquisition was significant at Jackson Street. This highway/rail at-grade crossing is classified as Category A. SEA found the predicted increases at the other locations to be below the criteria for significance.

Delaware County

SEA's safety analysis showed that for the 12 highway/rail at-grade crossings studied in Delaware County, the predicted increases in accident frequency would range from 0.0022 to 0.0112. This translates into a range of increases from one accident every 455 years to one accident every 89 years. SEA determined that the predicted increase was significant at Berlin Road. This highway/rail at-grade crossing is classified as Category A. SEA found the predicted increases at the other locations to be below the criteria for significance.

Erie County

SEA's safety analysis showed that for the 36 highway/rail at-grade crossings studied in Erie County, the predicted increases in accident frequency would range from 0.0035 to 0.0677. This translates into a range of increases from one accident every 286 years to one accident every 15 years. SEA determined that the predicted increase was significant at Skadden Road (CR 42). This highway/rail at-grade crossing is classified as Category A. SEA found the predicted increases at the other locations to be below the criteria for significance.

Franklin County

SEA's safety analysis showed that for the seven highway/rail at-grade crossings studied in Franklin County, the predicted increases in accident frequency would range from 0.0024 to 0.0088. This translates into a range of increases from one accident every 417 years to one accident every 114 years. SEA found these predicted increases to be below the criteria for significance.

Hardin County

SEA's safety analysis showed that for the 38 highway/rail at-grade crossings studied in Hardin County, the predicted increases in accident frequency would range from 0.0042 to 0.0272. This translates into a range of increases from one accident every 238 years to one accident every 37 years. SEA determined that the predicted increase was significant at Marsh Road. This highway/rail at-grade crossing is classified as Category A. SEA found the predicted increases at the other locations to be below the criteria for significance.

Henry County

SEA's safety analysis showed that for the 31 highway/rail at-grade crossings studied in Henry County, the predicted increases in accident frequency would range from 0.0078 to 0.0569. This translates into a range of increases from one accident every 128 years to one accident every 18 years. SEA determined that the predicted increases resulting from the proposed Conrail Acquisition were significant at Main Street and North Street. Both highway/rail at-grade crossings are classified as Category B. SEA found the predicted increases at the other locations to be below the criteria for significance.

Huron County

SEA's safety analysis showed that for the 36 highway/rail at-grade crossings studied in Huron County, the predicted increases in accident frequency would range from 0.0045 to 0.0411. This translates into a range of increases from one accident every 222 years to one accident every 24 years. SEA found these predicted increases to below the criteria for significance.

Lake County

SEA's safety analysis showed that for the 34 highway/rail at-grade crossings studied in Lake County, the predicted increases in accident frequency would range from 0.0053 to 0.0282. This translates into a range of increases from one accident every 189 years to one accident every 35 years. SEA found these predicted increases to be below the criteria for significance.

Lorain County

SEA's safety analysis showed that for the 54 highway/rail at-grade crossings studied in Lorain County, the predicted increases in accident frequency would range from 0.0074 to 0.0761. This translates into a range of increases from one accident every 135 years to one accident every 13 years. SEA determined that the predicted increases resulting from the proposed Conrail Acquisition were significant at Pitts Road and Kansas Avenue. These highway/rail at-grade crossings are classified as Category A. SEA found the predicted increases at the other locations to be below the criteria for significance.

Lucas County

SEA's safety analysis showed that for the three highway/rail at-grade crossings studied in Lucas County, the predicted increases in accident frequency would range from 0.0036 to 0.0125. This translates into a range of increases from one accident every 278 years to one accident every 80 years. SEA determined that the predicted increase resulting from the proposed Conrail Acquisition was significant at Conneau. This highway/rail at-grade crossing is classified as

Category A. SEA found the predicted increases at the other locations to be below the criteria for significance.

Mahoning County

SEA's safety analysis showed that for the two highway/rail at-grade crossings studied in Mahoning County, the predicted increases in accident frequency would range from 0.0097 to 0.0154. This translates into a range of increases from one accident every 103 years to one accident every 65 years. SEA found these predicted increases to be below the criteria for significance.

Marion County

SEA's safety analysis showed that for the 54 highway/rail at-grade crossings studied in Marion County, the predicted increases in accident frequency would range from 0.0016 to 0.0229. This translates into a range of increases from one accident every 625 years to one accident every 44 years. SEA determined that the predicted increases resulting from the proposed Conrail Acquisition were significant at Section Street, Galion-Marseilles Road and Scott Township Road-190. These highway/rail at-grade crossings are classified as Category A. SEA found the predicted increases at the other locations to be below the criteria for significance.

Ottawa County

SEA's safety analysis showed that for the 28 highway/rail at-grade crossings studied in Ottawa County, the predicted increases in accident frequency would range from 0.0022 to 0.0280. This translates into a range of increases from one accident every 455 years to one accident every 36 years. SEA found these predicted increases to be below the criteria for significance.

Richland County

SEA's safety analysis showed that for the 23 highway/rail at-grade crossings studied in Richland County, the predicted increases in accident frequency would range from 0.0056 to 0.0302. This translates into a range of increases from one accident every 179 years to one accident every 33 years. SEA determined that the predicted increases resulting from the proposed Conrail Acquisition were significant at Main Street and at Baseline Road. These highway/rail at-grade crossings are classified as Category A. SEA found the predicted increases at the other locations to be below the criteria for significance.

Sandusky County

SEA's safety analysis showed that for the 44 highway/rail at-grade crossings studied in Sandusky County, the predicted increases in accident frequency would range from 0.0036 to

0.0484. This translates into a range of increases from one accident every 278 years to one accident every 21 years. SEA determined that the predicted increases resulting from the proposed Conrail Acquisition were significant at Kilbourne, County Road 292, County Road 175 and an unknown street identified as FRA Crossing No. 473726P. These highway/rail at-grade crossings are classified as Category A. SEA found the predicted increases at the other locations to be below the criteria for significance.

Seneca County

SEA's safety analysis showed that for the 72 highway/rail at-grade crossings studied in Seneca County, the predicted increases in accident frequency would range from 0.0025 to 0.0204. This translates into a range of increases from one accident every 400 years to one accident every 49 years. SEA determined that the predicted increases were significant at Main Street, Township Road 0180, Gilllick Road, and Morrison Road. These highway/rail at-grade crossings are classified as Category A. SEA found the predicted increases at the other locations to be below the criteria for significance.

Trumbull County

SEA's safety analysis showed that for the 17 highway/rail at-grade crossings studied in Trumbull County, the predicted increases in accident frequency would range from 0.0048 to 0.0291. This translates into a range of increases from one accident every 208 years to one accident every 34 years. SEA determined that the predicted increases resulting from the proposed Conrail Acquisition were significant at Bradley-Brownlee and Warren Sharon Road. Both highway/rail at-grade crossings are classified as Category A. SEA found the predicted increases at the other locations to be below the criteria for significance.

Van Wert County

SEA's safety analysis showed that for the 50 highway/rail at-grade crossings studied in Van Wert County, the predicted increases in accident frequency would range from 0.0040 to 0.0206. This translates into a range of increases from one accident every 250 years to one accident every 49 years. SEA found these predicted increases to be below the criteria for significance.

Wood County

SEA's safety analysis showed that for the 75 highway/rail at-grade crossings studied in Wood County, the predicted increases in accident frequency would range from 0.0030 to 0.0950. This translates into a range of increases from one accident every 333 years to one accident every 11 years. SEA determined that the predicted increases resulting from the proposed Conrail Acquisition were significant at 14 highway/rail at-grade crossings. All 14 highway/rail at-grade

crossings are classified as Category B. The affected highway/rail at-grade crossings are listed below:

- Range Line Road
- Kellogg Road
- Washington Street
- Tontogany Road
- Middletown Pike
- Fire Point Road
- Roachton Road
- Eckel Junction Road
- Eckel Road (Crossing ID 155819H)
- Eckel Road (Crossing ID 155820C)
- W. Boundary Street
- Ford Road
- Bates Road
- Schrick Road

SEA found the predicted increases at the other locations to be below the criteria for significance.

Wyandot County

SEA's safety analysis showed that for the 52 highway/rail at-grade crossings studied in Wyandot County, the predicted increases in accident frequency would range from 0.0026 to 0.0189. This translates into a range of increases from one accident every 385 years to one accident every 53 years. SEA found these predicted increases to be below the criteria for significance.

5-OH.6.2 Summary of Potential Effects and Preliminary Recommended Mitigation

SEA determined that the proposed Conrail Acquisition would significantly increase the predicted accident risk at 42 highway/rail at-grade crossings in Ohio. Table 5-OH-9 shows SEA's recommended mitigation to reduce these risks.

SEA analyzed the accident frequencies with and without upgraded warning devices in place, as shown in Table 5-OH-8 at the end of this state discussion. With the mitigation measures, the accident frequencies at these locations would decrease to well below the pre-Acquisition levels. SEA recommends that NS and CSX upgrade the existing warning devices, as shown in Table 5-OH-9. For the seven locations that currently have gates, SEA recommends that CSX and NS upgrade the existing warning devices to four-quadrant gates or install median barriers to prevent drivers from going around gates. These recommendations would eliminate the adverse effects on highway/rail at-grade crossing safety resulting from the proposed Conrail Acquisition in Ohio.

Table 5-OH-9
Recommended Mitigation to Improve Safety at Highway/Rail At-Grade Crossings in Ohio

County	Railroad Segment	FRA ID	Highway/Rail At-grade Crossing	Existing Warning Devices	SEA's Proposed Mitigation
Allen	C-062	532688W	Lafayette Road	Passive	Flashing Lights
Ashtabula	N-075	472021W	Walter Main Road	Passive	Flashing Lights
Crawford	C-064	502682Y	Biddle Road	Passive	Flashing Lights
Crawford	N-071	481584W	Chatfield	Passive	Flashing Lights
Defiance	C-066	142366F	Jackson Street	Flashing Lights	Gates
Delaware	N-073	481490V	Berlin Road	Passive	Flashing Lights
Erie	N-085	481660M	Skadden/CR 42	Passive	Flashing Lights
Hardin	C-071	518382H	Marsh Road	Passive	Flashing Lights
Henry	C-065	155755Y	Main Street	Flashing Lights	Gates
Henry	C-065	155760V	North Street	Passive	Flashing Lights
Lorain	C-061	518507F	Pitts Road	Passive	Flashing Lights
Lorain	N-080	472284J	Kansas Avenue	Gates	Four Quad Gates or Median Barriers

Table 5-OH-9
Recommended Mitigation to Improve Safety at Highway/Rail At-Grade Crossings in Ohio

County	Railroad Segment	FRA ID	Highway/Rail At-grade Crossing	Existing Warning Devices	SEA's Proposed Mitigation
Lucas	C-040	232122V	Conneau	Gates	Four Quad Gates or Median Barriers
Marion	C-071	518391G	Section Street	Gates	Four Quad Gates or Median Barriers
Marion	N-073	481546M	Galion-Marseilles	Passive	Flashing Lights
Marion	N-073	481547U	Scott TWP RD-190	Passive	Flashing Lights
Richland	C-067	518456X	Main Street	Flashing Lights	Gates
Richland	C-067	518476J	Base Line Road	Passive	Flashing Lights
Sandusky	N-079	473668W	Kilbourne	Gates	Four Quad Gates or Median Barriers
Sandusky	N-079	473673T	CR 292	Passive	Flashing Lights
Sandusky	N-079	473680D	CR 175	Gates	Four Quad Gates or Median Barriers
Sandusky	N-079	473726P	Unknown	Passive	Flashing Lights
Seneca	C-070	228774H	Main Street	Passive	Flashing Lights
Seneca	C-070	228780L	TWP 0180	Passive	Flashing Lights
Seneca	C-075	142178R	Gillick Road	Passive	Flashing Lights
Seneca	C-075	142179X	Morrison Road	Passive	Flashing Lights
Trumbull	N-082	503133H	Bradley-Brownlee	Gates	Four Quad Gates or Median Barriers
Trumbull	N-082	544729H	Warren Sharon Rd	Flashing Lights	Gates
Wood	C-065	155789T	Range Line Road	Passive	Flashing Lights
Wood	C-065	155794P	Kellogg Road	Passive	Flashing Lights
Wood	C-065	155798S	Washington Street	Passive	Flashing Lights
Wood	C-065	155799Y	Tontogany Road	Passive	Flashing Lights
Wood	C-065	155804T	Middletown Pike	Passive	Flashing Lights

Table 5-OH-9
Recommended Mitigation to Improve Safety at Highway/Rail At-Grade Crossings in Ohio

County	Railroad Segment	FRA ID	Highway/Rail At-grade Crossing	Existing Warning Devices	SEA's Proposed Mitigation
Wood	C-065	155812K	Fire Point Road	Passive	Flashing Lights
Wood	C-065	155814Y	Roachton Road	Passive	Flashing Lights
Wood	C-065	155818B	Eckel Jct Road	Passive	Flashing Lights
Wood	C-065	155819H	Eckel Road	Passive	Flashing Lights
Wood	C-065	155820C	Eckel Road	Passive	Flashing Lights
Wood	C-065	155821J	W. Boundary Street	Gates	Four Quad Gates or Median Barriers
Wood	C-065	155838M	Ford Road	Passive	Flashing Lights
Wood	C-065	155839U	Bates Road	Passive	Flashing Lights
Wood	C-065	155840N	Schrick Road	Passive	Flashing Lights

5-OH.7 OHIO SAFETY: RAIL TRANSPORT OF HAZARDOUS MATERIALS

The primary concern with the rail transportation of hazardous materials is a spill or accidental release resulting from a train accident. SEA analyzed all rail line segments where the number of car loads containing hazardous materials would increase as a result of the proposed Acquisition. This resulted in SEA evaluating rail line segments that were below the Board's thresholds for environmental analysis.

The Association of American Railroads (AAR), in conjunction with the Chemical Manufacturer's Association (CMA), developed standards and practices to manage the risk of a hazardous material spill that the railroads have adopted. The practices include identifying "key routes" as those rail lines that handle in excess of 10,000 car loads of hazardous material each year. Key trains are trains with at least five car loads of poison inhalation hazard (PIH) material, or 20 car loads of other hazardous material. Key trains are restricted to 50 miles per hour maximum authorized speed and normally operate on Class 2 track or better. The AAR key route practices include special train handling procedures and extra inspection and special actions whenever wayside detectors indicate potential concerns. The standards and practices for key routes are shown in AAR Circular No. OT-55-B. A copy of this Circular is included in Attachment 10 of Appendix B, "Safety."

5-OH.7.1 Rail Line Segment Analysis

As a result of the proposed Conrail Acquisition, the railroads would change the routing of many car loads of hazardous material. The designation of key routes would change as the railroads shift hazardous material traffic from one rail line to another. In addition, certain rail line segments that are currently key routes would carry increased volumes of cars containing hazardous material.

SEA applied two different criteria to determine if the effects of rerouting hazardous material car loads are potentially significant:

1. The volume of hazardous materials transported on a rail line would be 10,000 or more car loads per year. The Acquisition-related change in volume of hazardous material car loads would upgrade a rail line segment to a key route designation.

2. The volume of hazardous material car loads doubles, and exceeds 20,000 or more car loads per year. SEA has termed rail line segments which meet these criteria a "major key route."

Rail line segments that would meet the first criteria are considered "key routes" and warrant the base level mitigation. Rail line segments that meet the second criteria are considered "major key routes" and warrant expanded mitigation. Depending on the individual circumstances, a rail line segment could meet both criteria and therefore warrant both the base level and the expanded mitigation.

5-OH.7.2 Summary of Potential Effects and Preliminary Recommended Mitigation

Potential Effects. Based on the information provided by the Applicants and SEA's independent analysis, SEA determined that 24 rail line segments in Ohio carrying increased amounts of hazardous material are of potential concern. Table 5-OH-10 shows these rail line segments, indicates the estimated annual car loads of hazardous material for both pre- and post-Acquisition, and identifies the key route status of each. SEA determined that 16 rail line segments currently carry less than 10,000 car loads of hazardous material per year but would increase to at least 10,000 car loads per year due to the proposed Acquisition. A total of 18 routes would at least double the volume of hazardous material transported, resulting in 20,000 or more car loads per year. Ten routes meet both of these significance thresholds.

Table 5-OH-10
Rail Line Segments with Significant Increases in Annual Hazardous Material Car Loads

Site ID	Between	And	Miles in State	Estimated Annual Car Loads		Significance Thresholds	
				Pre-Acquisition	Post-Acquisition	New Key Route	Major Key Route
C-040	Carleton, MI	Toledo, OH	2	14,000	31,000		X
C-061	Berea, OH	Greenwich, OH	42	16,000	51,000		X
C-065	Deshler, OH	Toledo, OH	36	10,000	28,000		X
C-066	Deshler, OH	Willow Creek, IN	45	17,000	50,000		X
C-068	Greenwich, OH	Willard, OH	12	18,000	69,000		X
C-069	Marcy, OH	Short, OH	9	5,000	44,000	X	X
C-070	Marion, OH	Fostoria, OH	40	4,000	32,000	X	X
C-072	Mayfield, OH	Marcy, OH	3	0	44,000	X	X
C-073	Quaker, OH	Mayfield, OH	6	0	44,000	X	X
C-074	Short, OH	Berea, OH	4	5,000	44,000	X	X
C-075	Willard, OH	Fostoria, OH	37	18,000	54,000		X
C-081	New Castle, PA	Youngstown, OH	8	8,000	12,000	X	
C-206	Fostoria, OH	Deshler, OH	26	12,000	26,000		X
C-228	Fostoria, OH	Toledo, OH	29	7,000	29,000	X	X
C-229	Columbus, OH	Marion, OH	20	5,000	12,000	X	
C-695	CP Maumee, OH	Oak, OH	1	6,000	20,000	X	X
N-070	Buffalo, NY	Ashtabula, OH	15	8,000	26,000	X	X
N-072	Vermilion, OH	Bellevue, OH	26	9,000	15,000	X	
N-075	Ashtabula, OH	Cleveland, OH	50	7,000	37,000	X	X
N-079	Oak Harbor, OH	Bellevue, OH	27	3,000	18,000	X	
N-080	Cleveland, OH	Vermilion, OH	37	9,000	32,000	X	X
N-081	White, OH	Cleveland, OH	11	12,000	34,000		X
N-082	Youngstown, OH	Ashtabula, OH	59	2,000	11,000	X	

Table 5-OH-10
Rail Line Segments with Significant Increases in Annual Hazardous Material Car Loads

Site ID	Between	And	Miles in State	Estimated Annual Car Loads		Significance Thresholds	
				Pre-Acquisition	Post-Acquisition	New Key Route	Major Key Route
N-095	Rochester, PA	Youngstown, OH	9	2,000	11,000	X	

Preliminary Mitigation Recommendation. SEA recommends requiring CSX and NS to bring the rail line segments into compliance with AAR key route standards and practices for those segments that would become a new key route.

For the 18 segments in Table 5-OH-10 identified as major key routes, where the volume of hazardous material car loads would at least double and exceed 20,000 car loads, SEA recommends that CSX and NS develop a Hazardous Materials Emergency Response Plan to contain and minimize the potential effects of any accidents or incidents. SEA will further recommend that CSX and NS conduct hazardous materials accident simulations with the voluntary participation of emergency service providers along the rail line segments at least once every two years. Participants in these plans include county and municipal government, local fire departments, and medical and other emergency response teams.

5-OH.8 OHIO TRANSPORTATION: PASSENGER RAIL SERVICE

In Ohio, passenger trains share certain tracks with freight trains. SEA evaluated potential Acquisition-related effects on the ability of rail line segments to accommodate existing passenger rail service, both intercity and commuter rail, and reasonably foreseeable new or expanded passenger service. SEA identified those rail line segments that carry both freight and passenger trains and would experience an increase of one or more freight trains per day.

Amtrak

Amtrak currently provides service to the Alliance, Bryan, Cleveland, Sandusky, Elyria, Toledo, and Cincinnati areas on Conrail and CSX lines. Section 4.7.1, "Intercity Passenger Rail Service," discusses intercity passenger rail service effects.

Commuter Rail

No existing commuter rail service exist in Ohio.

Future Services Under Study

The Akron Metropolitan Area Transportation Study (AMATS) is the Metropolitan Planning Organization (MPO) for the Akron area. AMATS, in conjunction with Akron's Metro Regional Transit Authority (METRO) and other MPO's, has begun to study initiation of commuter and intercity service between Akron/Canton and Cleveland. These agencies have also begun to acquire abandoned railroad right-of-way to connect Akron to METRO's preferred route to Cleveland which would use Conrail's Alliance - Cleveland segment between Hudson and Cleveland. This route currently has heavy freight train density. NS proposes to acquire this route and plans a 3.7 freight trains per day increase, for a total of 30 trains per day. Current signaling along this route limits its capacity and flexibility.

The Greater Cleveland Regional Transit Authority (GCRTA) is initiating a study of the potential for commuter service on the present NS route between Cleveland and the western suburbs, including Lakewood and Rocky River, Ohio. This line segment has one main track and is projected to increase by 20.6 freight trains per day to a total of 34.1 trains. GCRTA is discussing with NS the feasibility of a demonstration program on the route in order to assess potential ridership. There is no capital funding or operating agreement for regular commuter service. Amtrak does not operate on this line segment. This line segment is discussed in greater detail in the Section 5-OH.17, "Other Areas of Concern."

5.OH.8.1 Summary of Potential Effects and Preliminary Recommended Mitigation

Because there is no existing commuter rail service in Ohio, SEA has determined there will be no adverse effects and no mitigation is required.

5-OH.9 OHIO TRANSPORTATION: ROADWAY CROSSING DELAY

In order to analyze the effects of the proposed Conrail Acquisition on the roadway system at existing highway/rail at-grade crossings, SEA identified the crossings on rail line segments that would exceed the Board's environmental analysis thresholds for air quality. SEA then calculated potential changes in vehicle delay at these crossings where average daily traffic (ADT) volumes are 5,000 or greater. SEA concluded that the potential effect of increased train traffic for highways with ADT volumes below 5,000 would be experienced by very few drivers and the additional vehicular delay would be minimal. The description of levels of service and criteria of significance have been addressed in Chapter 3, "Analysis Methods and Potential Mitigation Strategies," and Appendix C, "Traffic and Transportation."

For crossings that would experience significant effects from the proposed Acquisition on vehicular delay, SEA tested mitigation strategies which involved increasing train speeds by increments of five miles per hour. SEA examined train operation guidelines and made preliminary recommendations to increase train speeds where it was easy to implement. At other

locations, SEA recommended that the Applicants consult with the local community and with the local highway/transportation departments and the Ohio Department of Transportation to agree on mitigating measures.

5-OH.9.1 County Analysis

There are 27 counties in Ohio that have highway/rail at-grade crossings for which SEA performed vehicle delay calculations. Table 5-OH-11, presented at the end of this state discussion, contains a summary of these results.

Allen County

The seven crossings analyzed in Allen County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B. The largest increase in maximum queue would be two vehicles.

Ashtabula County

The five crossings analyzed in Ashtabula County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B and C. The largest increase in maximum queue would be one vehicle.

Butler County

The eight crossings analyzed in Butler County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be in the range of B to E. The largest increase in maximum queue would be one vehicle. The Vine Street crossing involves exacerbating pre-Acquisition level of service E condition. SEA's preliminary recommendation is that the Applicants consult with the community and the appropriate highway/transportation department to agree on mitigating measures.

Crawford County

The four crossings analyzed in Crawford County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B and C. The largest increase in maximum queue would be two vehicles.

Cuyahoga County

Of the 12 crossings analyzed in Cuyahoga County, 10 would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions for all crossings would be in the range of B to D. The largest increase in maximum queue would be one

vehicle. Two crossings, Hummel Road and Engle Road, would experience a reduction from pre-Acquisition levels of service B to post-Acquisition levels of service D. SEA recommends that the train speed at these two crossings be increased by five miles per hour. These train speed increases would result in level of service C.

A broader discussion of the impacts of the Acquisition on the Greater Cleveland area is included in Section 5-OH.20, "Ohio Areas of Concern".

Defiance County

The two crossings analyzed in Defiance County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be C. There would be no increase in maximum queue.

Erie County

The three crossings analyzed in Erie County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B and C. The largest increase in maximum queue would be one vehicle.

Franklin County

The three crossings analyzed in Franklin County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B and C. The largest increase in maximum queue would be two vehicles.

Hamilton County

The 19 crossings analyzed in Hamilton County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be in the range of B to F. The largest increase in maximum queue would be two vehicles. Three crossings, Winton Road, Mitchell Avenue and Township Avenue, would experience post-Acquisition levels of service E or F. All three of these locations involve exacerbating pre-Acquisition level of service E condition. It is SEA's preliminary recommendation that for these three crossing, the Applicants consult with the community and with the local highway/transportation departments and the Ohio Department of Transportation to agree on mitigating measures.

Hardin County

The single crossing analyzed in Hardin County would have a minimal increase in crossing delay per stopped vehicle. The level of service under post-Acquisition conditions would be B. The increase in maximum queue would be one vehicle.

Huron County

The single crossing analyzed in Huron County would have a minimal increase in crossing delay per stopped vehicle. The level of service under post-Acquisition conditions would be B. The increase in maximum queue would be two vehicles.

Lake County

The 17 crossings analyzed in Lake County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B and C. The largest increase in maximum queue would be one vehicle.

A broader discussion of the impact of the Acquisition on the Greater Cleveland area is included in Section 5-OH.20, "Ohio Areas of Concern".

Lorain County

The nine crossings analyzed in Lorain County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be in the range of B to D. The largest increase in maximum queue would be two vehicles. The Main Street crossing shows a reduction from a pre-Acquisition level of service B to a post-Acquisition level of service D. It is SEA's preliminary recommendation that the train speeds be increased by five mph and that the Applicant implement a track improvement if it is found to be necessary to permit the speed increase.

A broader discussion of the impacts of the Acquisition on the Greater Cleveland area is included in Section 5-OH.20 "Ohio Areas of Concern".

Lucas County

The two crossings analyzed in Lucas County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B and C. There would be no increase in maximum queue.

Mahoning County

The two crossings analyzed in Mahoning County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be C. The largest increase in maximum queue would be two vehicles.

Marion County

The seven crossings analyzed in Marion County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B and C. The largest increase in maximum queue would be one vehicle.

Montgomery County

The eight crossings analyzed in Montgomery County would have a decrease in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B. Under the post-Acquisition conditions the queues would decrease by up to two vehicles.

Ottawa County

The single crossing analyzed in Ottawa County would have a minimal increase in crossing delay per stopped vehicle. The level of service under post-Acquisition conditions would be B. There would be no increase in maximum queue.

Richland County

The two crossings analyzed in Richland County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B. The largest increase in maximum queue would be two vehicles.

Sandusky County

The three crossings analyzed in Sandusky County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B and C. The largest increase in maximum queue would be one vehicle.

Seneca County

The single crossing analyzed in Seneca County would have a minimal increase in crossing delay per stopped vehicle. The level of service under post-Acquisition conditions would be B. Under the post-Acquisition conditions the maximum queue would increase by one vehicle.

Stark County

The single crossing analyzed in Stark County would have a decrease in crossing delay per stopped vehicle. The level of service under post-Acquisition conditions would be B. Under the post-Acquisition conditions the maximum queue would decrease by one vehicle.

Summit County

The single crossing analyzed in Summit County would have a decrease in crossing delay per stopped vehicle. The level of service under post-Acquisition conditions would be B. The maximum queue would decrease by one vehicle.

Van Wert County

The single crossing analyzed in Van Wert County would have a minimal increase in crossing delay per stopped vehicle. The level of service under post-Acquisition conditions would be B. The maximum queue would increase by two vehicles.

Warren County

The single crossing analyzed in Warren County would have a decrease in crossing delay per stopped vehicle. The level of service under post-Acquisition conditions would be B. There would be no change in maximum queue.

Wood County

The four crossings analyzed in Wood County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B and C. The largest increase in maximum queue would be one vehicle.

Wyandot County

The single crossing analyzed in Wyandot County would have a minimal increase in crossing delay per stopped vehicle. The level of service under post-Acquisition conditions would be B. The increase in maximum queue would be one vehicle.

5-OH.9.2 Summary of Potential Effects and Preliminary Recommended Mitigation

The proposed Conrail Acquisition would have no significant effect on vehicle delay for most at-grade crossings in Ohio. However, seven crossings in Butler, Cuyahoga, Hamilton, and Lorain Counties would incur significant vehicular delays as a result at the Acquisition. SEA's preliminary recommendation is that the Applicants increase train speeds at three of the seven

Mahoning County

The two crossings analyzed in Mahoning County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be C. The largest increase in maximum queue would be two vehicles.

Marion County

The seven crossings analyzed in Marion County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B and C. The largest increase in maximum queue would be one vehicle.

Montgomery County

The eight crossings analyzed in Montgomery County would have a decrease in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B. Under the post-Acquisition conditions the queues would decrease by up to two vehicles.

Ottawa County

The single crossing analyzed in Ottawa County would have a minimal increase in crossing delay per stopped vehicle. The level of service under post-Acquisition conditions would be B. There would be no increase in maximum queue.

Richland County

The two crossings analyzed in Richland County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B. The largest increase in maximum queue would be two vehicles.

Sandusky County

The three crossings analyzed in Sandusky County would have a minimal increase in crossing delay per stopped vehicle. The levels of service under post-Acquisition conditions would be B and C. The largest increase in maximum queue would be one vehicle.

Seneca County

The single crossing analyzed in Seneca County would have a minimal increase in crossing delay per stopped vehicle. The level of service under post-Acquisition conditions would be B. Under the post-Acquisition conditions the maximum queue would increase by one vehicle.

crossings, and that the Applicants consult with the community and the local highway/transportation departments and the Ohio Department of Transportation to agree on mitigation measures at the other four crossings.

5-OH.10 OHIO TRANSPORTATION: ROADWAY EFFECTS FROM RAIL FACILITY MODIFICATIONS

SEA evaluated the impact on highway/rail at-grade crossing delay resulting from the construction of three new rail line connections in Ohio. SEA evaluated the impact of additional truck traffic on the roadway system resulting from increased railroad activity at two intermodal facilities. SEA also evaluated the impact to truck traffic from two abandonments.

5-OH.10.1 Constructions

Summary of Potential Effects and Preliminary Recommended Mitigation

SEA analyzed the transportation effects of proposed new construction projects in Ohio resulting from the proposed Conrail Acquisition. For the new rail constructions, the transportation effects are related to highway/rail at-grade crossings. Therefore, SEA used the same analysis methods as described for highway/rail at-grade crossing delay and safety.

Three rail constructions proposed by NS in Ohio require environmental analysis. A description of the transportation analysis for each proposed action is provided below.

Construction: Columbus Connection (Franklin County) (NS)

NS proposes to build a rail connection between the existing north-south Conrail and NS lines in the north-central portion of Columbus. The proposed connection includes a crossover between the northbound and southbound NS line, and would be approximately 1,400 feet long. The connection would accommodate 18 trains per day. Figure 5-OH-3, presented at the end of this state discussion, shows the area of the proposed rail line connections.

Because there are no at-grade crossings within the limits of construction, SEA concluded that there would be no effect on highway traffic from this proposed rail line connection.

There would be no short-term vehicular delays and detours during construction of this rail connection. The construction would be performed in accordance with applicable Federal, state, and local regulations for construction projects. Construction traffic would use Weber and Hudson Streets to travel to and from the construction.

Construction: Oak Harbor Connection (Ottowa County) (NS)

NS proposes to build a rail connection between the existing northwest-southeast Conrail and NS lines northwest of the Village of Oak Harbor. The proposed connections would connect two parallel tracks that are approximately 2,100 feet apart. The connection would be approximately 4,970 feet long. It would accommodate 23 trains per day. Figure 5-OH-4, presented at the end of this state discussion, shows the area of the proposed rail line connection.

The new rail connection would involve the construction at of a new at-grade crossing at Toussaint-Portage Road. This roadway has an ADT volume of 360, as indicated in the Federal Railroad Administration database. Based on this low ADT volume, SEA concluded that the new highway/rail at-grade crossing would result in insignificant vehicle delay and queues. SEA performed a grade crossing accident risk analysis at this new crossing based on installation of a flasher warning device. The results of this study, summarized in Table 5-OH-12, indicate an accident frequency of 0.0004 accidents per year, or one accident every 250 years. Based on these results, it is SEA's preliminary conclusion that the accident risk at this new highway/rail at-grade crossing would be negligible.

The proposed action would create typical short-term vehicular delays and the need for detours during construction of this rail connection. NS would perform the construction in accordance with applicable Federal, state, and local regulations for construction projects. Construction traffic would use Vogel Road and Toussaint-Portage Road to travel to and from the construction site.

The vertical difference in elevation between the existing track beds and the adjacent roadway surface is approximately ten feet. Steep roadway grades are used to transition between the track and roadway elevations. The new highway/rail at-grade crossing would be approximately 1,050 feet north of the existing Conrail crossing and approximately 950 feet south of the existing NS crossing. This third crossing would result in a "roller coaster " type safety hazard for vehicles on Toussaint-Portage Road.

Table 5-OH-12
Highway/Rail At-Grade Crossing Accident Frequency, New Rail Connections

County	Railroad Segment	Street Name	Safety Device	ADT	Number of Roadway Lanes	Maximum Speed	Freight Trains	Accidents per Year
Oak Harbor	Oak Harbor Connection	Toussant Portage Road	Flasher	360	2	35	23	0.0004
Vermilion	Vermilion Connection	Coen Road	Gate	420	2	35	12	0.0007

It is SEA's preliminary recommendation that NS consider the following mitigation options for this proposed rail connection:

- Raise the elevation of Toussaint-Portage Road between the adjacent crossings to minimize the "roller coaster" effect of the grade variation.

- Upgrade the level of protection of the crossing signal devices at the existing NS line crossing to the same level that currently exists at the Conrail crossing on Toussaint-Portage Road.

Construction: Vermilion Connection (Erie County) (NS)

NS proposes to build a rail connection between the existing northeast-southwest Conrail and NS lines west of the Village of Vermilion. The proposed action would connect two parallel tracks that are approximately 2,100 feet apart. The connection would be approximately 5,300 feet long. It would accommodate 12 trains per day. Figure 5-OH-5, presented at the end of this state discussion, shows the area of the proposed rail line connection.

The new rail connection would involve the construction of a new at-grade crossing at Coen Road. This roadway has an ADT volume of 420 vehicles, as indicated in the Federal Railroad Administration database. Based on this low ADT volume, SEA concluded that the new highway/rail at-grade crossing would result in insignificant vehicle delay and queues. SEA performed an highway/rail at-grade crossing accident risk analysis at this new crossing based on installation of a gate warning device consistent with the existing warning devices along Coen Road at the Conrail and NS tracks. The results of this study, summarized in Table 5-OH-12, indicate an accident frequency of 0.0007 accidents per year, or one accident every 1,429 years. Based on these results, SEA has preliminarily concluded that the accident risk at this new highway/rail at-grade crossing would be negligible.

The proposed Acquisition would create typical short-term vehicular delays and the need for detours during construction of this rail connection. NS would perform the construction in accordance with applicable Federal, state, and local regulations for construction projects. Construction traffic would use Risden or Coen Roads to travel to and from the construction site.

The vertical difference in elevation between the track beds and the adjacent roadway surface is approximately ten feet. Steep roadway grades are used to transition between the track and roadway elevations. The new highway/rail at-grade crossing would be approximately 525 feet north of the existing NS crossing and approximately 2,000 feet south of the existing Conrail crossing. This new crossing, located 525 feet from the existing crossing, would result in a "roller coaster " effect for vehicular traffic along Coen Road.

SEA determined that the Coen Road crossing would be significantly affected and it is SEA's preliminary recommendation that NS consider the following mitigation strategy to alleviate the vertical alignment of Coen Road.

- Raise the elevation of Coen Road between the NS crossing and the new crossing to minimize the "roller coaster" effect of the grade variation.

5-OH.10.2 Intermodal Facilities - Summary of Potential Effects and Preliminary Recommended Mitigation

Two intermodal facilities in Ohio would experience increases in truck activity as a result of the proposed Acquisition. Others would experience decreases in truck activity. The following is a summary of NS intermodal operations in Ohio.

Intermodal Facility: Columbus-Discovery Park (Franklin County) (NS)

The NS Discovery Park intermodal facility is located in southeastern Columbus along the south side of Watkins Road. The main gate for truck entry and exit movements is located on Watkins Road. Two major highways serve the facility: Interstate 270 and State Route 104. The primary route trucks use to and from Interstate 270 includes New World Drive and Alum Creek Road to Watkins Road. The primary route used by trucks to and from State Route 104 is Groveport Road to Watkins Road.

The facility currently handles approximately 131 trucks per day. The proposed Acquisition would increase this figure to 184 trucks per day. This increase of 53 trucks per day corresponds to 106 additional truck trips per day. SEA assumed that 80 percent of the additional truck trips would use Interstate 270, New World Drive and Alum Creek Road. The remaining 20 percent of the additional truck trips would use State Route 104 and Groveport Road. All additional truck trips would use Watkins Road. Table 5-OH-13 summarizes the analysis of traffic volumes to determine the effects of these additional truck trips on the roadways approaching the facility.

The analysis results show that the total daily increase in truck traffic with the proposed Acquisition would be less than four percent of the ADT for all the study area roadways. Therefore, it is SEA's preliminary conclusion that these increases in truck traffic would have insignificant effects on the area roadways.

Table 5-OH-13
Traffic Analysis Summary for Columbus - Discovery Park Intermodal Facility

Roadway Name	Roadway ADT [a]	Increased Daily Truck Trips Using Roadway	Roadway ADT Percent Increase
Interstate 270	42,000	85	0.20%
Alum Creek Rd.	10,700	85	0.79%
New World Dr.	2,400	85	3.54%
State Route 104	35,800	21	0.06%
Groveport Rd.	14,100	21	0.15%
Watkins Rd.	3,200	106	3.31%

[a] From Mid-Ohio Regional Planning Commission.

Intermodal Facility: Collinwood New Intermodal Facility (Cuyahoga County) (CSX)

CSX has proposed to construct a new intermodal facility on property located next to the existing Conrail Collinwood Yard complex. This complex is located west of downtown Cleveland and contains a railyard and intermodal facility. CSX would locate the proposed new facility northwest of the existing yard on land not currently owned by Conrail, and CSX would use the existing Conrail intermodal facility primarily for storage and for yard operations. Most truck operations would be moved from the existing facility to the new facility.

Interstate 90 serves the existing Collinwood Yard and would also serve the proposed intermodal facility. The main gate for truck entry and exit movements would be on 152nd Street. The primary route used by trucks to and from Interstate 90 is 152nd Street.

The existing intermodal facility currently handles 22 trucks per day. The proposed Conrail Acquisition would increase this figure by 49 trucks per day to 71 trucks per day. Since the increase was less than 50 trucks per day, SEA concluded that this new facility would have insignificant effects on the area roadways.

5-OH.10.3 Abandonments - Summary of Potential Effects And Preliminary Recommended Mitigation

SEA analyzed the transportation effects of proposed abandonments in Ohio resulting from the proposed Conrail Acquisition. For the proposed abandonments, the transportation effects are related to highway/rail at-grade crossings. Therefore, SEA used the same analysis methods as described for highway/rail at-grade crossing and delay.

Abandonment - Site ID NA - 003: Toledo to Maumee (Lucas County) (NS)

As part of the proposed Acquisition, NS would abandon its existing 7.5 mile long line between Toledo and Maumee. The proposed abandonment would eliminate 17 highway/rail at-grade crossings with public roadways. Tables 5-OH-14 and 5-OH-15 show the reductions in highway/rail at-grade crossing delay and highway/rail at-grade crossing accident risk that would occur as a result of this proposed abandonment. These tables are presented at the end of this discussion.

The existing NS line handles approximately two through trains per day. This rail traffic would be diverted to other former Conrail lines that NS would acquire as part of the proposed Conrail Acquisition. The existing NS line also currently handles 90 carloads per year from one freight shipper on the line. The proposed abandonment would terminate rail service to this shipper. This would require this freight shipper to ship by truck, resulting in 360 additional trucks per year. This corresponds to 720 additional truck trips per year, which averages less than two additional truck trips per day on the study area roadways. SEA concluded that this would be an insignificant increase in truck traffic. Disruption of traffic due to proposed abandonment activities would be temporary in nature, resulting in insignificant effects on the area roadways.

SEA concluded that the proposed abandonment would result in small reductions in grade crossing delay and accident risk. Other transportation related effects of the abandonment including increased truck traffic would be insignificant.

Abandonment: Toledo Pivot Bridge (Lucas County) (NS)

As part of the proposed Conrail Acquisition, NS would abandon its existing 0.2 mile Toledo Pivot Bridge. There are no highway/rail at-grade crossings with public roadways on this rail line segment. The existing NS line handles ten through trains per day and an additional five to six trains per week (or less than one additional train per day). This rail traffic would be diverted to the former Conrail line and bridge located four miles to the south that NS would acquire as part of the proposed Acquisition. There are no local freight customers on this line. Thus, there would be no freight diverted from rail to truck. Disruption of traffic due to proposed abandonment activities would be temporary in nature. Therefore, SEA determined that the proposed abandonment would have insignificant effects on the area roadways.

5-OH.11 OHIO TRANSPORTATION: NAVIGATION

To evaluate potential effects of train traffic on shipping where interaction could occur, SEA reviewed proposed Acquisition-related activities on rail line segments, new constructions (rail line connections only), and rail line abandonments that meet or exceed the Board's thresholds for environmental analysis and involve movable bridges.

SEA identified four movable bridges which carry rail traffic over navigable waterways in Ohio that would meet or exceed the Board's environmental analysis thresholds. CSX owns one bridge which is on rail line segment C-040. The bridge crosses the Maumee River in Toledo. Conrail owns one bridge which is on rail line segment N-086 that also crosses the Maumee River in Toledo. NS owns two bridges on rail line segments N-075 and N-080 that cross the Cuyahoga and Black Rivers in Cleveland and Lorain, respectively. The proposed Conrail Acquisition would result in an increase of 11.2 trains per day on rail line segment C-040; 8.6 trains per day on rail line segment N-086; 23.6 trains per day on rail line segment N-075; and 20.6 trains per day on rail line segment N-080 that would cross each bridge, respectively. In addition, NS would abandon the Toledo Pivot Bridge that crosses the Maumee River near Toledo.

As stated in Section 3.9.1 "Methods for Navigation Issues," the U.S. Coast Guard has jurisdiction over specific actions affecting navigable waters of the U.S. and in all instances waterborne navigation has the right-of-way. Therefore, any operating constraints due to the post-Acquisition activities would be placed on the railroad and not the waterborne users at movable bridges extending across navigable waterways. The railroads operate bridges under conditions established by the U.S. Coast Guard for the convenience of navigation. SEA evaluated the potential effect of the increase in train traffic on moving the bridges for navigation. Based on the analysis and the small proposed increase in train traffic, SEA expects no adverse impacts from the proposed Conrail Acquisition at these four bridges.

5-OH.12 OHIO AIR QUALITY

This section summarizes the change in air pollutant emissions that would result from the proposed Acquisition-relatedoperational changes in the state of Ohio. The primary air pollutant emission sources from trains and related activities include locomotive emissions on rail line segments, at rail yards, and at intermodal facilities. In addition to locomotive emissions, SEA evaluated emissions from other sources at intermodal facilities (idling trucks, lift cranes, etc.), motor vehicles idling near at-grade crossings, and decreases in truck emissions due to truck-to-rail freight diversions.

To analyze the air quality effects of the proposed Acquisition, SEA evaluated rail line segments, rail yards, and intermodal facilities that would meet or exceed the Board's thresholds for environmental analysis defined in Chapter 2, "Proposed Action and Alternatives." See Chapter 3, "Analysis Methods and Potential Mitigation Strategies," for additional information and a summary of the air quality analysis methodology. Appendix E, "Air Quality," contains a detailed description of methodology and detailed tables of results.

SEA addressed air pollutant emissions for sulfur dioxide (SO_2), volatile organic compounds (VOCs), particulate matter (PM), lead (Pb), nitrogen oxides (NO_x) and carbon monoxide (CO). SEA determined that emissions for SO_2, VOCs, PM and Pb would not exceed the emission screening thresholds for environmental analysis in any county. However, SEA found that these

thresholds would be exceeded for NO_x in various counties in 17 states, and CO in three counties in two states (IL and OH). NO_x air pollutant emissions may affect a region's ability to attain the National Ambient Air Quality Standards for ozone. CO emissions may affect a local area's ability to attain the National Ambient Air Quality Standards for CO.

Sixteen NS and 18 CSX rail line segments, two NS intermodal facilities, and three NS and one CSX rail yards exceeded the Board's threshold for air quality analysis in Ohio. Table 5-OH-16 shows the air quality evaluation process that was followed. SEA identified 32 counties in Ohio which include any part of these rail facilities. For these counties, SEA summed air emissions increases from changes on rail line segments and other activities and compared them to the air emission screening level that would require a permit if the source were a stationary source (rather than a mobile source, such as trains, trucks, and other vehicles). If the calculated air emissions exceeded this screening level, SEA conducted a detailed air emissions analysis known as a "netting analysis" in these counties. The netting analysis considered all emissions increases and decreases from Acquisition-related activity changes. SEA compared the netting analysis results to the air emission screening level and additional analyses were performed for counties where netting analysis results exceeded the air emission screening level. For these counties, SEA inventoried all county air pollutant emissions sources to evaluate if proposed Acquisition-related air emissions represented more than one percent of all air emissions sources in the county.

Table 5-OH-16
Ohio Counties Evaluated in Air Quality Analysis

Counties Exceeding the Board's Activity Thresholds	O_3 Status [b]	Exceeds Emissions Screening Level Before Netting	Exceeds Emissions Screening Level After Netting	Exceeds 1% of County Emissions
Allen	A	Yes	Yes	No
Ashtabula	M	Yes	Yes	Yes
Butler	N (Moderate)	No	-	-
Crawford	A	Yes	Yes	Yes
Cuyahoga	M	Yes [a]	Yes (NO_x & CO)	Yes (NO_x only)
Defiance	A	Yes	Yes	Yes
Delaware	M	Yes	No	-
Erie	A	Yes	No	-
Franklin	M	No	-	-
Hamilton	N (Moderate)	No	-	-
Hancock	A	No	-	-
Hardin	A	Yes	No	-
Henry	A	Yes	Yes	Yes
Huron	A	Yes	Yes	Yes
Lake	M	Yes	Yes	Yes
Lorain	M	Yes[a]	Yes (NO_x only)	Yes (NO_x only)
Lucas	M	Yes	No	-
Mahoning	M	No	-	-
Marion	A	Yes	Yes	Yes
Montgomery	M	No	-	-
Ottawa	A	No	-	-
Portage	M	No	-	-
Richland	A	Yes	No	-
Sandusky	A	Yes	Yes	Yes
Seneca	A	Yes	Yes	Yes

Table 5-OH-16
Ohio Counties Evaluated in Air Quality Analysis

Counties Exceeding the Board's Activity Thresholds	O_3 Status [b]	Exceeds Emissions Screening Level Before Netting	Exceeds Emissions Screening Level After Netting	Exceeds 1% of County Emissions
Stark	M	No	-	-
Summit	M	No	-	-
Trumbull	M	Yes	Yes	-
Van Wert	A	Yes	Yes	Yes
Warren	N (Moderate)	No	-	-
Wood	M	Yes	Yes	Yes
Wyandot	A	Yes	Yes	Yes

[a] For both NO_x and CO. Other counties over screening level for NO_x only.
[b] A= Attainment Area, M= Maintenance Area, N= Nonattainment Area, as defined in the Clean Air Act.

The emissions estimates presented in Appendix E, "Air Quality," show that the increased county-wide air pollutant emissions from the facilities described above exceed the threshold for 21 counties in Ohio. SEA's analysis results for these counties are presented below:

5-OH.12.1 County Analysis

Allen County

EPA has designated Allen County as an attainment area for all pollutants, with no maintenance areas for any pollutant. Table 5-OH-17 shows that the net NO_x emissions increase in Allen County, considering all calculated Acquisition-relatedemissions changes, is above the emissions screening threshold of 100 tons per year used to determine if emissions changes are potentially significant.

The increased NO_x emissions in Allen County are under one percent of the existing (1995) county-wide NO_x emissions. Therefore, SEA does not expect potential adverse impact in Allen County due to this small emissions increase.

Table 5-OH-17
Allen County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (CSX)	Lima, OH to Deshler, OH	-17.46
Rail Segment (CSX)	Bucyrus, OH to Adams, IN	150.21
Rail Yard (CSX)	Lima - Lima	0.42
Rail Yard (CSX)	Lima - Robb Avenue	3.65
Truck Diversions (both)	County-wide	-23.16
At-Grade Crossings (both)	Affected Crossings >5000 Vehicles/Day[a]	0.11
Total Acquisition-Related Net NO_x Emissions Increase		113.77
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		12,555.84
Percent Increase in County NO_x Emissions		0.91%

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Ashtabula County

EPA has designated Ashtabula County as an attainment area for all pollutants, and has designated the county as a maintenance area for O_3. Table 5-OH-18 shows that the net NO_x emissions increase in Ashtabula County, considering all calculated Acquisition-related emissions changes, is above the emissions screening threshold of 100 tons per year used to determine if emissions changes are potentially significant.

The increased NO_x emissions in Ashtabula County are over one percent of the existing (1995) county-wide NO_x emissions. Because these emissions may contribute to O_3 formation on a regional level, refer to Chapter 4 for a further discussion of the potential effects on regional air quality. Implementation of proposed new EPA emissions standards for locomotives will likely offset much of the estimated increase.

Crawford County

EPA has designated Crawford County as an attainment area for all pollutants, with no maintenance areas for any pollutant. Table 5-OH-19 shows that the net NO_x emissions increase in Crawford County, considering all calculated Acquisition-related emissions changes, is above

the emissions screening threshold of 100 tons per year used to determine if emissions changes are potentially significant.

The increased NO_x emissions in Crawford County are over one percent of the existing (1995) county-wide NO_x emissions. Because Crawford is a largely rural county with very low existing emissions, SEA does not expect that the relatively large percentage increase (over 11 percent) in NO_x emissions will have a significant adverse effect on ozone attainment in the county.

Table 5-OH-18
Ashtabula County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Buffalo FW, NY to Ashtabula, OH	128.04
Rail Segment (NS)	Ashtabula, OH to Cleveland, OH	216.10
Rail Segment (NS)	Youngstown, OH to Ashtabula, OH	278.37
Rail Segment (NS)	Ashtabula, OH to Ashtabula Harbor, OH	-4.96
Rail Segment (CSX)	Buffalo Seneca, NY to Ashtabula, OH	-18.70
Rail Segment (CSX)	Ashtabula, OH to Quaker, OH	24.16
Rail Yard (NS)	Ashtabula	-0.85
Rail Yard (CSX)	Ashtabula	-14.18
Truck Diversions (both)	County-wide	-6.19
At-Grade Crossings (both)	Affected Crossings >5000 Vehicles/Day[a]	0.10
Total Acquisition-Related Net NO_x Emissions Increase		601.89
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		10,362.59
Percent Increase in County NO_x Emissions		5.81%

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Table 5-OH-19
Crawford County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Bucyrus, OH to Fairgrounds Col, OH	77.29
Rail Segment (NS)	Bucyrus, OH to Bellevue, OH	122.25
Rail Segment (NS)	Alliance, OH to Crestline, OH	-7.78
Rail Segment (CSX)	Galion, OH to Columbus, OH	-7.95
Rail Segment (CSX)	Galion, OH to Marion, OH	2.81
Rail Segment (CSX)	Crestline, OH to Galion, OH	-27.47
Rail Segment (CSX)	Greenwich, OH to Crestline, OH	18.94
Rail Segment (CSX)	Crestline, OH to Bucyrus, OH	69.55
Rail Segment (CSX)	Bucyrus, OH to Adams, IN	42.08
Intermodal Facility (NS)	Crestline	-6.38
Truck Diversions (both)	County-wide	-3.94
At-Grade Crossings (both)	Affected Crossings >5000 Vehicles/Day[a]	0.15
Total Acquisition-Related Net NO_x Emissions Increase		279.55
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		2,408.77
Percent Increase in County NO_x Emissions		11.60%

[a] "Affected Crossings" are those with an increase in rail segment activity over the Board's air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Cuyahoga County

EPA has designated Cuyahoga County as a moderate nonattainment area for particulate matter (PM_{10}), and part of the county a nonattainment area for SO_2. EPA has designated the entire county as a maintenance area for O_3. The county meets air quality standards for other pollutants.

Table 5-OH-20 shows that the net NO_x emissions change in Cuyahoga County, considering all calculated Acquisition-relatedemissions changes, is above the emissions screening threshold of 100 tons/year used to determine if emissions changes are potentially significant. The increased NO_x emissions would be more than one percent of the existing county-wide NO_x emissions. Therefore, SEA found the net emissions increase to be potentially significant. Because these

emissions could contribute to O_3 formation on a regional level, refer to Chapter 4 for further discussion of the potential effects on regional air quality.

Table 5-OH-20
Cuyahoga County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Alliance, OH to White, OH	8.35
Rail Segment (NS)	White, OH to Cleveland, OH	150.69
Rail Segment (NS)	Cleveland, OH to Shortline Jct, OH	30.46
Rail Segment (NS)	Cleveland, OH to Vermilion, OH[a] (via Berea)	-233.30
Rail Segment (NS)	Ashtabula, OH to Cleveland, OH	253.43
Rail Segment (NS)	Cleveland, OH to Vermilion, OH	111.76
Rail Segment (CSX)	Lester, OH to Cleveland, OH	7.29
Rail Segment (CSX)	Berea, OH to Greenwich, OH	102.01
Rail Segment (CSX)	Ashtabula, OH to Quaker, OH	12.27
Rail Segment (CSX)	Quaker, OH to Drawbridge, OH	-240.61
Rail Segment (CSX)	Quaker, OH to Mayfield, OH	108.01
Rail Segment (CSX)	Mayfield, OH to Marcy, OH	189.84
Rail Segment (CSX)	Marcy, OH to Short, OH	236.60
Rail Segment (CSX)	Short, OH to Berea, OH	135.60
Rail Yard (NS)	Cleveland	0.02
Rail Yard (NS)	Cleveland - Rockport	3.24
Rail Yard (NS)	South Lorain	-0.61
Rail Yard (CSX)	Cleveland - Collinwood	-6.12
Rail Yard (CSX)	Cleveland - Brook Park	0.01
Rail Yard (CSX)	Cleveland - Parma	1.41
Rail Yard (CSX)	Cleveland - Clark Avenue	-1.44
Intermodal Facility (NS)	Cleveland - 9th at Orange	2.53
Intermodal Facility (CSX)	Cleveland - Collinwood	9.54
Truck Diversions (both)	County-wide	-94.81

Table 5-OH-20
Cuyahoga County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
At-Grade Crossings (both)	All Crossings	1.28
Total Acquisition-Related Net NO_x Emissions Increase		787.45
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		61,093.81
Percent Increase in County NO_x Emissions		1.29%

* Formerly Conrail.

For Cuyahoga County only, SEA completed a more detailed analysis of highway/rail at-grade crossing emissions. The analysis for all other counties considered emissions from just those highway/rail at-grade crossings with over 5000 vehicles per day on segments over the Board's thresholds for air quality analysis. For Cuyahoga County, the analysis considered all at-grade crossings on segments with any projected changes in trains per day, in order to determine whether the lower activity crossings would significantly affect emissions. Cuyahoga County was chosen for detailed analysis because it had the greatest amount of combined vehicle traffic and train traffic increases for at-grade crossings. The results for both NO_x and CO indicated that emissions of each pollutant were less than those for the greater than 5000 ADT crossings. (See attachment E-10 in Appendix E). SEA found that highway/rail at-grade crossings still represent a small component of the overall emissions, even with the addition of the lower activity crossings.

Table 5-OH-21 shows that the net CO emissions change in Cuyahoga County, considering all calculated Acquisition-related emissions changes, is over the screening level of 100 tons per year. However, the increase is below one percent of the existing (1995) CO emissions in Cuyahoga County. Therefore, SEA expects no potential adverse impacts are expected from these CO emissions.

Table 5-OH-21
Cuyahoga County Annual CO Emissions Summary

Activity Type (RR)	Identification	CO Emissions (tons/year)
Rail Segment (NS)	Alliance, OH to White, OH	0.93
Rail Segment (NS)	White, OH to Cleveland, OH	16.73

Table 5-OH-21
Cuyahoga County Annual CO Emissions Summary

Activity Type (RR)	Identification	CO Emissions (tons/year)
Rail Segment (NS)	Cleveland, OH to Shortline Jct, OH	3.38
Rail Segment (NS)	Cleveland, OH to Vermilion, OH[a] (via Berea)	-25.91
Rail Segment (NS)	Ashtabula, OH to Cleveland, OH	28.14
Rail Segment (NS)	Cleveland, OH to Vermilion, OH	12.41
Rail Segment (CSX)	Lester, OH to Cleveland, OH	0.81
Rail Segment (CSX)	Berea, OH to Greenwich, OH	11.33
Rail Segment (CSX)	Ashtabula, OH to Quaker, OH	1.36
Rail Segment (CSX)	Quaker, OH to Drawbridge, OH	-26.72
Rail Segment (CSX)	Quaker, OH to Mayfield, OH	11.99
Rail Segment (CSX)	Mayfield, OH to Marcy, OH	21.08
Rail Segment (CSX)	Marcy, OH to Short, OH	26.27
Rail Segment (CSX)	Short, OH to Berea, OH	15.06
Rail Yard (NS)	Cleveland - Rockport	0.37
Rail Yard (NS)	South Lorain	-0.07
Rail Yard (CSX)	Cleveland - Collinwood	-0.74
Rail Yard (CSX)	Cleveland - Parma	0.17
Rail Yard (CSX)	Cleveland - Clark Avenue	-0.17
Intermodal Facility (NS)	Cleveland - 9th at Orange	1.50
Intermodal Facility (CSX)	Cleveland - Collinwood	5.94
Truck Diversions (both)	County-wide	-41.57
At-Grade Crossings (both)	All Crossings	53.89
Total Acquisition-Related Net CO Emissions Increase		116.18
CO Emissions Screening Level		100.00
Existing (1995) County Total CO Emissions		408,487.36
Percent Increase in County CO Emissions		0.03%

[a] Formerly Conrail.

Defiance County

EPA has designated Defiance County as an attainment area for all pollutants, with no maintenance areas. Table 5-OH-22 shows that the net NO_x emissions increase in Defiance County, considering all calculated Acquisition-relatedemissions changes, is above the emissions screening threshold of 100 tons per year used to determine if emissions changes are potentially significant.

The increased NO_x emissions in Defiance County are well over one percent of the existing (1995) county-wide NO_x emissions. However, Defiance County does not currently have, nor has it had, an O_3 nonattainment problem. Given the very low existing NO_x emissions and the O_3 attainment status of the county, SEA expects no potential adverse air quality impact in this county, despite the relatively large (26.9 percent) increase in county NO_x emissions.

Table 5-OH-22
Defiance County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (CSX)	Deshler, OH to Willow Creek, IN	584.25
Truck Diversions (CSX)	County-wide	-0.01
At-Grade Crossings	Affected Crossings >5000 Vehicles/Day [a]	0.08
Total Acquisition-Related Net NO_x Emissions Increase		584.3
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		2,172.39
Percent Increase in County NO_x Emissions		26.90%

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Delaware County

EPA has designated Delaware County as an attainment area for all other pollutants, and a maintenance area for O_3. Table 5-OH-23 shows the emissions increase in Delaware County, considering all calculated Acquisition-related emissions changes, is below the emissions screening threshold of 100 tons per year used to determine if emissions changes are potentially significant. Therefore, SEA did not perform further analysis for Delaware County.

Table 5-(
Delaware County Annual N

Activity Type (RR)	Identi
Rail Segment (NS)	Bucyrus, OH to Fairgro
Rail Segment (CSX)	Columbus, OH to Maric
Rail Segment (CSX)	Galion, OH to Columbu
Truck Diversions (both)	County-wide
Total Acquisition-Related Net NO_x Emissions Increase	
NO_x Emissions Screening Level	

Erie County

EPA has designated Erie County as an attainmer
areas for any pollutant. Table 5-OH-24 shows tha
considering all calculated Acquisition-related
screening threshold of 100 tons/year used to de
significant. Therefore, SEA did not perform furt

Table 5-(
Erie County Annual NO

Activity Type (RR)	Iden
Rail Segment (NS)	Cleveland, OH to Ver
Rail Segment (NS)	Vermilion, OH to Oak
Rail Segment (NS)	Bellevue, OH to Sandu
Rail Segment (NS)	Cleveland, OH to Ver
Rail Segment (NS)	Vermilion, OH to Bell
Rail Yard (NS)	Erie - Bellevue
Intermodal Facility (NS)	Erie - Bellevue (new c
Truck Diversions (both)	County-wide
At-Grade Crossings (both)	Affected Crossings >5
Total Acquisition-Related Net NO_x Emissions Change	
NO_x Emissions Screening Level	

[a] Formerly Conrail.
[b] "Affected Crossings" are those with an increase in
thresholds, and which have vehicle traffic levels o

H-23
O_x Emissions Summary

ication	NO_x Emissions (tons/year)
nds Col, OH	203.82
ı, OH	34.76
, OH	-132.48
	-32.82
	73.28
	100.00

area for all pollutants, with no maintenance
the net NO_x emissions change in Erie County,
missions changes, is below the emissions
ermine if emissions changes are potentially
ıer analysis for this county.

)H-24
Emissions Summary

ification	NO_x Emissions (tons/year)
lion, OH[a] (via Berea)	-18.92
Harbor, OH	-192.91
ky Dock, OH	42.95
ion, OH	13.34
vue, OH	190.84
	-17.31
nstruction)	7.57
	-106.72
00 Vehicles/Day[b]	0.08
	-81.08
	100.00

ail segment activity over Board air quality analysis
r 5000 vehicles/day.

Hardin County

EPA has designated Hardin County as an attainment area for all pollutants, and a maintenance area for O_3. Table 5-OH-25 shows that the net NO_x emissions change in Hardin County, considering all calculated Acquisition-related emissions changes, is below the emissions screening threshold of 100 tons/year used to determine if emissions changes are potentially significant. Therefore, SEA did not perform further analysis.

Table 5-OH-25
Hardin County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (CSX)	Marion, OH to Ridgeway, OH	41.15
Rail Segment (CSX)	Ridgeway, OH to Sidney, OH	2.81
Rail Segment (CSX)	Stanley, OH to Dunkirk, OH	-16.29
Rail Segment (CSX)	Dunkirk, OH to Ridgeway, OH	-156.21
Rail Segment (CSX)	Ridgeway, OH to Marysville, OH	-2.03
Rail Segment (CSX)	Bucyrus, OH to Adams, IN	119.23
Rail Yard (CSX)	Kenton	0.43
Truck Diversions (both)	County-wide	-1.14
At-Grade Crossings (both)	Affected Crossings >5000 Vehicles/Day[a]	0.02
Total Acquisition-Related Net NO_x Emissions Change		-12.03
NO_x Emissions Screening Level		100.00

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Henry County

EPA has designated Henry County as an attainment area for all pollutants, with no maintenance areas for any pollutant. Table 5-OH-26 shows that the net NO_x emissions increase in Henry County, considering all calculated Acquisition-relatedemissions changes, is above the emissions screening threshold of 100 tons per year used to determine if emissions changes are potentially significant.

The increased NO_x emissions in Henry County are well over one percent of the existing (1995) county-wide NO_x emissions. However, Henry County is a largely rural area, so its existing NO_x

emissions are very small in comparison to urban areas that have O_3 nonattainment problems. Given the current low existing NO_x emissions and current O_3 attainment status of the county, SEA expects no potential adverse impact despite the large percentage increase in NO_x emissions.

Table 5-OH-26
Henry County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (CSX)	Deshler, OH, to Toledo, OH	45.98
Rail Segment (CSX)	Deshler, OH, to Willow Creek, IN	355 13
Rail Segment (CSX)	Fostoria, OH, to Deshler, OH	4.21
Rail Segment (CSX)	Lima, OH, to Deshler, OH	-5.61
Truck Diversions (both)	County-Wide	-0.05
Total Acquisition-Related Net NO_x Emissions Increase		399.66
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		1,826.80
Percent Increase in County NO_x Emissions		21.88%

Huron County

EPA has designated Huron County as an attainment area for all pollutants, with no maintenance areas for any pollutant. Table 5-OH-27 shows that the net NO_x emissions increase in Huron County, considering all calculated Acquisition-related emissions changes, is above the emissions screening threshold of 100 tons per year used to determine if emissions changes are potentially significant.

The increased NO_x emissions in Huron County are well over one percent of the existing (1995) county-wide NO_x emissions. Because Huron is a largely rural county with very low existing emissions, SEA does not expect that the relatively large percentage increase (nearly 25 percent) in NO_x emissions would have a significant adverse effect on ozone attainment in the county.

Table 5-OH-27
Huron County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Bucyrus, OH to Bellevue, OH	5.44
Rail Segment (NS)	Bellevue, OH to Sandusky Dock, OH	3.96
Rail Segment (NS)	Vermilion, OH to Bellevue, OH	13.43
Rail Segment (NS)	Oak Harbor, OH to Bellevue, OH	1.28
Rail Segment (CSX)	Willard, OH to Fostoria, OH	122.04
Rail Segment (CSX)	Greenwich, OH to Willard, OH	239.56
Rail Segment (CSX)	Sterling, OH to Greenwich, OH	11.18
Rail Segment (CSX)	Berea, OH to Greenwich, OH	348.04
Rail Segment (CSX)	Greenwich, OH to Crestline, OH	42.08
Rail Yard (CSX)	Willard	-24.50
At-Grade Crossings (both)	Affected Crossings >5000 Vehicles/Day[a]	0.02
Total Acquisition-Related Net NO_x Emissions Increase		762.53
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		3,071.06
Percent Increase in County NO_x Emissions		24.83%

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Lake County

EPA has designated part of Lake County as a nonattainment area for SO_2, and the whole county as a maintenance area for O_3. Table 5-OH-28 shows that the net NO_x emissions increase in Lake County, considering all calculated Acquisition-related emissions changes, is above the emissions screening threshold of 100 tons per year used to determine if emissions changes are potentially significant.

The increased NO_x emissions in Lake County are over one percent of the existing (1995) county-wide NO_x emissions. Because these emissions could contribute to O_3 formation on a regional level, refer to Chapter 4 for further discussion of the potential effects on regional air quality.

SEA anticipates that implementation of proposed new EPA emissions standards for locomotives could offset the estimated increase.

Table 5-OH-28
Lake County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Ashtabula, OH to Cleveland, OH	507.02
Rail Segment (CSX)	Ashtabula, OH to Quaker, OH	54.55
Truck Diversions (CSX)	County-wide	-5.43
At-Grade Crossings	Affected Crossings >5000 Vehicles/Day[a]	0.39
Total Acquisition-Related Net NO_x Emissions Increase		556.53
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		24,913.79
Percent Increase in County NO_x Emissions		2.23%

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Lorain County

EPA has designated part of Lorain County as a nonattainment area for SO_2, and the whole county as a maintenance area for O_3. Table 5-OH-29 shows that the net NO_x emissions change in Lorain County, considering all calculated Acquisition-related emissions changes, is above the emissions screening threshold of 100 tons per year used to determine if emissions changes are potentially significant.

The increased NO_x emissions in Lorain County are over one percent of the existing (1995) county-wide NO_x emissions. Because these emissions could contribute to O_3 formation on a regional level, refer to Chapter 4 for further discussion of the potential effects on regional air quality. SEA anticipates that implementation of proposed new EPA emissions standards for locomotives could offset the estimated increase.

Table 5-OH-29
Lorain County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Cleveland, OH, to Vermilion, OH (former CR)	-257.26
Rail Segment (NS)	Cleveland, OH, to Vermilion, OH	176.81
Rail Segment (NS)	Sheffield Yard, OH, to South Lorain, OH	0.65
Rail Segment (CSX)	Lester, OH, to Cleveland, OH	0.27
Rail Segment (CSX)	Berea, OH, to Greenwich, OH	813.09
Truck Diversions (both)	County-Wide	-85.93
At-Grade Crossings (both)	Affected Crossings >5000 Vehicles/Day[a]	0.38
Total Acquisition-Related Net NO_x Emissions Increase		648.01
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		31,158.92
Percent Increase in County NO_x Emissions		2.08%

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Table 5-OH-30 shows that the net CO emissions change in Lorain County, considering all calculated Acquisition-related emissions changes, is below the screening level of 100 tons per year used to determine if emissions changes are potentially significant. Additionally, the table shows that most of the estimated CO emissions are associated with rail line segments and would be widely dispersed. Therefore, SEA does not anticipate potential adverse impacts from these CO emissions.

Table 5-OH-30
Lorain County Annual CO Emissions Summary

Activity Type (RR)	Identification	CO Emissions (tons/year)
Rail Segment (NS)	Cleveland, OH to Vermilion, OH (former CR)	-28.57
Rail Segment (NS)	Cleveland, OH to Vermilion, OH	19.64
Rail Segment (NS)	Sheffield Yard, OH to South Lorain, OH	0.07
Rail Segment (CSX)	Lester, OH to Cleveland, OH	0.03

Table 5-OH-30
Lorain County Annual CO Emissions Summary

Activity Type (RR)	Identification	CO Emissions (tons/year)
Rail Segment (CSX)	Berea, OH to Greenwich, OH	90.30
Truck Diversions (both)	County-wide	-37.68
At-Grade Crossings (both)	Affected Crossings >5000 Vehicles/Day[a]	16.05
Total Acquisition-Related Net CO Emissions Increase		59.84
CO Emissions Screening Level		100.00

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Lucas County

EPA has designated part of Lucas County as a nonattainment area for SO_2, and the whole county as a maintenance area for O_3.

Table 5-OH-31 shows that the net NO_x emissions change in Lucas County, considering all calculated Acquisition-related emissions changes, is below the screening level of 100 tons per year used to determine if emissions changes are potentially significant. Therefore, SEA did not perform further analysis for this county.

Table 5-OH-31
Lucas County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Milan, MI, to Homestead, OH	-15.49
Rail Segment (NS)	Homestead, OH, to Oak Harbor, OH	-15.59
Rail Segment (NS)	Oak Harbor, OH, to Miami, OH	13.19
Rail Segment (NS)	Airline, OH, to Butler, IN	-102.36
Rail Segment (NS)	Miami, OH, to Airline, OH	9.54
Rail Segment (NS)	Airline, OH, to River Rouge, MI	6.44
Rail Segment (CSX)	Carleton, MI, to Toledo, OH	57.98
Rail Segment (CSX)	Deshler, OH, to Toledo, OH	103.26

Table 5-OH-31
Lucas County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (CSX)	Fostoria, OH, to Toledo, OH	16.65
Rail Segment (CSX)	CP Maumee, OH, to Oak, OH	-17.47
Rail Yard (NS)	Airline	24.31
Rail Yard (NS)	Homestead	6.69
Rail Yard (CSX)	Toledo - Walbridge	-45.28
Intermodal Facility (NS)	Toledo	4.30
Truck Diversions (both)	County-Wide	-53.34
At-Grade Crossings (both)	Affected Crossings >5000 Vehicles/Day[a]	0.02
Total Acquisition-Related Net NO_x Emissions Change		-4.91
NO_x Emissions Screening Level		100.00

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Marion County

EPA has designated Marion County as an attainment area for all pollutants, with no maintenance areas for any pollutant. Table 5-OH-32 shows that the net NO_x emissions increase in Marion County, considering all calculated Acquisition-related emissions changes, is above the emissions screening threshold of 100 tons per year used to determine if emissions changes are potentially significant.

The increased NO_x emissions in Marion County are above one percent of the existing (1995) county-wide NO_x emissions. Because Marion is a largely rural county with low existing emissions, SEA does not expect that the relatively large percentage increase (nearly 11 percent) in NO_x emissions would have a significant adverse effect on ozone attainment in the county. See Chapter 4, "System-wide and Regional Setting, Impacts and Proposed Mitigation," for a discussion of system-wide and regional air quality.

Table 5-OH-32
Marion County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Bucyrus, OH, to Fairground Col. OH	183.07
Rail Segment (CSX)	Marion, OH, to Fostoria, OH	82.45
Rail Segment (CSX)	Columbus, OH, to Marion, OH	16.83
Rail Segment (CSX)	Galion, OH, to Marion, OH	19.40
Rail Segment (CSX)	Marion, OH, to Ridgeway, OH	67.33
Rail Yard (CSX)	Marion	-0.79
Rail Yard (CSX)	Marion	-0.34
At-Grade Crossings (both)	Affected Crossings >5000 Vehicles/Day	0.17
Total Acquisition-Related Net NO_x Emissions Increase		368.12
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		3,428.83
Percent Increase in County NO_x Emissions		10.73%

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Richland County

EPA has designated Richland County as an attainment area for all pollutants, with no maintenance areas for any pollutant. Table 5-OH-33 shows that the net NO_x emissions change in Richland County, considering all calculated Acquisition-related emissions changes, is below the screening level of 100 tons per year used to determine if emissions changes are potentially significant. Therefore, SEA did not perform further analysis for this county.

Table 5-OH-33
Richland County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Alliance, OH to Crestline, OH	-270.22
Rail Segment (CSX)	Greenwich, OH to Crestline, OH	162.02
Truck Diversions (both)	County-wide	-30.23
At-Grade Crossings (both)	Affected Crossings >5000 Vehicles/Day[a]	0.05
Total Acquisition-Related Net NO_x Emissions Change		-138.40
NO_x Emissions Screening Level		100.00

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Sandusky County

EPA has designated Sandusky County as an attainment area for all pollutants, with no maintenance areas for any pollutant. Table 5-OH-34 shows that the net NO_x emissions increase in Sandusky County, considering all calculated Acquisition-related emissions changes, is above the emissions screening threshold of 100 tons per year used to determine if emissions changes are potentially significant.

The increased NO_x emissions in Sandusky County are above one percent of the existing (1995) county-wide NO_x emissions. Because Sandusky is a mostly rural county with low existing emissions, SEA does not expect that the 4.4 percent increase in NO_x emissions would have a significant adverse effect on ozone attainment in the county. See Chapter 4, "System-wide and Regional Setting, Impacts and Proposed Mitigation," for a discussion of system-wide and regional air quality.

Table 5-OH-34
Sandusky County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Bucyrus, OH, to Bellevue, OH	7.29
Rail Segment (NS)	Bellevue, OH, to Ft Wayne, IN	9.64
Rail Segment (NS)	Oak Harbor, OH, to Bellevue, OH	289.69
Truck Diversions (both)	County-Wide	-96.19
At-Grade Crossings (both)	Affected Crossings >5000 Vehicles/Day[a]	0.34
Total Acquisition-Related Net NO_x Emissions Increase		210.77
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		4,782.55
Percent Increase in County NO_x Emissions		4.41%

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Seneca County

EPA has designated Seneca County as an attainment area for all pollutants, with no maintenance areas for any pollutant. Table 5-OH-35 shows that the net NO_x emissions increase in Seneca County, considering all calculated Acquisition-related emissions changes, is above the emissions screening threshold of 100 tons per year used to determine if emissions changes are potentially significant.

The increased NO_x emissions in Seneca County are well over one percent of the existing (1995) county-wide NO_x emissions. Because Seneca County is a mostly rural county with very low existing emissions, SEA does not expect that the relatively large percentage increase (nearly 29 percent) in NO_x emissions would have a significant adverse effect on ozone attainment in the county.

Table 5-OH-35
Seneca County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Bucyrus, OH, to Bellevue, OH	249.11
Rail Segment (NS)	Bellevue, OH, to Ft Wayne, IN	23.88
Rail Segment (CSX)	Willard, OH, to Fostoria, OH	652.28
Rail Segment (CSX)	Fostoria, OH, to Deshler, OH	3.51
Rail Segment (CSX)	Marion, OH, to Fostoria, OH	105.75
Rail Segment (CSX)	Fostoria, OH, to Toledo, OH	20.11
Total Acquisition-Related Net NO_x Emissions Increase		984.15
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		3,430.54
Percent Increase in County NO_x Emissions		28.69%

Trumbull County

EPA has designated Trumbull County as an attainment area for all pollutants, and as a maintenance area for O_3.

Table 5-OH-36 shows that the net NO_x emissions change in Trumbull County, considering all calculated Acquisition-related emissions changes, is above the screening level of 100 tons per year used to determine if emissions changes are potentially significant. The increased NO_x emissions in Trumbull County are over one percent of the existing (1995) county-wide NO_x emissions. Since these emissions could contribute to ozone formation on a regional level, refer to Chapter 4, "System-wide and Regional Setting, Impacts and Proposed Mitigation," for further discussion of the potential effects on regional air quality. SEA anticipates that implementation of proposed new EPA emissions standards for locomotives could offset the estimated increase.

Table 5-OH-36
Trumbull County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Youngstown, OH, to Ashtabula, OH	249.11
Rail Segment (NS)	Hubbard, OH, to Oil City, PA	-0.71
Rail Segment (NS)	Youngstown, OH, to Alliance, OH	-1.43
Rail Segment (NS)	Latimer, OH, to Warren, OH	-5.96
Rail Segment (CSX)	Youngstown, OH, to Sterling, OH	74.81
Rail Yard (CSX)	Lordstown	-1.30
Truck Diversions (both)	County-Wide	-101.21
Total Acquisition-Related Net NO_x Emissions Increase		213.31
NO_x Emissions Screening Level		100.00
Existing County (1995) Total NO_x Emissions		18,338.25
Percent Increase in County NO_x Emissions		1.16%

Van Wert County

EPA has designated Van Wert County as an attainment area for all pollutants, with no maintenance areas for any pollutant. Table 5-OH-37 shows that the net NO_x emissions increase in Van Wert County, considering all calculated Acquisition-related emissions changes, is above the emissions screening threshold of 100 tons per year used to determine if emissions changes are potentially significant.

The increased NO_x emissions in Van Wert County are above one percent of the existing (1995) county-wide NO_x emissions. However, Van Wert County is a rural county, and does not have, nor has it had, an O_3 nonattainment problem. Given the very low existing NO_x emissions and the O_3 attainment status of the county, SEA does not expect potential adverse air quality impacts in this county, despite the 7.64 percent increase in county NO_x emissions. See Chapter 4, "System-wide and Regional Setting, Impacts and Proposed Mitigation," for a discussion of system-wide and regional air quality.

Table 5-OH-37
Van Wert County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (CSX)	Bucyrus, OH, to Adams, IN	148.46
Truck Diversions (CSX)	County-Wide	-11.41
At-Grade Crossings	Affected Crossings >5000 Vehicles/Day[a]	0.03
Total Acquisition-Related Net NO_x Emissions Increase		137.08
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		1,795.19
Percent Increase in County NO_x Emissions		7.64%

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day

Wood County

EPA has designated Wood County as an attainment area for all pollutants, with a maintenance area for O_3. Table 5-OH-38 shows that the net NO_x emissions increase in Wood County, considering all calculated Acquisition-related emissions changes, is above the emissions screening threshold of 100 tons per year used to determine if emissions changes are potentially significant.

The net NO_x emissions increase in Wood County, considering all calculated Acquisition-related emissions changes, is above one percent of the existing (1995) county-wide NO_x emissions. Because these emissions could contribute to O_3 formation on a regional level, refer to Chapter 4 for further discussion of the potential effect on regional air quality. SEA anticipates implementation of proposed new EPA emissions standards for locomotives could offset the estimated increase.

Table 5-OH-38
Wood County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (NS)	Oak Harbor, OH to Miami, OH	53.51
Rail Segment (CSX)	Deshler, OH to Toledo, OH	644.88
Rail Segment (CSX)	Fostoria, OH to Deshler, OH	64.18
Rail Segment (CSX)	Fostoria, OH to Toledo, OH	127.18
Rail Segment (CSX)	Oak, OH to Walbridge, OH	-39.39
Rail Segment (CSX)	Stanley, OH to Dunkirk, OH	-232.25
Rail Yard (CSX)	Stanley	22.77
Truck Diversions (both)	County-wide	-75.46
At-Grade Crossings (both)	Affected Crossings >5000 Vehicles/Day[a]	0.16
Total Acquisition-Related Net NO_x Emissions Increase		565.63
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		6,530.41
Percent Increase in County NO_x Emissions		8.66%

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

Wyandot County

EPA has designated Wyandot County as an attainment area for all pollutants, with no maintenance areas for any pollutant. Table 5-OH-39 shows that the net NO_x emissions increase in Wyandot County, considering all calculated Acquisition-related emissions changes, is above the emissions screening threshold of 100 tons per year used to determine if emissions changes are potentially significant.

The increased NO_x emissions in Wyandot County are over one percent of the existing (1995) county-wide NO_x emissions. However, Wyandot County is a rural county, and does not have, nor has it had, an O_3 nonattainment problem. Given the very low existing NO_x emissions and the O_3 attainment status of the county, SEA expects no potential adverse air quality impact in this county, despite the 25 percent increase in NO_x emissions. See Chapter 4, "System-wide and Regional Setting, Impacts and Proposed Mitigation," for a discussion of system-wide and regional air quality.

Table 5-OH-39
Wyandot County Annual NO_x Emissions Summary

Activity Type (RR)	Identification	NO_x Emissions (tons/year)
Rail Segment (CSX)	Bucyrus, OH to Adams, IN	117.48
Rail Segment (CSX)	Marion, OH to Fostoria, OH	199.85
At-Grade Crossings	Affected Crossings >5000 Vehicles/Day[a]	0.02
Truck Diversions (both)	County-wide	-3.24
Total Acquisition-Related Net NO_x Emissions Increase		314.10
NO_x Emissions Screening Level		100.00
Existing (1995) County Total NO_x Emissions		1,250.46
Percent Increase in County NO_x Emissions		25.12%

[a] "Affected Crossings" are those with an increase in rail segment activity over Board air quality analysis thresholds, and which have vehicle traffic levels over 5000 vehicles/day.

5-OH.12.2 Summary of Potential Effects and Preliminary Mitigation

While there are localized increases in emissions in some counties, the increases are not likely to affect compliance with air quality standards. Therefore, SEA has determined that air quality will not be significantly affected and no mitigation is necessary. See system-wide and regional discussion in Section 4.12 "Air Quality."

5-OH.13 OHIO NOISE

To analyze the potential noise impacts of the proposed Acquisition, SEA evaluated rail line segments, rail yards and intermodal facilities that would meet or exceed the Board's thresholds for environmental analysis of noise. Although new construction projects and rail line abandonments can result in noise increases, the noise effects would be temporary and therefore, SEA did not evaluate them.

5-OH.13.1 Proposed Activities

Train noise sources include diesel locomotive engine and wheel/rail interaction noise (or wayside noise) and horn noise. Wayside noise affects all locations in the vicinity of the rail facility, and generally diminishes with distance from the source. Horn noise is an additional noise source at grade crossings, and also generally diminishes with distance. SEA performed an analysis to identify rail line segments, rail yards and intermodal facilities where the proposed changes in

operations meet or exceed the Board's environmental analysis thresholds at 49 CFR 1105.7(e)(6). Where the proposed rail activity would exceed these thresholds, SEA calculated the 65 dBA L_{dn} noise contours for the pre- and post-Acquisition conditions. SEA based the noise level impact assessment on the projected activity level data provided by the railroads. SEA counted sensitive receptors (e.g., schools, libraries, hospitals, residences, retirement communities, and nursing homes) within the noise contours for both pre-Acquisition and post-Acquisition operating conditions.

The CSX and NS rail line segments, intermodal facilities and rail yards that would experience increases in traffic or activity meeting the Board's environmental analysis thresholds for Ohio are listed in Tables 5-OH-40 and 5-OH-41. Table 5-OH-42 shows the facilities with noise sensitive receptors exceeding 65 dBA L_{dn}.

The counties where these facilities are located are listed in Section 5-OH.2 on Proposed Conrail Acquisition Activities in Ohio.

5-OH.13.2 Summary of Potential Effects and Preliminary Recommended Noise Mitigation

There are different noise mitigation techniques used to reduce horn noise and wayside noise. These different types of noise and mitigation techniques are as follows:

Grade Crossing Noise Effects. The Federal Railroad Administration (FRA) has indicated that it will propose new rules on train horn blowing procedures in 1998. These new rules may allow communities to apply for an exception to horn blowing at certain grade crossings that meet explicit criteria. These criteria relate to so-called "quiet zones" where FRA would no longer require train engineers to sound the train horn at grade crossings with special upgraded safety features. Examples of such safety features include four-quadrant gates and median barriers that preclude motorists from entering the crossings while the crossing arm is down. Until FRA develops and implements these regulations, these measures are not feasible for SEA to require as mitigation. However, communities will have the opportunity to qualify for "quiet zones" once the FRA regulations are in place.

Table 5-OH-41
Intermodal Facilities and Rail Yards in Ohio that Meet or Exceed the Board's Thresholds for Noise Analysis

Site ID	Facility Location	Trucks Per Day		Percent Change in ADT on local roads	Change in dBA	Approx. distance (feet) to 65 dBA L_{dn} contour
		Pre-Acquisition	Post Acquisition			
Intermodal Facilities						
NM-11[a]	Bellevue	0	65	N/A	N/A	69
NM-12[a]	Columbus-Discovery Park	131	184	0.1 - 3.5	< 2	---
Rail Yards		**Rail Cars Per Day**				
NY-06	Conneaut	30	74	145	3.9	500
NY-08[a]	Toledo Airline Jct.	0	520	N/A	< 2	---

[a] SEA determined that the increase in noise due to increased rail activity was insignificant and receptor counts were unnecessary. Refer to the screening methodology in Appendix F for additional detail.

Table 5-OH-42
Noise Sensitive Receptors In Ohio Exceeding 65 dBA L_{dn}

Site ID	Name	Pre-Acquisition	Post-Acquisition	Increase
Rail Line Segments				
C-061	Berea-Greenwich	713	1734	1021
C-062	Bucyrus-Adams, IN	759	1685	926
C-064	Crestline-Bucyrus	96	201	105
C-065	Deshler-Toledo	128	1423	1295
C-066	Deshler-Willow Creek, IN	668	1152	484
C-067	Greenwich-Crestline	531	851	320
C-068	Greenwich-Willard	285	392	107
C-069	Marcy-Short	142	377	235
C-071	Marion-Ridgeway	301	517	216
C-072	Mayfield-Marcy	98	317	219
C-073	Quaker-Mayfield	169	423	254
C-074	Short-Berea	275	819	544
C-075	Willard-Fostoria	1145	1469	324
N-070	Ashtabula-Buffalo, NY	1641	2400	770
N-072	Bellevue-Vermilion	157	238	81
N-074	Cleveland-Shortline Jct.	0	21	21

Table 5.OH-40
Rail Line Segments That Meet or Exceed Board Thresholds for Noise Analysis

Site ID	Segment		Trains Per Day			Percent Change in Gross Ton Miles
	From	To	Pre-Acquisition	Post-Acquisition	Increase	
C-040[a]	Carleton, MI	Toledo	21.9	33.1	11.2	60
C-061	Berea	Greenwich	14.5	54.2	39.6	248
C-062	Bucyrus	Adams, IN	5.9	13.9	8.0	375
C-064	Crestline	Bucyrus	6.5	14.5	8.0	375
C-065	Deshler	Toledo	0.6	14.2	13.6	N/A
C-066	Deshler	Willow Creek, IN	21.4	47.7	26.3	109
C-067	Greenwich	Crestline	14.5	31.3	16.8	87
C-068	Greenwich	Willard	32.5	55.2	22.7	95
C-069	Marcy	Short	16.4	45.8	29.4	265
C-070[a]	Marion	Fostoria	17.8	27.4	9.6	58
C-071	Marion	Ridgeway	16.1	31.8	15.7	31
C-072	Mayfield	Marcy	3.4	43.8	40.4	933
C-073	Quaker	Mayfield	6.8	43.8	37.0	933
C-074	Short	Berea	13.4	47.3	33.8	580
C-075	Willard	Fostoria	32.5	54.0	21.5	96
N-070	Ashtabula	Buffalo, NY	13	25.2	12.2	120
N-071[a]	Bellevue	Bucyrus	26.0	34.6	8.6	39
N-072	Bellevue	Vermilion	15.6	27	11.4	64
N-073[a]	Bucyrus	Fairgrounds Col	26.0	34.3	8.3	41
N-074	Cleveland	Shortline Jt.	2.0	4.0	2.2	N/A
N-075	Cleveland	Ashtabula	13.0	36.6	23.6	214
N-077[a]	Oak Harbor	Miami	48.0	61.5	13.5	20
N-079	Oak Harbor	Bellevue	7.7	27.2	19.5	276
N-080	Vermilion	Cleveland	13.5	34.1	20.6	81
N-081	White	Cleveland	12.5	29.7	17.2	131
N-082	Youngstown	Ashtabula	11.7	23.8	12.1	76
N-085	Bellevue	Sandusky Dock	1.4	11.7	10.3	139
N-086[a]	Miami	Airline	55.4	64.0	8.6	9

[a] SEA determined that the increase in noise due to increased rail activity was insignificant and receptor counts were unnecessary. Refer to the screening methodology in Appendix F for additional detail.

Table 5-OH-42
Noise Sensitive Receptors In Ohio Exceeding 65 dBA L_{dn}

Site ID	Name	Pre-Acquisition	Post-Acquisition	Increase
Rail Line Segments				
N-075	Cleveland-Ashtabula	619	1626	1009
N-079	Oak Harbor-Bellevue	159	326	167
N-080	Vermilion-Cleveland	2194	4439	2245
N-081	White-Cleveland	30	61	31
N-082	Youngstown-Ashtabula	129	213	84
N-085	Bellevue-Sandusky Dock	3	47	44
Rail Yards				
NY-06	Conneaut	18	37	19

Wayside Noise Effect. Wayside noise is the sound of a train as it passes by. Wayside noise is comprised of steel wheel/ rail interaction noise, and locomotive diesel engine noise. This type of noise can be reduced by constructing barriers between the railway noise source and adjoining land uses, and by installing building sound insulation. Noise barriers include earth berms and walls that block the sound. Rail lubrication can be used to reduce "wheel squeal" noise on curved track. Building sound insulation consists of special windows and other building treatments that reduce interior noise. Noise barriers are the preferred type of noise mitigation for this project since barriers can be built on railroad property. Additional discussion of noise mitigation measures is included in Appendix F, "Noise Methods."

As noted above, for receptors near grade crossings that would experience increases in noise resulting from horn sounding, mitigation is not currently feasible. For areas affected by wayside noise, SEA considered rail line segments eligible for noise mitigation for noise sensitive receptors exposed to at least 70 dBA L_{dn} and an increase of at least 5 dBA L_{dn} due to increased rail activity.

It is SEA's preliminary conclusion that the following rail line segments in the state of Ohio potentially warrant noise mitigation according to the project mitigation criteria:

- C-061 Berea to Greenwich.
- C-065 Deshler to Toledo.
- C-072 Mayfield to Marcy.
- C-073 Quaker to Mayfield.
- C-074 Short to Berea.

- N-079 Oak Harbor to Bellevue.

Receptors exposed to 70 dBA L_{dn} and a 5 dBA L_{dn} (from wayside noise) would be a subset of all receptors along these rail line segments.

SEA's preliminary recommendation is that CSX and NS shall meet with communities along the above rail line segments negotiate a mutually-acceptable binding agreement to implement measures to reduce the effects of engine and wheel noise for sensitive receptors experiencing noise levels above 70 decibels (dBA L_{dn}) and with an increase of 5 dBA or more. Appropriate measures could include noise barriers, sound insulation for buildings, or rail lubrication. If a mutually-acceptable binding agreement has not been reached prior to the release of the Final EIS, SEA may recommend that the Board, as a condition of the approval of the Application, direct CSX and NS to implement noise control measures on these rail line segments.

SEA recognizes the complexity of implementing noise abatement along rail line segments and invites public comment on the appropriateness, nature and location of mitigation measures. The Final EIS will include more detailed information for areas along these rail line segments that potentially warrant noise mitigation. For example, this information will include areas where noise barriers may be effective in reducing wayside noise.

There are no rail yards or intermodal facilities in Ohio that warrant noise mitigation, according to project mitigation criteria.

5-OH.14 OHIO CULTURAL RESOURCES

Cultural resources include historic and archaeological features. SEA determined that potential effects to cultural resources would most likely occur during new construction and rail line proposed abandonment activities that meet or exceed the Board's thresholds for environmental analysis.

Based on site visits and evaluation of railroad documents, SEA identified cultural resources that may be affected by Acquisition-related construction. SEA included qualified professionals in the fields of architectural history and archaeology specific to the State of Ohio. SEA presented its preliminary results and methodology in a meeting with the Ohio State Preservation Office (SHPO) on July 25, 1997.

5-OH.14.1 Constructions

SEA identified cultural resources at each of the construction locations in Ohio. On October 17, 1997, SEA presented to the Ohio SHPO documentation supporting the findings presented below. The Advisory Council on Historic Preservation's criteria for adverse effect are shown in italicized text whenever appropriate.

Construction: Collinwood New Intermodal Facility (Cuyahoga County, OH) (CSX)

Historical Background. The Conrail line is part of Conrail's Lakeshore route between Buffalo and Chicago and has some of the highest rail traffic in Ohio. Like many rail lines between major eastern and midwestern cities, this rail line was composed of a series of smaller roads linked end-to-end and later consolidated under a single company's control. The first of the rail lines that would become the Buffalo-Chicago line was the Cleveland, Painesville and Ashtabula (CP&A), chartered in 1848. By 1852 this road linked Cleveland and Erie, Pennsylvania, and passed through the rural area east of Cleveland where Collinwood would later be established. From Erie, the Buffalo and State Line and Erie and North East railroads ran through to Buffalo. West of Cleveland, the Cleveland and Toledo Railroad was completed in 1853, and by that same year the Northern Indiana Railroad provided a connection west from Toledo all the way to Chicago. Thus, by the early 1850s it was possible to travel from New York City to Chicago on an all-rail route via Buffalo, Cleveland, and Toledo.

The Cleveland Painesville & Ashtabula took the name Lakeshore in 1868 and in 1869 joined with the other railroads on the route to form the Lakeshore and Michigan Southern (LS&MS). Cornelius Vanderbilt gained control of the LS&MS shortly after the consolidation, and in 1914 the LS&MS joined with rail lines east of Buffalo to form the New York Central Railroad. The New York Central merged in 1968 with its longtime rival, the Pennsylvania, to form Penn Central. Conrail was formed in 1976 from the bankrupt Penn Central and other eastern roads. Today, Conrail's Lakeshore route is still known by its historic name.

Between 1903 and 1912, the LS&MS developed the land north of the Collinwood Yard and east of Collamer Street (East 152nd) as major car and locomotive shop facilities. In a triangular space formed by the LS&MS yard tracks, East 152nd, and Hale Avenue, nine large brick buildings originally housed a locomotive machine shop, a blacksmith shop, a storehouse, a powerhouse, passenger coach paint and repair shops, two freight car repair shops, and a woodworking mill. Somewhat smaller buildings housed a general office, a lumber shed, and a laboratory. Numerous other small brick and frame buildings serving various functions were a part the facilities at the Collinwood shops. Most of the Collinwood Yard and shop complex continued in use as a busy facility through the post-war years and into the Penn Central era after 1968. After its creation in 1976, Conrail decided to base its heavy locomotive shops in Altoona, Pennsylvania, at former Pennsylvania Railroad facilities, and changes in freight traffic (such as increased shipment of trailers and containers) affected the flow of freight through the Collinwood Yard. By 1981 the shops were closed, and many of the buildings were demolished. A portion of the Conrail property, which included some of the standing shop buildings, was also sold to non-railroad interests.

Archaeological Resources Identified. SEA reviewed environmental documentation prepared by CSX. CSX had reviewed the files at the Ohio Historic Preservation Agency (the Ohio SHPO) and determined that no known archaeological sites were present at the Collinwood Yard site. SEA independently evaluated the information provided by the Applicants.

SEA conducted a field review of the Collinwood Yard site and independently evaluated the information provided by the Applicants to determine the potential for the area to contain intact or significant archaeological deposits. Based on the findings of the field review, SEA determined that the project site, because it has been extensively disturbed as a result of preparing and using the site for a rail yard, is highly unlikely to contain intact archaeological deposits aside from any that were related to its railroad use.

Where railroad buildings had been removed, the surface is heavily strewn with gravel, small rocks, red bricks and brick fragments, old timber, cement surfaces (either as large slabs or slab fragments), metal pipe, and building foundations. East of East 152nd Street, foundations from at least ten major railroad yard buildings were identified. The building foundations consist of poured cement floors and remnants of brick walls, asphalt roofing material, and other building debris.

Historic and Architectural Resources Identified. The Collinwood Yard and shop site contains several extant buildings and structures that reflect the activities that occurred there. Several historic features survive at the shop complex including two office buildings, a warehouse, a Richardsonian style powerhouse, a freight car repair shop, and a lumber shed. All of these date back to the period around 1907 when the major construction of the shops took place. SEA found that a large concrete coaling tower survives west of East 152nd Street. South of the tracks, between East 140th and East 152nd, SEA found the two 1930 electric locomotive maintenance buildings in use for diesel locomotive maintenance, and an interlocking tower (Quaker) is in service. A signal and power bridge that formerly served the Cleveland Union Terminal locomotives is located just west of Quaker. Several other structures are located in this area, including the bridges, building headquarters, 152nd, crew facilities, yard office, and a yard tower.

Historic District. The complex of foundations and extant buildings comprises the remnants of the New York Central's most important western shops, hereafter termed the New York Central Shops District. SEA determined that the New York Central Shops District appeared to be eligible for inclusion in the National Register of Historic Places under Criterion A for its association with the development of railroad transportation. The extant buildings were also found to meet National Register of Historic Places Criterion C as examples of industrial architecture designed for the handling and servicing of railroad rolling stock.

Summary of Potential Effects and Preliminary Recommended Mitigation. Four of the 27 extant buildings, and seven of the 12 foundations contributing to the portion of the historic district east of East 152nd Street would be acquired for the proposed Collinwood project.

Because their probable destruction would be an adverse effect, SEA proposed to the Ohio SHPO that Historic American Buildings Survey documentation of the extant buildings be undertaken to permanently record their history and appearance. In addition, SEA has proposed recording the foundations and the other remnants of the shops on Ohio Archaeological Inventory Forms as an industrial archaeological site complex.

Conrail, as part of their plans to expand the Collinwood facility parking, removed several of these structures in October, 1997. SEA reviewed Conrail's documentation concerning this work and confirmed that Conrail had planned this expansion well in advance of the proposed Acquisition. SEA did not consider it part of the proposed Acquisition. SEA consulted with the Ohio SHPO and photographed these structures to document them prior to demolition.

It is SEA's preliminary recommendation that CSX shall complete cultural and historic resource documentation (Historic American Building Survey/Historic American Engineering Record) for the Lake Shore & Michigan Southern (New York Central) Shops District no later than 180 days following the effective date of any Board final written decision in this proceeding.

Construction: Columbus Connection (Franklin County, OH) (NS). SEA determined there are no cultural resources at the Columbus site, therefore, there no adverse effects would result from the proposed Acquisition, and SEA did not recommend any mitigation.

Construction: Vermilion Connection (Erie County, OH) (NS). Based on the site inspection, review of the Applicants' information and consultation with the Ohio SHPO, SEA determined there are no cultural resources at the Vermilion site, therefore, there would be no adverse effects, and SEA did not recommend any mitigation.

Construction: Willard Fueling Facility (Huron County, OH) (CSX). SEA determined there are no cultural resources at the Willard site, therefore, there would not be adverse effects, and SEA did not recommend any mitigation. SEA has not completed portions of the Phase I archaeological survey at Willard because of a lack of right-of-way information and property access. SEA will complete the survey as part of the concurrent Section 106 compliance process.

Construction: Oak Harbor Connection Ottawa County, OH) (NS). SEA determined there are no cultural resources at the Oak Harbor site, therefore, there are no known effects, and SEA did not recommend any mitigation. SEA has not completed portions of the Phase I archaeological survey at Oak Harbor because of a lack of right-of-way information and property access. The survey will be completed as part of the concurrent Section 106 compliance process.

5-OH.14.2 Summary of Potential Effects and Preliminary Recommended Mitigation of Constructions

Table 5-OH-43 identifies the potential effect of construction on historic properties and the preliminary recommended mitigation.

Table 5-OH-43
Potential Effects on Historic Properties at Construction Locations in Ohio

Site ID	Location	Historic Property	Effect
CR-03	Collinwood Yard (CSX)	Lake Shore & Michigan Southern (New York Central) Shops District	Adverse effect: Acquisition and probable *destruction* of 4 of 9 extant district contributors. Mitigation: HABS documentation of buildings and recording of remnants on Ohio Archaeological Inventory Forms

5-OH.14.3 Proposed Abandonments

Abandonment: Toledo to Maumee (Lucas County, OH) (NS)

Historical Background. By the end of the 19th century, Toledo, Ohio had become a major railroad center. A large local industrial base relied on rail transportation including interchange of cars between connecting rail lines, and major coal and ore docks at the mouth of the Maumee River. Toledo had a large amount of rail traffic, and freight was experiencing significant delays getting to and through the city.

A group of Toledo investors proposed solving this problem by construction of a belt railway that would circle the city and connect with all the area trunk line railroads. In September of 1900 they incorporated the Toledo Railway and Terminal Company (TR&TC) to build the nearly 30-mile projected rail line. Construction began in mid-1901 and operations on the partially completed rail line began in September of 1902. The company accepted the completed belt line from the contractor in December of 1903.

The TR&TC formed an irregular loop around Toledo several miles outside the downtown area, connecting with all the railroads serving the city. It even briefly provided some passenger service on a spur into downtown Toledo from the northern leg of the belt line. The TR&TC operated at a loss from the start, and in early 1905 control of the rail line was taken over by the Pere Marquette and the Cincinnati, Hamilton and Dayton railroads, two of Toledo's railroads which later would become part of CSX. The TR&TC was placed in receivership in early 1906 and was sold at foreclosure in December of 1907 to the Toledo Terminal Railroad Company,

which had been formed for the purpose of providing inter-system access for the nine railroads serving Toledo. The Toledo Terminal Railroad Company operated this way all through the 20th century until it was sold in segments to CSX and NS in the last few years.

Resources Identified. SEA staff, which included a qualified architectural historian and a bridge historian, who conducted field surveys and analysis. Based on this analysis, SEA identified three railroad bridges and one culvert more than 50 years of age along the proposed abandonment, however none appeared eligible for, or were listed on the National Register of Historic Places (historic property). All of the bridges featured standard designs with concrete abutments and piers and steel deck plate girder spans. The bridges are located at milepost: TM-11.40 over Swan Creek (built 1925), TM-8.60 over Ten Mile Creek (built 1928), and TM-8.55 over Bancroft Street (built 1924). The ten-foot concrete box culvert over Sibley Creek (TM-7.2) was built in 1908.

Potential Effects. Based on the site inspection, review of the Applicants' information and consultation with the Ohio SHPO, SEA determined no adverse effects would result and SEA did not recommend any mitigation.

Abandonment: Toledo Pivot Bridge (Lucas County, OH) (NS)

Historical Background. The NS line that runs eastward from Toledo through Homestead to Bellevue is part of the former Wheeling and Lake Erie Railway (W&LE). The W&LE began construction in 1881 to bring eastern Ohio coal to Lake Erie at Toledo. The rail line was gradually extended east from Toledo and finally entered Wheeling in 1891. During the late 19th and early 20th centuries the W&LE added mileage through both new construction and purchase of existing rail lines, and it remained an independent operation, prospering with its busy coal traffic. In 1949 the Nickel Plate Road (New York, Chicago and St. Louis Railway) leased the W&LE and operated it as part of the Nickel Plate system. The Nickel Plate was in turn acquired in 1964 by the Norfolk & Western Railway, which combined with the Southern Railway in the 1960s to form Norfolk Southern. In 1990 most of the original W&LE was turned over to a new W&LE for operation as a regional railroad, but NS retained the Bellevue-Toledo portion.

In 1882 the W&LE crossed the Maumee River via a 1,300-foot bridge, which was replaced in 1904 by the current structure. Originally the swing span, near the bridge's eastern end, was steam-powered and remained so until 1950. The bridge was closed to river navigation during January and February of that year so it could be converted to electric power. It has remained largely unaltered since then.

Resources Identified. The Toledo Pivot Bridge, also referred to as the Wheeling & Lake Erie Swing Bridge, consists of: three timber stringer trestle approach spans; one pin-connected, steel, Pratt through truss approach span; one riveted, steel, Pratt through truss, rim-bearing swing span; four pin-connected, steel, Pratt through truss approach spans; and, one simply-supported, steel,

deck girder approach span. The latter span replaced the original timber stringer approach span, which was on timber bents, as evidenced by cut-off bent timbers. There are no walkways or handrails on the bridge. The main spans are carried on stone masonry piers, which were laid up ashlar, while the swing span is carried on a circular stone masonry pier. The only evident pier modifications are concrete caps on the piers which carry the west approach spans. The timber trestle is carried on seven-timber bents, with timber bent caps. The east approach span and the eastern-most west approach span have tall, steel girder towers that originally carried the electrical power lines to the bridge (these rail lines served the electric motors of the swing span). The power lines have now been removed, and the bridge is powered by a diesel-electric generator. All of the built-up steel truss members of the bridge are laced. The lower chords of the approach trusses are Iberis, while the diagonal tension members of these spans are a combination of Iberis and truss rods with turnbuckles.

The operator's cabin for the swing span is carried high within the central tower of that span, above the central pier. The control cabin is flat-roofed, and has been re-sided in vinyl or aluminum siding. The cabin's windows are one-over-one, double-hung, in single and paired applications. Some of the original wood framed windows appear to have been replaced with aluminum sash. Timber fenders protect the center pivot pier and concrete bents that support the ends of the swing span when in the open position. Additional timber fenders protect the piers carrying the adjacent approach spans. This single-track bridge appears to date from between 1905 and 1910. There are twin searchlight-type approach signals at the west end of the bridge, and there are concrete footings, probably from a timber "tell-tale" signal adjacent to the west approaches.

SEA determined that the Toledo Pivot Bridge (Wheeling & Lake Erie Swing Bridge) appears eligible for the NRHP under Criterion C as an example of a rare type of bridge, a Pratt through truss railroad swing bridge.

Potential Effects and Mitigation. The proposed abandonment would likely result in the destruction and removal of the Toledo Pivot Bridge, as shown in Table 5-OH-44. SEA determined that this would be both an adverse effect under Section 106 and a significant impact under NEPA.

It is SEA's preliminary recommendation that NS shall complete cultural and historic resource documentation (Historic American Building Survey/Historic American Engineering Record Level II) for the Toledo Pivot Bridge before initiating any construction or removal activities at that site.

Table 5-OH-44
Potential Effects on Historic Properties along Proposed Abandonments in Ohio

Site ID	Location	Historic Property	Effect
NA-04	Toledo Pivot Bridge (NS)	Wheeling & Lake Erie Swing Bridge	Adverse effect: *destruction*. Mitigation: HABS documentation

5-OH.15 OHIO HAZARDOUS MATERIALS AND WASTE SITES

In analyzing the effects on hazardous waste sites for the proposed Conrail Acquisition, the primary issue addressed was whether proposed construction and abandonment activities would disturb contaminated areas. SEA identified potential impacts on hazardous waste sites and related environmental concerns for each location where proposed Acquisition-related construction or abandonment activities would take place.

SEA investigated the following sites in Ohio for potential hazardous materials or waste impacts:

- Collinwood Yard.
- Willard Yard Fueling Facility.
- Oak Harbor.
- Vermilion Connection.
- Toledo-Maumee.
- Toledo Pivot Bridge.

5-OH.15.1 Construction: Collinwood New Intermodal Facility (Cleveland, Cuyahoga County, OH) (CSX)

Existing Environment. The Environmental Data Resources Inc. (EDR, 1997) report identified 28 hazardous waste sites or related environmental concerns within 500 feet of the proposed connection. These sites include three Resource Conservation and Recovery Information System-Treater, Storer, Disposer facilities, 18 Leaking Underground Storage Tank (LUST) sites, and seven Ohio Spills incidents. In addition, the EDR report identified eight sites that could not be mapped due to inadequate address information. The eight sites that could not be mapped included seven LUST sites (one also listed as Ohio Spills site) and one Emergency Response Notification System site. SEA located four of the seven LUST sites within 500 feet of the proposed connection. SEA located the other three LUST sites that could not be mapped and the

Emergency Response Notification System site that could not be mapped more than 500 feet from the proposed construction area. SEA supplemented this information with a site visit on July 23, 1997. During the site visit, SEA identified additional hazardous waste sites or related environmental concerns within the proposed construction area. Key site information is summarized below:

- Six of the Ohio Spills incidents listed in the EDR report have the same site name and address: Consolidated Rail Corporation, 601 East 152nd Street, Cleveland, Ohio, mapped within the southwest portion of the proposed construction area. These incidents were caused by a derailment in May 1996 that released six materials (each an individual Ohio Spills report): soda ash, asbestos type material, coke, hydraulic oil, scrap metal, and lead chunks. The EDR report mapped one LUST site, Conrail [East 152nd Street (30 feet east of pump station)], at the same location.

- The other Ohio Spills incident and a LUST site are both listed as Conrail Flexi-Flo Terminals, 577 East 152nd Street, mapped approximately 180 feet north of the southwest portion of the construction area (approximately 600 feet north of the East 152nd Street crossing).

- Three other LUST sites in the EDR report are listed as Axle Properties, 765 East 140th Street, mapped approximately 240 feet north of the southwestern limits of the proposed connection.

- During the site visit, SEA noted that property to the west of 152nd Street had evidence of possible hazardous waste concerns, including surface stains, an on-site electrical transformer, and possible underground storage tanks. SEA also identified a potential hazardous materials concern on adjacent properties: approximately fifty 55-gallon drums on a paved area without secondary containment on Conrail's northern adjoining property.

Potential Effects and Preliminary Recommended Mitigation. SEA identified numerous hazardous waste sites or related environmental concerns within 500 feet of the proposed construction area, including several environmental concerns within the boundaries of the proposed construction. The proposed construction could disturb known hazardous waste sites or related environmental concerns. If hazardous materials are encountered during construction, CSX would follow appropriate regulations and procedures described in Chapter 3, "Analysis Methods and Potential Mitigation Strategies," and Appendix H. Because existing regulatory requirements of other agencies and standard construction practices of the Applicant adequately address potential disturbance of contaminated areas, it is SEA's preliminary determination that no additional mitigation is necessary.

5-OH.15.2 Construction: Willard Yard Fueling Facility (Huron County, OH) (CSX)

Existing Environment. The EDR report (1997) identified no hazardous waste sites or related environmental concerns within 500 feet of the proposed connection. However, the EDR report identified 18 sites that could not be mapped due to inadequate address information. SEA located all 18 of these sites more than 500 feet from the proposed connection. SEA supplemented this information with a site visit on July 24, 1997. SEA determined that there are no known hazardous waste sites or related environmental concerns within 500 feet of the proposed connection.

Potential Effects and Preliminary Recommended Mitigation. SEA identified no hazardous waste sites or related environmental concerns within 500 feet of the proposed connection. Therefore, SEA does not anticipate that the proposed connection would disturb any known hazardous materials, and site-specific mitigation measures are not required. However, if hazardous materials are encountered during construction, CSX would follow appropriate regulations and procedures described in Chapter 3, "Analysis Methods and Potential Mitigation Strategies," and Appendix H. Because existing regulatory requirements of other agencies and standard construction practices of the Applicant adequately address potential disturbance of contaminated areas, it is SEA's preliminary determination that no additional mitigation is necessary.

5-OH.15.3 Construction: Columbus Connection (Franklin County, OH) (NS)

Existing Environment. The EDR report (1997) identified no hazardous waste sites or related environmental concerns within 500 feet of the proposed connection. However, the EDR report identified one site that could not be mapped due to inadequate address information. SEA could not locate this site. SEA supplemented this information with a site visit on July 22, 1997. SEA determined that there are no known hazardous waste sites within 500 feet of the proposed connection.

Potential Effects and Preliminary Recommended Mitigation. SEA identified no hazardous waste sites within 500 feet of the proposed connection. However, the location of the one site that could not be mapped is unknown. SEA does not anticipate that the proposed connection would disturb known hazardous materials. If hazardous materials are encountered during construction, CSX would follow appropriate regulations and procedures described in Chapter 3, "Analysis Methods and Potential Mitigation Strategies," and Appendix H. Because existing regulatory requirements of other agencies and standard construction practices of the Applicant adequately address potential disturbance of contaminated areas, it is SEA's preliminary determination that no additional mitigation is necessary.

5-OH.15.4 Construction: Oak Harbor Connection (Ottowa County, OH) (NS)

Existing Environment. The EDR report (1997) identified no hazardous waste sites or related environmental concerns within 500 feet of the proposed connection. However, the EDR report identified ten sites that could not be mapped due to inadequate address information. SEA could not locate these sites. SEA supplemented this information with a site visit on July 23, 1997. SEA determined that there are no known hazardous waste sites within 500 feet of the proposed connection.

Potential Effects and Preliminary Recommended Mitigation. SEA identified no hazardous waste sites within 500 feet of the proposed connection. However, the locations of the ten sites that could not be mapped are unknown. SEA does not anticipate that the proposed connection would disturb known hazardous materials. If hazardous materials are encountered during construction, NS would follow appropriate regulations and procedures described in Chapter 3, "Analysis Methods and Potential Mitigation Strategies," and Appendix H. Because existing regulatory requirements of other agencies and standard construction practices of the Applicant adequately address potential disturbance of contaminated areas, it is SEA's preliminary determination that no additional mitigation is necessary.

5-OH.15.5 Construction: Vermilion Connection (Erie County, OH) (NS)

Existing Environment. The EDR report (1997) identified no hazardous waste sites or related environmental concerns within 500 feet of the proposed connection. However, the EDR report identified one site that could not be mapped due to inadequate address information. SEA could not locate this site. SEA supplemented this information through contact with a local official (Firefighter Pavlich) and a site visit on July 25, 1997. SEA determined that there are no known hazardous waste sites within 500 feet of the proposed connection.

Potential Effects and Preliminary Recommended Mitigation. SEA identified no hazardous waste sites within 500 feet of the proposed connection. The location of the one site that could not be mapped is unknown. SEA does not anticipate that the proposed connection would disturb known hazardous materials. If hazardous materials are encountered during construction, NS would follow appropriate regulations and procedures described in Chapter 3, "Analysis Methods and Potential Mitigation Strategies," and Appendix H. Because existing regulatory requirements of other agencies and standard construction practices of the Applicant adequately address potential disturbance of contaminated areas, it is SEA's preliminary determination that no additional mitigation is necessary.

5-OH.15.6 Abandonment: Toledo-Maumee Abandonment (Lucas County) (NS)

Existing Environment. The EDR report (1997) identified 48 hazardous waste sites or related environmental concerns within 500 feet of the proposed abandonment. These sites include two Resource Conservation and Recovery Information System-Treator, Storer, Disposer facilities, 24 LUST sites, and 22 Ohio Spills incidents. In addition, the EDR report identified 346 sites that could not be mapped due to inadequate address information. SEA could not locate these sites. SEA supplemented this information with a site visit on July 24, 1997. During the site visit, SEA identified additional hazardous waste sites or related environmental concerns within 500 feet of the proposed abandonment. Key site information is summarized below.

Numerous industrial facilities and petroleum distributors abut the railroad right-of-way, as listed in Table 5-OH-45. In addition, BP Oil Pipeline Co. pipeline is located within the right-of-way along the proposed abandonment. The pipeline crosses under the railroad at least twice.

Table 5-OH-45
Industrial Facilities and Petroleum Distributors
Along Toledo - Maumee Abandonment

Site	Location
Former Allied Chemical Plant site	Glendale Road (facility no longer there)
Empire Petroleum terminal[a]	Airport Highway
Brent Industries (formerly Spartan Chemicals)	South Street
Westwood Auto Parts (junkyard)	Westwood Avenue (northeast of Conrail mainline and southwest of Conrail's Toledo intermodal facility)
Louisiana Pacific Paneling Company	Hill Ave.
Ohio Bell (now Ameritech)	Hill Ave.
Northtown Auto Parts	Hill Ave.
A&K Railroad Ties (2 old railroad tank cars observed)	Hill Ave.
BETCO	Nebraska Ave.
Nazar Rubber Co. and Pre-Cast Concrete[a]	Dorr Street/Westwood Ave.
Electrical Substation	Central Ave.
Former DuPont Plant[a] (closed for approx. 3 years)	Tremainsville Road
Electrical Substation	Laskey Road
Teledyne facility[a] (builds helicopter engines)	across Laskey Road from abandonment end point

[a] The EDR database identifies these four sites as having hazardous waste sites or other related concerns. Teledyne is listed as a LUST, Resource Conservation and Recovery Information System-Treator, Storer, Disposer, and OH Spills site. DuPont is listed as having six OH Spills and one Resource Conservation and Recovery Information System-Treator, Storer, Disposer facility. Nadzar is listed as a LUST site. Empire Petroleum is listed as having two LUSTs.

Potential Effects and Preliminary Recommended Mitigation. SEA identified numerous hazardous waste sites or related environmental concerns within 500 feet of the proposed abandonment. In addition, the locations of the 346 sites that could not be mapped are unknown. If hazardous materials are encountered during construction, NS would follow appropriate regulations and procedures described in Chapter 3, "Analysis Methods and Potential Mitigation Strategies," and Appendix H. Because existing regulatory requirements of other agencies and standard construction practices of the railroad adequately address potential disturbance of contaminated areas, it is SEA's preliminary determination that no additional mitigation is necessary.

Construction: Willard Fueling Facility (Huron County, OH) (CSX)

The proposed action involves construction and operation of new fueling facility adjacent to Willard Yard. The specific location and layout of the facility has not been finalized.

Water Resources: Willard Fueling Facility

Existing Conditions - Water Resources. Based on review of U.S. Geological Survey topographic mapping and on observations made during the site visit, SEA determined that the proposed Willard Yard construction project crosses ten perennial streams and is located adjacent to four man-made ponds.

Based on National Wetland Inventory mapping and on observations made during the site visit, SEA determined that there are two small wetland areas located within 500 feet of the auxiliary track. SEA identified the first system as a palustrine wetland system located approximately 200 feet south of the existing track; the second wetland system is identified as a palustrine wetland, located approximately 100 feet south of the existing track. During the field review, SEA identified additional wetlands located along the proposed project area. These systems are described as palustrine emergent and scrub-shrub wetlands which are located at the toe-of-slope and are associated with the perennial streams crossed by the proposed construction.

Based on review of Federal Emergency Management Agency Flood Insurance Rate Maps, SEA determined that the Willard Yard proposed construction site is not located within a 100-year floodplain. SEA confirmed the map findings during the site visit.

Potential Effects - Water Resources. SEA determined that the proposed construction activities at Willard Yard may cause temporary impacts to surface waters at locations where the auxiliary tracks cross watercourses. The temporary impacts may include deposition of sediment in downstream areas, and increased turbidity and related water quality impacts. The proposed construction activity could cross ten perennial streams.

SEA concluded that the proposed construction at Willard Yard could affect wetlands located along tributaries crossed by the railroad right-of-way, but would not affect the two wetlands observed south of the existing track. Therefore, CSX would likely require authorization under Section 404 of the Clean Water Act, for discharge of fill material into waters of the U.S. A National Pollutant Discharge Elimination System stormwater discharge may be required if more than five of land would be disturbed during construction activities. Because the site is not located in a designated flood zone, SEA concluded that the proposed construction at Willard Yard would cause no impacts to 100-year floodplains.

SEA also evaluated potential soil erosion impacts resulting from construction activities. They concluded that potential impacts of soil erosion resulting from cleared vegetation and exposed

Potential Effect - Wildlife. SEA determined that the proposed Oak Harbor construction would not cause adverse impacts to wildlife populations. SEA further concluded that the proposed Oak Harbor construction would not adversely affect the movement or migration of wildlife.

Existing Conditions - Threatened or Endangered Species. Based on coordination with U.S. Fish and Wildlife Service representative in the Reynoldsburg field office, SEA determined that there are three animal and two plant species Federally listed as endangered or threatened known to occur in Ottawa County. These species are listed in Table 5-OH-46 and 5-OH-47. During the site visit at the Oak Harbor site, SEA determined that there are no occurrences of the species in the area of the proposed construction, based on the heavily disturbed conditions of the site and the surrounding area. SEA determined that habitat within the proposed project area does not meet the habitat requirements of any of the Federally listed species.

Potential Effects - Threatened or Endangered Species. Since there are no Federally listed threatened or endangered species, or the habitat to support them, in or near the proposed Oak Harbor construction site, SEA concluded that there would be no impacts to any Federally listed species. SEA also concluded that the proposed action would not adversely affect any critical habitat for any listed species.

Existing Conditions - Parks, Forest Preserves, Refuges and Sanctuaries. SEA contacted representatives of the National Park Service and the U.S. Forest Service to identify lands within the jurisdiction of these Federal agencies. Based on this coordination, SEA determined that there are no parks, forests, preserves, refuges or sanctuaries in or adjacent to the proposed Oak Harbor construction site. SEA determined that the Toussaint Creek Wildlife Area, Marsh Wildlife Area and Crane Creek State Park are all located more than three miles north of the proposed project area.

Potential Effects - Parks, Forest Preserves, Refuges and Sanctuaries. Since there are no parks, forests, preserves, refuges or sanctuaries in or adjacent to the proposed Oak Harbor construction site, SEA concluded that there would be no impacts to this type of resource.

Preliminary Recommended Mitigation: Oak Harbor Connection

Due to Best Management Practices used in the railroad's construction specifications and regulatory programs governing effects on wetlands, water resources, and protected species, it is SEA's preliminary determination that no mitigation is necessary. However, as a condition of approval, SEA would require NS to conform to its standard specifications during construction. These standard specifications are presented in Chapter 3, Section 3.15, "Natural Resources."

Based on review of Federal Emergency Management Agency flood insurance rate maps, SEA determined that the Oak Harbor site is not located within a 100-year floodplain. SEA confirmed the map findings during their site visit.

Potential Effects - Water Resources. SEA concluded that construction of the proposed rail line at Oak Harbor would not affect surface water resources within the vicinity of the construction site. SEA determined that the proposed construction would affect wetlands confined to the borrow areas adjacent to the Conrail double track. Therefore, NS would require authorization under Section 404 of the Clean Water Act, for discharge of fill material into waters of the U.S. A National Pollutant Discharge Elimination System stormwater discharge permit may be required if potential land disturbance impacts exceed five acres. Because the site is not located in a designated flood zone, SEA concluded that the proposed construction would cause no impacts to 100-year floodplains.

SEA also evaluated potential soil erosion impacts resulting from construction activities and concluded that potential impacts of soil erosion resulting from cleared vegetation and exposed soil would not be significant with the use of Best Management Practices to control runoff and surface instability.

Biological Resources: Oak Harbor Connection

During the site visit, SEA observed that the land use adjacent to the Oak Harbor project area is comprised of residential, agricultural, and railroads right-of-way.

Existing Condition - Vegetation. SEA determined that cropland covers most of the area affected by the proposed Oak Harbor construction. Various weedy grasses and deciduous scrub-shrub species, including some wetland species, are present in borrow areas adjacent to the rail lines and along Lacarpe Creek. SEA determined that the vegetation found at the Oak Harbor site is not unique or limited to the project area.

Potential Effects - Vegetation. The proposed construction site at Oak Harbor is located with existing railroad right-of-way and cropland. Therefore, SEA concluded that the proposed Oak Harbor construction activity would only affect commonly occurring vegetation. SEA also concluded that these plant species are not unique or limited to the construction site.

Existing Conditions - Wildlife. SEA determined based on the type of vegetation and the low level of human activity within the Oak Harbor the project area contains good wildlife habitat. SEA determined that the type of wildlife which may inhabit the area includes numerous bird species, including songbirds, gamebirds, and raptors. SEA determined that the site most likely contains large and small mammals, including deer, foxes, raccoons, rabbit, mole, voles and others. SEA determined that Lacarpe Creek may support some semi-aquatic and aquatic wildlife species.

Potential Effects - Threatened or Endangered Species. Since there are no threatened or endangered species, or the habitat to support them, in or near the proposed Columbus construction site, SEA concluded there would be no impacts to this type of resource. SEA also concluded that the proposed action would not adversely affect any critical habit for any listed species.

Existing Conditions - Parks, Forest Preserves, Refuges and Sanctuaries. SEA contacted representatives of the U.S. Fish and Wildlife Service, the National Park Service and the U.S. Forest Service to identify land within the jurisdiction of these Federal agencies. Based on this coordination, SEA determined that there are no parks, forest preserves, refuges or sanctuaries within or adjacent to the proposed Columbus construction site.

Potential Effects - Parks, Forest Preserves, Refuges and Sanctuaries. SEA concluded that, since there are no parks, forest, preserves, refuges or sanctuaries are in or adjacent to the proposed Columbus construction site, there would be no impacts to this type of resource.

Preliminary Recommended Mitigation: Columbus Connection

Due to Best Management Practices used in the railroad's construction specifications and regulatory programs governing effects on wetlands, water resources, and protected species, it is SEA's preliminary determination that no mitigation is necessary. However, as a condition of approval, SEA would require NS to conform to its standard specifications during construction. These standard specifications are presented in Chapter 3, Section 3.15, "Natural Resources."

Construction - Oak Harbor Connection (Ottowa County, OH) (NS)

The proposed action involves the construction of 5,000 feet of new rail track between the existing Conrail and NS tracks. Figure 5-OH-4, presented at the end of this state discussion, depicts the site and surrounding environment.

Water Resources: Oak Harbor Connection

Existing Condition - Water Resources. Based on review of U.S. Geological Survey topographic mapping, SEA identified the presence of Lacarpe Creek, which is a perennial stream running east-west approximately 400 feet south of the proposed Oak Harbor project area. The stream is down-gradient from the construction site.

While the review of National Wetland Inventory mapping did not indicate wetlands on the site, SEA identified a narrow wetland system located at the north side toe of the slope of the existing Conrail rail bed during the site review.

Biological Resources: Columbus Connection

During the site visit, SEA observed that the land adjacent to the Columbus project area is comprised of commercial and residential facilities.

Existing Conditions - Vegetation. During the site visit, SEA determined that gravel covers the majority of the proposed Columbus construction site. SEA observed that the area around the site is already developed due to rail activity and residential development. SEA identified a sparsely vegetated strip of weedy annuals and grasses that occurs throughout the proposed construction site, as well as a single line of deciduous trees the eastern side of the Conrail right-of-way and lawn areas associated with commercial and residential facilities abutting both the NS and Conrail rights-of-way. SEA views the vegetation at the site as the type of growth characteristic of a highly disturbed area. SEA determined that the vegetation currently existing within and adjacent to the project area of Columbus is not unique or limited to the proposed construction site.

Potential Effects - Vegetation. SEA determined that proposed construction activities at Columbus would only affect scattered, weedy vegetation which is typically found within disturbed areas. Therefore, SEA concluded that the loss of vegetation at the Columbus construction site would be minimal. SEA also determined that the vegetation disturbed would re-establish itself adjacent to the new track once construction is completed.

Existing Conditions - Wildlife. During the site visit, SEA observed that the entire Columbus project site and its surrounding area is disturbed and concluded that wildlife habitat on the site is limited to vegetation typical of disturbed areas. Based on this determination, SEA determined that wildlife located within the site are typical of species adapted to disturbed areas, such as songbirds and small mammals.

Potential Effects - Wildlife. SEA determined that the Columbus construction site contains limited wildlife habitat, due to the disturbed nature of the site. Therefore, SEA determined the proposed construction would not cause significant impacts to wildlife. In addition, SEA determined that proposed construction would not adversely affect the movement or migration of wildlife.

Existing Conditions - Threatened or Endangered Species. Based on coordination with U.S. Fish and Wildlife Service and the Ohio Department of Natural Resources, SEA determined that there are five animal species listed as Federally endangered or threatened known to occur in Franklin County. Table 5-OH-46 identifies these species. SEA evaluated the Columbus construction site for its potential to support these species and found that there was little potential habitat available. This is due to the heavily disturbed conditions of the site and the surrounding area. During the site visit, SEA did not observe any Federally listed as threatened or endangered species or their required habitat characteristics, within the proposed construction site.

Construction: Columbus Connection (Franklin County, OH) (NS)

The proposed action at the Columbus site includes the construction of 1,400 feet of new connecting track between the western Norfolk Southern track and the north/south Conrail track. Figure 5-OH-3, presented at the end of this state discussion, depicts the site and the surrounding conditions.

Water Resources: Columbus Connection

Existing Conditions - Water Resources. Based on the review of the U.S. Geological Survey topographic mapping, SEA determined that there is one headwater stream located within the proposed Columbus project area. SEA identified this stream as an unnamed tributary to Olentangy River and verified its location during the site visit.

Based on review of the U.S. Fish Wildlife Service's National Wetland Inventory mapping, SEA determined that a palustrine (non-tidal), shrub/scrub wetland is located west of the existing north/south-trending Conrail line. This wetland is located up-gradient from the proposed Columbus construction site. SEA verified the existence and location of the wetland during the site visit.

Based on review of Federal Emergency Management Agency Flood Insurance Rate Maps, SEA determined that the Columbus site is not located within the 100-year floodplain.

Potential Effects - Water Resources. SEA determined that construction of the proposed rail line would not have adverse impacts on the tributary to Olentangy River. SEA concluded that the location of the construction within the existing bed of the rail line, would minimize potential impacts to the unnamed tributary. SEA concluded that potential impacts from soil erosion resulting from cleared vegetation and exposed soil would not be significant since state and local agencies require the implementation of Best Management Practices to control runoff and to stabilize the soil. In addition, NS would use sedimentation and erosion control devices. SEA also determined that there would be no impacts to the wetland located within the vicinity of the proposed construction site, due to its location up-gradient and outside of the construction area. Therefore, NS may not require authorization under Section 404 of the Clean Water Act for discharge of fill material into waters of the United States. A National Pollutant Discharge Elimination System stormwater discharge permit may be required if more than five acres of land would be disturbed during construction activities. SEA determined that, because the construction project area is not located within the 100-year floodplain, there would be no impacts to floodplains at the Columbus site.

Potential Effects - Wildlife. SEA determined that Collinwood Yard has minimal wildlife habitat value, due to the disturbed nature of the site, and the lack a habitat adjacent to the proposed construction area. Therefore, SEA determined that the proposed construction would not cause significant impacts to wildlife populations. In addition, the proposed project would not adversely affect the movement or migration of wildlife at the Collinwood site or in the surrounding area.

Existing Conditions - Threatened and Endangered Species. Based on coordination with U.S. Fish and Wildlife Service representative in the Reynoldsburg field office, SEA determined that there are three animal species listed as Federally endangered or threatened found in Cuyahoga County. These species are listed in Table 5-OH-46. During the site visit, SEA evaluated the construction area for its potential to support these species and found that the site did not contain specific habitat characteristics required by any of the Federally listed species.

Potential Effects - Threatened and Endangered Species. Since there are no Federally listed threatened or endangered species, or the habitat to support them, in or near the proposed Collinwood Yard construction site, SEA determined there would be no impacts to this type of resource. SEA also determined that the proposed action would not affect any critical habitats for any listed species.

Existing Conditions - Parks, Forests, Preserves, Refuges, and Sanctuaries. SEA contacted representatives of the U.S. Fish and Wildlife Service, the National Park Service and the U.S. Forest Service to identify land within the jurisdiction of these Federal agencies. Based on this coordination, SEA determined that there are no parks, forests, preserves, refuges or sanctuaries within or adjacent to the proposed Collinwood Yard construction site.

Potential Effects - Parks, Forests, Preserves, Refuges, and Sanctuaries. Since SEA determined there are no Federal or state parks, fores, preserves, refuges or sanctuaries within or adjacent to the proposed Collinwood Yard construction site, there would be no impacts to this type of resource.

Preliminary Recommended Mitigation: Collinwood New Intermodal Facility

Due to Best Management Practices used in the railroad's construction specifications and regulatory programs governing effects on wetlands, water resources, and protected species, SEA determined that no mitigation is necessary. However, as a condition of approval, SEA would require CSX to conform to its standard specifications during construction. These standard specifications are presented in Chapter 3, Section 3.15, "Natural Resources."

Based on review of Federal Emergency Management Agency flood insurance rate maps, SEA determined that the site is not located within a 100-year floodplain. SEA verified all mapping during the site visit.

Potential Effects - Water Resources. SEA identified no surface waters or wetlands within or adjacent to the proposed Collinwood Yard construction. SEA concluded that impacts from soil erosion resulting from cleared vegetation and exposed soil would not be significant since state and local agencies require the implementation of Best Management Practices to control runoff and to stabilize the soil. In addition, CSX would restore disturbed soil areas outside the rail bed through re-seeding. These measures would prevent or minimize any potential impacts to Euclid Creek, located approximately 3,000 feet northeast of the northern portion of the yard. Therefore, CSX may need authorization under Section 404 of the Clean Water Act, for discharge of fill material into waters of the U.S. A National Pollutant Discharge Elimination Systems stormwater discharge permit may be required if more than five acres of land would be disturbed during construction activities.

SEA determined that, because the proposed project area is not located within the 100-year floodplain, there would be no impacts to floodplains at the Collinwood site.

Biological Resources: Collinwood New Intermodal Facility

SEA observed that the existing Collinwood yard site has been heavily disturbed by railroad, commercial, and industrial land use.

Existing Conditions - Vegetation. The Collinwood site consists of an active 23-acre rail yard with limited vegetative cover. During the site visit, SEA observed several sparse areas of grass species dispersed throughout the project area. SEA determined that the vegetation within and adjacent to the proposed construction site is not unique or limited to the site.

Potential Effects - Vegetation. SEA determined that the proposed construction at Collinwood Yard would affect only vegetation that is characteristic of disturbed areas. Specifically, the proposed construction affect grass and weed species within the existing railroad right-of-way. SEA determined that these plant species would likely re-vegetate the new right-of-way once construction is complete.

Existing Conditions - Wildlife. During the site visit, SEA observed very little undisturbed area at the Collinwood yard construction site. SEA evaluated and determined that the vegetation on and near the proposed site provides little wildlife habitat. SEA concluded that only species adapted to developed urban areas, such as field mice, voles, moles and occasional songbirds potentially inhabit the proposed construction site.

Table 5-OH-47
Federally Protected Plant Species Listed for Ohio

Group	Common Name	Scientific Name	Status	Cuyahoga County	Geauga County	Erie County	Franklin County	Huron County	Lucas County	Ottawa County
Fabaceae	Running Buffalo Clover	Trifolium stoloniferum	Endangered							
Asteraceae	Lakeside Daisy	Hymenoxys herbacea	Threatened			X				X
Ranunculaceae	Northern Wild Monkshood	Aconitum noveboracensis	Threatened							
Orchidaceae	Eastern Prairie Fringed Orchid	Plantanthera leucophaea	Threatened						X	X
Rosaceae	Virginia Spiraea	Spires virginia pogonia	Threatened							
Orchidaceae	Small Whorled Pogonia	Isotria medeoloides	Threatened							

Source: U.S. Fish and Wildlife Service - Reynoldsburg Field Office

5-OH.16.1 Summary of Potential Effects and Preliminary Recommended Mitigation for New Constructions

Construction: Collinwood New Intermodal Facility (Cuyahoga County, OH) (CSX)

The proposed action involves the construction of a new intermodal facility located on 23 acres of newly acquired land. Figure 5-OH-6, presented at the end of this state discussion, depicts the site and the surrounding conditions.

Water Resources: Collinwood New Intermodal Facility

Existing Conditions - Water Resources. Based on review of U.S. Geological Survey topographic maps, United States Fish and Wildlife Service (USFWS) National Wetland Inventory Mapping and the subsequent site visit, SEA determined that there are no water bodies or wetlands within or adjacent to the proposed Collinwood Yard construction site.

Table 5-OH-46
Federally Protected Animal Species Listed for Ohio

Group	Common Name	Scientific Name	Status	Columbiana County	Geauga County	Erie County	Franklin County	Huron County	Lucas County	Ottawa County
Vertebrates										
Mammals	Indiana Bat	Myotis sodalis	Endangered	X	X	X	X	X	X	X
Birds	Bald Eagle	Haliaeetus leucocephalus	Threatened		X	X			X	X
Birds	Peregrine Falcon	Falco peregrinus	Endangered	X			X		X	
Birds	Piping Plover	Charadrius melodus	Endangered	X		X			X	X
Fish	Scioto Madtom	Noturus trautmani	Endangered				X			
Reptile	Copperbelly Water Snake	Nerodia erythrogaster neglecta	Threatened							
Invertebrates										
Mussel	Purple Cat's Paw Pearly Mussel	Epioblasma obliquata obliquate	Endangered							
Mussel	Northern Riffleshell	Epioblasma torulosa rangiana	Endangered				X			
Mussel	Fanshell	Cyprogenia stegaria	Endangered							
Mussel	Clubshell Mussel	Pleurobema clava	Endangered				X			
Mussel	White Cat's Paw Pearly Mussel	Epioblasma obliquata perobliqua	Endangered							
Mussel	Pink Mucket Pearly Mussel	Lampsilis abrupta	Endangered							
Insect	American Burying Beetles	Nicrophorus americanus	Endangered							
Insect	Mitchell's Satyr Butterfly	Neonympha mitchellii mitchellii	Endangered							
Insect	Karner Blue Butterfly	Latchets Melissa Samuels	Endangered						X	

Source: U.S. Fish and Wildlife Service - Reynoldsburg Field Office

- Toledo to Maumee Abandonment.
- Toledo Pivot Bridge Abandonment.

Based on information from the U.S. Fish and Wildlife Service Reynoldsburg field office, SEA identified threatened and endangered species known to occur in counties affected by proposed Acquisition-related activities.

Tables 5-OH-46 and 5-OH-47 present the Federally protected animal and plant species that occur in Ohio, as identified by the U.S. Fish and Wildlife Service's Division of Endangered Species (August 1997). "Threatened" describes a species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range; "Endangered" describes a species that is in danger of extinction within the foreseeable future throughout all or a significant portion of its range . The U.S. Fish and Wildlife Service lists the piping plover as Endangered within the Great Lakes Watershed. The piping plover is listed as threatened in other areas of the state. Appendix I includes brief descriptions of suitable habitats for the threatened and endangered species.

railroad adequately address potential disturbance of contaminated areas, it is SEA's preliminary determination that no additional mitigation is necessary.

5-OH.16 OHIO NATURAL RESOURCES

SEA focused the natural resources analysis on any proposed physical alteration affecting water resources, wetlands, biological resources, and wildlife habitats. SEA determined that the potential for impacts to water resources, wetlands, biological resources, and wildlife habitats would most likely be associated with site-specific projects related to the proposed abandonment of rail lines and construction of new connector lines, rail yards, and intermodal facilities.

SEA evaluated five proposed construction sites and two proposed abandonment sites in the state of Ohio. SEA contacted appropriate Federal and state regulatory and review agencies for natural resources regarding the proposed projects that would occur within their jurisdictions. Specifically, for the state of Ohio, SEA coordinated with:

- U.S. Department of Agriculture Forest Service.
- U.S. Department of Agriculture Natural Resources Conservation Service.
- U.S. Department of the Army Corps of Engineers.
- U.S. Department of the Interior Fish and Wildlife Service (USFWS).
- U.S. Department of Interior National Park Service.
- U.S. Environmental Protection Agency.
- Ohio Department of Natural Resources.

SEA determined that potential impacts to natural resources could occur at:

- Collinwood Yard.
- Columbus Construction.
- Oak Harbor Construction.
- Willard Yard.
- Vermilion Connection.

5-OH.15.7 Abandonment: Toledo Pivot Bridge Abandonment (Lucas County) (NS)

Existing Environment. The EDR report (1997) identified no hazardous waste sites or related environmental concerns within 500 feet of the proposed abandonment. However, the EDR report identified one site that could not be mapped due to inadequate address information. SEA could not locate this site. SEA supplemented this information through contact with a local official (Deputy Fire Chief Koengseker) and a site visit on July 24, 1997. SEA determined that there are numerous known hazardous waste sites or related environmental concerns within 500 feet of the abandonment. Key site information is summarized below:

- Cross-ties are creosoted.

- If the entire bridge, including the supports/pillions, is removed and the removal disturbs river sediments, the presence of hazardous waste/contaminants in the river sediments may need to be evaluated prior to this action (historical industrial use of adjacent properties has included petroleum refineries, coke manufacturing, and iron works).

- The bridge components may require special handling (as well as worker safety issues) during dismantling and disposal if lead paint, asbestos, etc., are present and susceptible to disturbance during the abandonment.

- A petroleum pipeline is present at the proposed abandonment site and may be attached to the bridge.

- Adjacent property uses also represent a potential concern. Specifically, adjacent properties located to the north and south side of the railroad on the east side of the Maumee River were former industrial facilities which are in the process of being redeveloped (portions are being used to construct an overpass). The property to the south was formerly operated by Toledo Coke Company and/or Koppers, and as Interlake Iron. The adjacent property to the north was formerly a Gulf Oil refinery (until the mid-1980s). The eastern portion of the former Gulf Oil site is being used for the overpass. Clark Oil has a petroleum storage facility on the west side of the Maumee River adjacent to and south of the railroad bridge.

Potential Effects and Preliminary Recommended Mitigation. SEA identified numerous hazardous waste sites or related environmental concerns within 500 feet of the proposed abandonment. In addition, the location of the one site that could not be mapped is unknown. If hazardous materials are encountered during construction, NS would follow appropriate regulations and procedures described in Chapter 3, "Analysis Methods and Potential Mitigation Strategies," and Appendix H. Demolition of the bridge would likely require a permit from the Coast Guard under Section 9 of the Rivers and Harbors Act as well as compliance with regulatory requirements governing assessment and remediation of contamination. Because existing regulatory requirements of other agencies and standard construction practices of the