

Amtrak Connecticut River Bridge Replacement Project

Old Saybrook and Old Lyme, Connecticut

NEPA Re-Evaluation #1

MARCH 2024

TABLE OF CONTENTS

Introduction	3
Design Refinements Summary	3
Environmental Considerations.....	5
Conclusion.....	22

- Attachment A: USCG Public Notice CT River Bridge
- Attachment B: Section 106 Memorandum of Agreement (MOA)
- Attachment C: CTSHPO Letter NRHP Eligibility, April 2021
- Attachment D: CTSHPO Data Recovery Plan Concurrence, September 2021
- Attachment E: MOA Progress Summary Report
- Attachment F: High Tide Line Impact Plans
- Attachment G: Coastal Jurisdiction Line State Impact Plans
- Attachment H: NMFS Section 7 Consultation
- Attachment I: NMFS EFH Correspondence
- Attachment J: Re-Initiation of USFWS Section 7 Consultation
- Attachment K: CTDEEP Natural Diversity Data Base List
- Attachment L: USWFS IPaC
- Attachment M: REMA Ecological Services, Federally Listed Fauna
- Attachment N: CTDEEP Osprey and Bald Eagle
- Attachment O: CTDEEP Fisheries Consultation
- Attachment P: CTDEEP Concurrence Ragged Rock Creek

- Figure 1: Project Location Map
- Figure 2: Easement Maps
- Figure 3: Section 4(f) Properties
- Figure 4: Ragged Rock Creek

INTRODUCTION

The National Railroad Passenger Corporation (Amtrak) is replacing the existing Connecticut River Bridge, located between Old Lyme and Old Saybrook, in Connecticut (see **Figure 1**). In accordance with the National Environmental Policy Act (NEPA) and the Federal Railroad Administration’s (FRA) *Procedures for Considering Environmental Impacts*, 64 FR 28545 (May 26, 1999), FRA and Amtrak prepared an Environmental Assessment (EA) and Section 4(f) Evaluation in May 2014 for the Connecticut River Bridge Replacement Project (the Project). Based on the EA, FRA issued a Finding of No Significant Impact (FONSI) for the Project on January 5, 2017. The EA and FONSI are available on FRA’s website at <https://railroads.dot.gov/environment/environmental-reviews/connecticut-river-bridge-replacement-Project>. Amtrak used congressionally-directed annual capital grant funding administered by FRA to perform conceptual engineering and environmental review for the Project.

Since 2014, Amtrak has advanced the Project into the final design and permitting phase. Amtrak has applied for various permits from the Connecticut Department of Energy & Environmental Protection (CTDEEP), and the U.S. Army Corps of Engineers (USACE), and is applying for U.S. Coast Guard (USCG) permits that are required to construct and operate the Project. In 2020, USCG requested documentation to confirm the validity of FRA’s 2017 FONSI during its initial review of Amtrak’s Bridge Permit Application. In addition to satisfying the USCG request, this NEPA reevaluation is necessary because of the passage of time since FRA’s issuance of the FONSI in 2017 and because Amtrak has made changes to the Project as the design has advanced. Consequently, FRA must analyze any changes in environmental conditions and Project impacts.

DESIGN REFINEMENTS SUMMARY

Since the publication of the 2014 EA and FRA’s issuance of the FONSI in 2017, Amtrak has refined the design of the bridge structure and track layout. Amtrak is in the process of obtaining a USCG Bridge Permit. As part of the bridge permitting process, the USCG published a public notice in May 2023 including the proposed vertical and horizontal clearances (see Attachment A). No substantial comments were received by the close of the comment period on June 26, 2023. A summary of these design changes is described below:

TABLE 1: SUMMARY OF DESIGN REFINEMENTS

New Bridge Alignment	EA Assumption – 48 feet south of existing bridge.
	Advanced Design – 52 feet south of existing bridge.
Channel Width	EA Assumption – 150-200 feet.
	Advanced Design – 150 feet.
Channel Position	EA Assumption – Channel to remain in existing position.
	Advanced Design – Eastern end shifted 16.5 feet west towards the center of the Connecticut River.
Vertical Clearance – Closed Position	EA Assumption – 18 feet.
	Advanced Design – 24 feet.
Vertical Clearance – Open Position	EA Assumption – Option A: 68 feet for full channel width and unlimited for vessels requiring less than 71 feet in width. Option B: At least 90 feet.
	Advanced Design – Unlimited for a 90-foot-wide portion of the channel. Minimum 74 feet for the full width of the channel.
Lift Span Speed Limit	EA Assumption – 45 miles per hour.
	Advanced Design – 70 miles per hour.
Approach Span Speed Limit	EA Assumption – 60 miles per hour.
	Advanced Design – 120 miles per hour.
Lieutenant River Bridge Superelevation	EA Assumption – No change to Lieutenant River Bridge.
	Advanced Design – Reduced from approximately 6 inches to a maximum of 5.5 inches along Tracks 1 and 2 Curve No. 115.

Lieutenant River	EA Assumption – No change to Lieutenant River Bridge.
Temporary Construction Access Bridge	Advanced Design – A temporary access bridge will be constructed over the Lieutenant River, meeting or exceeding the clearances of the existing rail crossing (33-foot horizontal and 11-foot vertical clearance).

ENVIRONMENTAL CONSIDERATIONS

Amtrak advanced the Project to 60 percent design in March 2020, 90 percent in March 2021, and 100 percent in September 2021. Amtrak evaluated the updated design's consistency with the assumptions in the 2014 EA. Overall, the Project design is largely consistent with the conceptual design that was available at the time of the EA. The majority of the assumptions that served as the basis for the environmental impact analyses in the EA remain the same. **Table 2** presents a summary of whether the design changes result in new benefits or impacts to the environmental categories evaluated in the 2014 EA. The table is followed by a more detailed discussion of changes in environmental conditions and Project impacts.

TABLE 2: SUMMARY OF ENVIRONMENTAL IMPACTS

Transportation	
Impacts as Described in the 2014 EA/2017 FONSI	The Project would improve the reliability of the Connecticut River crossing to the benefit of passenger and freight rail traffic on the NEC, and maritime traffic on the Connecticut River. The Navigation Survey conducted as part of the EA found that the existing channel width and alignment were adequate for current navigation.
Reevaluation #1: New Impacts (Y/N)	No. No new adverse impacts are proposed, but several additional transportation benefits have been identified. The new bridge would provide an additional benefit to marine vessels due to a slightly wider channel, westward shifted channel, and increased vertical clearance. The new bridge would provide an additional benefit to rail service by allowing for increased speeds.
Reevaluation #1: Change in Impacts (Advanced Design)	The slightly wider channel, shifted channel, and increase in vertical clearance would have a positive benefit for mariners. The increase in speed would be a marked improvement for rail operations. Construction-related navigation closures and a construction access bridge over the Lieutenant River would be temporary and are not expected to result in significant adverse impacts to mariners.
Mitigation	Amtrak is responsible for complying with the commitments and mitigation measures described in Table 1 in the 2017 FONSI.
Land Use, Zoning, and Public Policy	
Impacts as Described in the 2014 EA/2017 FONSI	The Project would not adversely affect existing or planned land uses in the study area and will not result in any adverse impacts to zoning or public policy. It would not require any permanent upland land acquisition. Amtrak has several existing easements to allow for maintenance access and is working to optimize the use of these existing easements for construction access.
Reevaluation #1: New Impacts (Y/N)	Yes. The EA stated that construction of the bridge would not require any permanent upland land acquisition. However, based on final design, anticipated maintenance access needs, and anticipated wetland mitigation requirements identified during permitting, Amtrak proposes purchasing a vacant property located at 17 Shore Road in Old Lyme, Connecticut. This site will be used for wetland restoration and improvement activities including invasive species management, tidal channel construction, and more (see Wetlands section for further details). In addition, the Project would require temporary construction easements. See the Land Use and Acquisitions section below for more detail.
Reevaluation #1: Change in Impacts (Advanced Design)	Although the acquisition would result in a permanent change in land use, it would not result in any substantial changes to surrounding existing land use and would not alter land use or development patterns. Easements for construction-related uses would be temporary and would not result in a significant adverse effect to land uses.
Mitigation	None.

Parkland and Open Space	
Impacts as Described in the 2014 EA/2017 FONSI	The Project would not have significant adverse effects on the two parks (Ferry Landing Park & Elizabeth B. Karter Watch Rock Natural Preserve) located within the study area. The Project would not affect the preserve, hiking trails, picnic area, lawn, and gazebo within these parks. The waterfront walkway in Ferry Landing Park extends into a boardwalk that continues underneath the existing Connecticut River Bridge. The segment that passes underneath the bridge will be closed during bridge construction. This will be a short-term (for a period of up to 3 years), temporary impact. The perimeter waterfront walkway is expected to remain open during construction.
Reevaluation #1: New Impacts (Y/N)	No. No change in impacts.
Reevaluation #1: Change in Impacts (Advanced Design)	None.
Mitigation	Amtrak is responsible for complying with the commitments and mitigation measures described in Table 1 in the 2017 FONSI.
Socioeconomic Conditions	
Impacts as Described in the 2014 EA/2017 FONSI	The Project would not require the acquisition or displacement of any active businesses or affect area employers and is not expected to increase or decrease marine traffic in the Project area. Therefore, the Project would not result in any adverse impacts to socioeconomic conditions.
Reevaluation #1: New Impacts (Y/N)	Yes. Amtrak proposes purchasing a vacant property located at 17 Shore Road in Old Lyme. Acquisition of this parcel would remove it from the property tax roll. The amount is negligible (estimated at \$318/year).
Reevaluation #1: Change in Impacts (Advanced Design)	The acquisition of the vacant property at 17 Shore Road would not be considered a substantial effect and the Project would not adversely affect socioeconomic conditions.
Mitigation	None.
Visual Resources	
Impacts as Described in the 2014 EA/2017 FONSI	The Project would not substantially affect the visual character of the study area nor block important views to and from visual resources.
Reevaluation #1: New Impacts (Y/N)	No. No new impacts. The new structure would provide a slightly wider channel, shift the channel westward, and increase vertical clearance.
Reevaluation #1: Change in Impacts (Advanced Design)	None. The changes in bridge design are not anticipated to have an adverse impact on the Ferry Road view corridors or any other visual resources.
Mitigation	Amtrak is responsible for complying with the commitments and mitigation measures described in Table 1 in the 2017 FONSI.
Cultural Resources	
Impacts as Described in the 2014 EA/2017 FONSI	The Project would have an adverse effect on the Connecticut River Bridge. On August 5, 2016, a Memorandum of Agreement (MOA) was executed among FRA, Amtrak, and the Connecticut State Historic Preservation Office (CTSHPO) pursuant to Section 106 of the National Historic Preservation Act. The MOA stipulates measures to resolve the adverse effects of the Project on the historic bridge, as well as measures regarding additional archaeological investigations as project design advances.

Reevaluation #1: New Impacts (Y/N)	Yes. Three NRHP-eligible archaeological sites were identified within the Project's Section 106 Area of Potential Effect (APE) in 2020. CTSHPO concurred with the eligibility of each site in a letter dated April 23, 2021, and responded that the Project will have an adverse effect on each of these resources. In accordance with the Project's Section 106 MOA, Amtrak developed a Data Recovery Plan (DRP), which included an Unanticipated Discovery Plan (UDP), for these newly identified archaeological sites. CTSHPO approved the DRP, concurring that the plan appropriately mitigates Project's impacts to each site. See the Historic, Cultural, and Archaeological Resources section below for more detail.
Reevaluation #1: Change in Impacts (Advanced Design)	The Project will have an adverse effect on three previously unknown National Register of Historic Place (NRHP)-eligible archaeological sites. The Project's Section 106 MOA stipulates how effects to these sites will be addressed (Stipulation III.D.). Additionally, the boundaries of one of these sites has been expanded to account for the archaeological resources identified at 17 Shore Road. The adverse effect to the historic bridge remains with the advanced design, with mitigation measures stipulated in the MOA.
Mitigation	Amtrak is responsible for complying with the commitments and mitigation measures described in Table 1 in the 2017 FONSI.
Air Quality	
Impacts as Described in the 2014 EA/2017 FONSI	The Project would not substantially increase the number of new transit riders or measurably reduce vehicle-miles-traveled in the region. Therefore, there would be no adverse effect on air quality.
Reevaluation #1: New Impacts (Y/N)	No. No new impacts.
Reevaluation #1: Change in Impacts (Advanced Design)	None.
Mitigation	Amtrak is responsible for complying with the commitments and mitigation measures described in Table 1 in the 2017 FONSI.
Noise and Vibration	
Impacts as Described in the 2014 EA/2017 FONSI	The Project would not result in significant adverse noise or vibration impacts. Following FTA procedures, a noise assessment and vibration screening analysis were performed to study noise and vibration impacts to receptors at the CTDEEP Boardwalk in Old Lyme and the residences on Clark Street in Old Saybrook.
Reevaluation #1: New Impacts (Y/N)	No. No new impacts.
Reevaluation #1: Change in Impacts (Advanced Design)	None.
Mitigation	None.
Energy Use	
Impacts as Described in the 2014 EA/2017 FONSI	Changes in energy consumption in the study area as a result of the Project would be negligible, and the Project would result in no significant adverse impacts to energy consumption or resources would result.
Reevaluation #1: New Impacts (Y/N)	No. No new impacts.
Reevaluation #1: Change in Impacts (Advanced Design)	None.
Mitigation	Amtrak is responsible for complying with the commitments and mitigation measures described in Table 1 in the 2017 FONSI.

Terrestrial Resources	
Impacts as Described in the 2014 EA/2017 FONSI	The removal of some scrub/shrub vegetation along the existing embankment may be necessary to accommodate the new alignment and construction access. These areas have relatively little value as terrestrial habitat, and as such, no significant permanent impacts to terrestrial habitat are expected.
Reevaluation #1: New Impacts (Y/N)	Yes. As Amtrak advanced the Project design, it was determined that some limited tree clearing within the ROW may be necessary.
Reevaluation #1: Change in Impacts (Advanced Design)	The Project may require the removal of trees within the ROW to accommodate the new alignment and construction access.
Mitigation	Amtrak is responsible for complying with the commitments and mitigation measures described in Table 1 in the 2017 FONSI.
Floodplains	
Impacts as Described in the 2014 EA/2017 FONSI	The Project would not significantly impact floodplains. In-water piers and other support structures do not constrict tidal or freshwater flows. Because the Connecticut River and adjacent floodplains are entirely tidal, small areas of fill would not impact the capacity of the river to absorb flood waters.
Reevaluation #1: New Impacts (Y/N)	No. No new significant impacts.
Reevaluation #1: Change in Impacts (Advanced Design)	None.
Mitigation	Amtrak is responsible for complying with the commitments and mitigation measures described in Table 1 in the 2017 FONSI.
Coastal Zone	
Impacts as Described in the 2014 EA/2017 FONSI	Amtrak coordinated with CTDEEP during the development of the EA. As part of the EA, a preliminary coastal zone consistency analysis was conducted to determine the Project's anticipated effects on coastal resources. Overall, the Project is consistent with Connecticut's Coastal Management Program. Amtrak committed to obtaining a federal CZM concurrence from CTDEEP after further design progression.
Reevaluation #1: New Impacts (Y/N)	Yes. New coastal zone impacts are expected due to the increased extent of work within the zone, including wetland mitigation sites.
Reevaluation #1: Change in Impacts (Advanced Design)	The extent of work within the Coastal Zone is greater than originally anticipated in the EA. However, the consistency review process remains the same. Amtrak is obtaining the required CZM concurrence as part of the USACE/CTDEEP Joint Permit Application for Clean Water Act Sections 401 and 404 process.
Mitigation	Amtrak is responsible for complying with the commitments and mitigation measures described in Table 1 in the 2017 FONSI.
Wetlands	
Impacts as Described in the 2014 EA/2017 FONSI	The EA estimated the Preferred Alternative to permanently impact 3.51 acres of wetlands and open water, and to temporarily impact 5.22 acres of wetland and open water. No significant adverse impacts to wetlands would result from the Project. Because complete avoidance of wetlands and open water is not feasible, minimization and mitigation measures will be implemented.
Reevaluation #1: New Impacts (Y/N)	Yes. The revised design would permanently impact 4.09 acres and temporarily impact 4.06 acres of federally jurisdictional waters of the United States including wetlands and tidal waters below the HTL. In addition, 4.52 acres of state-regulated tidal wetlands and other coastal resource areas will be permanently impacted and 3.89 acres of state-regulated tidal wetlands and other coastal resource areas will be temporarily impacted. See the Wetlands and Open Waters section below for more detail.

Reevaluation #1: Change in Impacts (Advanced Design)	<p>USACE dredge and fill impacts including wetlands and waters below the high tide line (HTL):</p> <ul style="list-style-type: none"> - Permanent dredge and fill: 4.09 acres - Temporary fill: 4.06 acres <p>CTDEEP-regulated coastal resource impacts including tidal wetlands, areas below the coastal jurisdiction line (CJL), and areas capable of supporting tidal wetland vegetation:</p> <ul style="list-style-type: none"> - Permanent impacts: 4.52 acres - Temporary impacts: 3.89 acres <p>The change in impacts have been incorporated in the USACE/CTDEEP Joint Permit Application for Clean Water Act Sections 401 and 404 which was submitted on May 10, 2023 and is anticipated to be approved by the end of February 2024</p>
Mitigation	<p>Amtrak is responsible for complying with the commitments and mitigation measures described in Table 1 in the 2017 FONSI.</p> <p>Reevaluation #1 Additional Mitigation:</p> <ul style="list-style-type: none"> • Amtrak will continue to coordinate with USACE and CTDEEP to finalize a mitigation plan to offset unavoidable aquatic resource impacts. Amtrak’s current conceptual mitigation plan includes tidal wetland restoration at two nearby off-site properties in Old Lyme, including a parcel at 17 Shore Road and a 3.25-acre Amtrak-owned site (a water-locked parcel located to the southwest of 17 Shore Road south of the Amtrak ROW), totaling approximately 10.1 acres of wetland restoration. Amtrak will be required to implement the final mitigation plan. USACE and CTDEEP will be responsible for oversight and compliance associated with Amtrak’s implementation of the final mitigation plan.
Water Resources	
Impacts as Described in the 2014 EA/2017 FONSI	<p>The Project would not permanently impact water quality. Water quality impacts from in-water construction include sediment resuspension, which would only occur in very localized areas of activity during certain construction activities, such as pier installation. Overall, the short duration and localized extent of construction activities and similar operation of existing and replacement bridges means that the Project will not result in significant adverse impacts.</p>
Reevaluation #1: New Impacts (Y/N)	<p>Yes. Dredging activity was not proposed at the time of the 2014 EA but is required based on the revised project design and anticipated construction methods.</p>
Reevaluation #1: Change in Impacts (Advanced Design)	<p>Dredging activity was not proposed at the time of the 2014 EA. The revised design and anticipated construction methods would require dredging of ±45,550 cubic yards in the Connecticut River below the mean high water (MHW; el. 1.60). These dredging activities would occur over a short duration in a localized area. Amtrak would use sediment containment measures to protect the surrounding environment and would adhere to permit limitations for in-water construction activities during fish migration windows to protect diadromous species. With these measures, no significant adverse impacts to water and aquatic resources would result from this activity. Dredged material will need to be dewatered prior to transportation. Amtrak anticipates that this will occur on a barge within the river. This activity will result in a short-term temporary impact to turbidity. See the Water and Aquatic Resources section below for more detail.</p>
Mitigation	<p>Amtrak is responsible for complying with the commitments and mitigation measures described in Table 1 in the 2017 FONSI.</p> <p>Reevaluation #1 Additional Mitigation:</p> <ul style="list-style-type: none"> • Amtrak will obtain a General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities from CTDEEP prior to commencing construction. Amtrak and its contractors will comply with any commitments specified within the permit. • Amtrak will obtain a Clean Water Act Section 404 permit and Section 401 permit from USACE and CTDEEP prior to the commencing construction. Amtrak and its contractors will comply with any commitments specified within the permits including in-water work windows to protect diadromous species. • Amtrak will implement sediment containment measures, such as silt curtains, during

	dredging to minimize water quality impacts.
Threatened and Endangered Species	
Impacts as Described in the 2014 EA/2017 FONSI	The 2014 EA concluded that based on continuous coordination with resource agencies, species-specific surveys and in-water work restrictions, construction of the Project would not pose a significant adverse impact to Threatened or Endangered Species. USFWS did not identify any federally-listed or proposed, threatened or endangered species or critical habitat under the USFWS jurisdiction within the Project area. Further, because the Project will replace an existing bridge actively used to carry rail traffic, long-term future operational effects would be similar to those of the existing bridge and no adverse operational impacts are anticipated.
Reevaluation #1: New Impacts (Y/N)	Yes. During spring and summer 2021 field investigations, two State Protected plant species were confirmed to be present. Amtrak developed protection/relocation plans and has coordinated with the CTDEEP NDDDB program to minimize the impact on the State Protected plant species identified. In addition, the Lieutenant River supports a diverse fish community, including spawning runs of diadromous Alewife and Blueback Herring (a Connecticut state-listed species of special concern). Dredging activity was not originally proposed but is required based on the revised project design and anticipated construction methods. Dredging has the potential to impact federally listed species and habitat. See the Critical Habitats and Threatened and Endangered Species section below for more detail.
Reevaluation #1: Change in Impacts (Advanced Design)	During spring and summer 2021 and 2022, Amtrak’s consultants conducted field investigations to confirm the presence of the State Protected plant species. Two species were confirmed to be present, <i>Lilaeopsis chinensis</i> and <i>Limosella australis</i> . Amtrak developed protection/relocation plans and has coordinated with the CTDEEP NDDDB program to minimize the impact on the State Protected plant species identified. Amtrak worked with CTDEEP regarding a NDDDB Protection Plan. In 2017, the Project area was designated as critical habitat for the New York Bight DPS for Atlantic Sturgeon. Effective March 31, 2023, the USFWS reclassified the northern long eared bat (<i>Myotis septentrionalis</i>) from threatened to endangered. The following additional federally-listed species were identified by USFWS in 2023 as having possible presence in the Project area: Northern long-eared bat (endangered), red knot (<i>Calidris canutus rufa</i> , threatened), roseate tern (<i>Sterna dougallii</i> , endangered), and monarch butterfly (<i>Danaus plexippus</i> , candidate). However, consultation with USFWS determined that the Project would not impact any of these species (see additional information below).
Mitigation	Amtrak is responsible for complying with the commitments and mitigation measures described in Table 1 in the 2017 FONSI. Reevaluation #1 Additional Mitigation: <ul style="list-style-type: none"> • Amtrak will obtain a Clean Water Act Section 404 permit and Section 401 permit from USACE and CTDEEP prior to the commencing construction. Amtrak and its contractors will comply with any commitments specified within the permits including in-water work windows to protect diadromous species. • Amtrak will comply with all Conservation Recommendations provided by NMFS during EFH consultation by utilizing turbidity controls during construction and providing compensatory mitigation for permanent loss of wetland and open water habitats.
Contaminated Sites and Hazardous Waste	
Impacts as Described in the 2014 EA/2017 FONSI	Amtrak performed a Phase I Environmental Site Assessment to determine the potential presence of contaminated materials in areas that would be disturbed by the Project. This assessment did not identify any potential sources of hazardous materials that likely impacted the Project site. Therefore, no significant adverse effects to contaminated sites or hazardous waste are expected. However, based on the age of the bridge itself, there is a high potential identified for encountering hazardous waste such as asbestos, lead paint, and PCB containing equipment. It is anticipated that excavated material will be tested and disposed of properly.
Reevaluation #1: New Impacts (Y/N)	Yes. Dredging activity was not originally proposed but is required based on the revised project design and anticipated construction methods. Dredging activity could result in material which may

	contain contaminants of concern.
Reevaluation #1: Change in Impacts (Advanced Design)	Dredging was not proposed at the time of the 2014 EA. It is anticipated that dredged material may contain contaminants of concern and therefore has to be stockpiled, tested, characterized, and be disposed of at an approved upland facility. The likelihood of encountering hazardous materials during the existing bridge demolition remains in the advanced design.
Mitigation	Amtrak is responsible for complying with the commitments and mitigation measures described in Table 1 in the 2017 FONSI.
Safety and Security	
Impacts as Described in the 2014 EA/2017 FONSI	Amtrak will design, build, and operate the Project to comply with all applicable federal, state, and local safety regulations. The Project will improve the structural and operational reliability of the existing bridge and increase the safety of passengers traveling on SLE and Amtrak trains over the bridge. The Project will provide navigational benefits by improving the reliability of the bridge and minimizing delays during bridge openings and closings.
Reevaluation #1: New Impacts (Y/N)	No. No change in impacts.
Reevaluation #1: Change in Impacts (Advanced Design)	None.
Explanation of How Conclusion was Reached	The design refinements would not change the Project's impacts on safety and security in the area.
Mitigation	Amtrak is responsible for complying with the commitments and mitigation measures described in Table 1 in the 2017 FONSI.
Indirect and Cumulative Effects	
Impacts as Described in the 2014 EA/2017 FONSI	The Project would result in no positive or negative secondary effects. There are several other rail projects in the vicinity (i.e., Northeast Corridor Improvement Project, Mystic River Bridge, Shaw's Cove Bridge, Thames River Bridge, and Niantic River Bridge) that, when combined with the Project, would improve the operations and reliability of the existing NEC and thus, result in a cumulative benefit to rail transportation.
Reevaluation #1: New Impacts (Y/N)	No. No change in impacts. Since the 2017 FONSI, FRA issued the NEC FUTURE Record of Decision, which presented a vision for growth along the Northeast Corridor. Subsequently, the NEC Commission (comprising representatives from each of the eight Northeast Corridor states, the District of Columbia, Amtrak, and USDOT) identified and provided a sequencing and delivery strategy for completing projects to eliminate the NEC's state-of-good-repair backlog and to modernize and make targeted improvements to the NEC. Amtrak has begun some of these infrastructure upgrades to increase track capacity, improve ride quality, and offer greater reliability. The Connecticut River Bridge Project, together with these other upgrades and projects, will result in an overall cumulative benefit to rail service along the NEC.
Reevaluation #1: Change in Impacts (Advanced Design)	None.
Explanation of How Conclusion was Reached	After review of design changes and environmental conditions, it was determined that there were no changes in Project impacts related to indirect and cumulative effects.
Mitigation	None.
Environmental Justice	
Impacts as Described in the 2014 EA/2017 FONSI	The Project would not result in any adverse impacts to minority or low-income communities. No minority or low-income populations were identified within the project study area.
Reevaluation #1: New Impacts (Y/N)	No. No change in impacts.
Reevaluation #1: Change in Impacts (Advanced Design)	None.
Explanation of How Conclusion was Reached	The design refinements presented in this memo would have no effect on the conclusions in the EA regarding the Project's potential effects on environmental justice communities.
Mitigation	None.

Section 4(f) Evaluation	
Impacts as Described in the 2014 EA/2017 FONSI	The Project would constitute a “use” of two Section 4(f) resources—the Connecticut River Bridge and Ferry Landing Park. The EA and FONSI determined that there are no prudent and feasible alternatives to the use of these two resources. As such, the 2017 FONSI established and set forth measures to mitigate harm, as described above. Amtrak would follow these commitments as part of the Project.
Reevaluation #1: New Impacts (Y/N)	Yes. Disturbance to the Ragged Rock Creek WMA was not identified in the EA. There is one area (8,000± SF) in the Ragged Rock Creek WMA adjacent to the Amtrak ROW that will be temporarily disturbed for construction access. After occupancy, the area would be restored to existing conditions. Amtrak has coordinated with CTDEEP, the Section 4(f) official with jurisdiction. See the Section 4(f) Evaluation section below for more detail.
Reevaluation #1: Change in Impacts (Advanced Design)	Although the advanced design would temporarily occupy 0.09 percent of the Ragged Rock Creek WMA along the Amtrak ROW, the temporary occupancy would not constitute a “use” of this resource per 23 CFR 774.17.
Mitigation	<p>Amtrak is responsible for complying with the commitments and mitigation measures described in Table 1 in the 2017 FONSI.</p> <p>Reevaluation #1 Additional Mitigation:</p> <ul style="list-style-type: none"> • After occupancy of the Ragged Rock Creek WMA in Old Saybrook, Amtrak will restore the occupied area to pre-existing conditions. • Amtrak will implement invasive species control of common reed (<i>Phragmites australis</i>) over a five-year period on approximately 200 acres of the Ragged Rock Creek Wildlife Management Area as mitigation for unavoidable impacts to brackish intertidal wetland areas.

As summarized above, Amtrak’s advancement of the Project from conceptual engineering to final design in 2014-2021 resulted in changes in design that have the potential to change the Project’s impacts to the following environmental categories: Land Use, Cultural Resources, Wetlands and Open Waters, Water and Aquatic Resources, Threatened and Endangered Species, and Section 4(f) resources. More detail regarding each of these environmental categories is provided below.

Land Use and Acquisitions

The EA stated that construction of the bridge would not require any permanent upland land acquisition. However, based on final design, anticipated maintenance access needs, and wetland mitigation requirements, Amtrak proposes purchasing a vacant property located at 17 Shore Road in Old Lyme, Connecticut. Amtrak is in discussions with the property owner and plans to acquire this property through a voluntary sale. When the property is acquired by Amtrak, it would result in a change in land use from a vacant land use (currently zoned by the Town of Old Lyme as rural residential [RU-80]) to a different land use. While Amtrak intends to purchase the parcel, it would not construct any railroad infrastructure on the property or use it for transportation purposes. The new use of the land would maintain an existing access road which Amtrak currently holds an easement to use and be for wetland mitigation purposes. In addition, as the site is required to remain a wetland mitigation site per permitting requirements, the property would be protected from future development through language included in the real estate transaction. This change in land use would not result in any substantial changes to surrounding existing land use and would not alter land use or development patterns.

The Project will require temporary construction easements in addition to the existing easements in-place on privately-owned and State-owned parcels in Old Saybrook for a construction access road, a temporary trestle work platform, and retaining structures (see **Figure 2**). Amtrak has existing access easements with individual private property owners on the Old Saybrook side of the Project. The Project will require the

temporary occupancy of one small area of the state-owned Ragged Rock Creek Wildlife Management Area (WMA) in Old Saybrook for vehicular construction access. Amtrak has coordinated this temporary occupancy with CTDEEP (see **Section 4(f) Evaluation** below for additional detail).

In Old Lyme, the Project will require temporary construction easements in addition to the existing easements in-place on privately-owned and State-owned parcels for vehicular construction access, a temporary trestle work platform, and retaining structures (see **Figure 2**). Amtrak has existing access easements with individual private property owners on the Old Lyme side of the Project. The Project will require temporary easements for the use of a portion of the larger state-owned Ferry Landing Park parcel in Old Lyme for construction access, personnel parking, and construction trailers. Ferry Landing Park includes CTDEEP's Marine Headquarters building. Amtrak anticipates that approximately 15 of the 31 public parking spaces within the Marine Headquarters will be affected, including two Americans with Disabilities Act (ADA) parking spaces. Six parking spaces at the site are currently designated for Amtrak personnel. Amtrak will provide a temporary parking area for CTDEEP during construction and restore ADA parking as mitigation after construction, per easement agreements. Amtrak is currently in the process of finalizing the Ferry Landing Park easement agreements with CTDEEP.

After construction, the Contractor will remove all of the temporary work platforms, paths, and retaining structures. These construction-related uses would be temporary and of short duration and would not result in a significant adverse effect to land uses. Overall, although the wetland mitigation necessary to address impacts of the Project's final design requires the purchase of a privately-held parcel that was not identified in the EA, the Project's overall land use impacts remain the same as disclosed in the EA.

Historic, Cultural, and Archaeological Resources

On August 5, 2016, FRA, Amtrak, and the CT State Historic Preservation Office (CTSHPO) executed a Memorandum of Agreement (MOA) pursuant to Section 106 (see Attachment B). Two federally recognized tribes, the Mashantucket Pequot and Mohegan, were contacted and invited to participate as consulting parties; neither tribe elected to participate. The MOA stipulates measures to resolve the adverse effects of the Project on the historic bridge, as well as measures regarding additional archaeological investigations as Project design advances.

Since the publication of the 2014 EA and 2017 FONSI, two potential NRHP-eligible archaeological sites (in Old Lyme and Old Saybrook) were identified within the Project's Section 106 Area of Potential Effects (APE) in 2020 at 30% design and one potentially NRHP-eligible site in an expansion of the original APE at 60% design to include a parcel at 17 Shore Road in Old Lyme, which will serve as a wetland mitigation site. These sites have good integrity and their boundaries were established within the APE through Phase II surveys. As per MOA Stipulation III.C, and because significant archaeological sites were discovered, FRA invited the following three federally recognized tribes to participate in the Project as consulting parties and comment on the 2021 Phase IB/Phase II Archaeology Report: the Narragansett Indian Tribe, Mashantucket (Western) Pequot Tribal Nation (MPTN), and Mohegan Tribe. The Mohegan Tribe and the Mashantucket (Western) Pequot elected to participate.

CTSHPO concurred in a letter dated April 23, 2021 (see Attachment C), that each of the three sites are eligible for listing in the NRHP, and determined, based on information provided by FRA, in coordination with Amtrak, that the Project will have an adverse effect on each of these resources. CTSHPO found each of these sites to be individually significant, but taken together, they offer a rare glimpse into nearly 10,000 years of human culture at the mouth of a regionally important river. They are one of the state's most valuable

archeological assets. Their loss is significant because comparable sites already have been lost to development or climate change.

Amtrak subsequently developed a Data Recovery Plan (DRP), which included an Unanticipated Discoveries Plan (UDP), addressing each of the three sites in consultation with CTSHPO, per the Stipulation III.D (DRP) and Stipulation III.E (UDP) in the 2016 MOA; CTSHPO concurred in a letter dated September 21, 2021 (see Attachment D), that the DRP appropriately mitigates each site. FRA also provided the DRP to the Narragansett, Mashantucket (Western) Pequot and Mohegan tribes for review and comment. The Mashantucket (Western) Pequot tribe provided comments on November 2, 2021. FRA and Amtrak subsequently addressed the tribe's comments in a series of emails by December 6, 2021.

In 2023 the Limits of Disturbance (LOD) at the 17 Shore Road site were altered slightly, necessitating supplemental Phase II testing to confirm the limits of the archaeological site within the LOD. A memorandum report on the supplemental testing was supplied to CTSHPO, the Mohegan Tribe and the Mashantucket (Western) Pequot Tribe on August 2, 2023 for review and comment. CTSHPO responded on August 23, 2023 with no comments on the memorandum report.

The Amtrak MOA Progress Summary Report for the period of August 5, 2016 through August 30, 2023 (Attachment E) provides a consolidated update of progress made on Treatment Measures for both Architectural and Archaeological Resources.

Although the archaeological site boundaries have been expanded and more detail is now known about the archaeological resources than presented in the EA, the Project's Section 106 MOA includes provisions for ongoing identification of, assessment of effects to, and resolution of adverse effects to historic properties including archaeological sites as the Project's design advanced and as the Project is under construction. As such, the MOA satisfies the requirements of Section 106 consultation and will continue to be used throughout the duration of the Project.

Wetlands and Open Waters

The 2014 EA included a preliminary assessment of wetland impacts based on conceptual engineering design and available mapping resources. During the advanced engineering design, Amtrak minimized permanent impacts to wetlands and open water to the extent possible through the use of retaining walls, temporary access trestles, rip rap slopes, and other design measures that reduced the footprint of permanent impact and temporary disturbance, while improving the navigation benefits of the Project. As the Project has proceeded through advanced design, Amtrak performed detailed wetland delineations in July 2018, September 2019¹, August and September 2020², and December 2021.³ Amtrak calculated permanent and temporary dredge and fill impacts using two methods as described below:

- 4.09 acres of permanent impact and 4.06 acres of temporary impact to federally jurisdictional tidal waters below the high tide line (HTL) and adjacent estuarine wetlands regulated by the USACE are shown in **Table 2** and Attachment F.
- 4.52 acres of permanent impact and 3.89 acres of temporary impacts to tidal wetlands including lands potentially capable of supporting tidal wetland vegetation, which may extend to one foot above local extreme high water (elevation 4.1 feet NAVD88 for this Project) as well as other coastal resource areas

¹ REMA Ecological Services, Wetlands Delineation & Characterization Report, November 18, 2019.

² REMA Ecological Services, Wetlands Delineation & Characterization Report - Supplemental, December 18, 2020.

³ REMA Ecological Services, Wetlands Delineation & Characterization Report - Supplemental, January 27, 2022.

including tidal waters and other areas below the coastal jurisdiction line (CJL; elevation 2.9 feet NAVD88 for this Project) regulated by CTDEEP are shown in **Table 2** and Attachment G.

Amtrak has proposed compensatory measures for permanent wetland and coastal water impacts to CTDEEP and USACE through their respective permitting processes.⁴ The proposed measures include restoring tidal wetlands at two properties along the Lieutenant River approximately 0.5 miles east of the bridge replacement location, and are described below:

- At 17 Shore Road, tidal wetland restoration measures will include:
 - Restoring tidal hydrology and tidal wetland vegetation to a formerly connected tidal wetland area via in the southeastern portion of the site through:
 - Construction of a new tidal channel and culvert under the existing access road to convey tidal flow from an existing tidal tributary of the Lieutenant River in the northwestern portion of the mitigation site into the southeastern portion of the site,
 - Removal of an approximately 2.4-acre colony of common reed,
 - Establishing surface elevations to support low marsh and high marsh tidal wetland habitats,
 - Constructing tidal pools and channels for subtidal habitat,
 - Planting of tidal wetland vegetation typical of intertidal marsh communities, and
 - Decommissioning an existing and structurally deficient culvert under the existing Amtrak embankment.
 - Plugging of a remnant mosquito control ditch in the northwestern portion of the site to restore tidal hydrology.
 - Control of common reed (*Phragmites australis*), which presently dominates a large proportion of the site.
 - Permanent preservation of tidal and inland wetlands, upland buffers, and a population of the state-listed plant salt marsh bulrush (*Bolboshoenus novae-angliae*).
- At the Amtrak-owned 3.25-acre site (a water-locked parcel located to the southwest of 17 Shore Road on the south side of Amtrak ROW) tidal wetland restoration measures will include:
 - Plugging of three remnant mosquito control ditches to restore tidal hydrology.
 - Control of common reed.
 - Preservation of existing populations of the state-listed plant lilaopsis (*Lilaeopsis chinensis*).
 - Transplanting approximately 4,000 square feet of lilaopsis and mudwort (*Limosella australis*) plants from the Project disturbance limits to the site.

Collectively, the tidal wetland restoration efforts at the 3.25-acre site and 17 Shore Road will restore approximately 9.55 acres of tidal wetland habitat and create an additional 0.56 acres of subtidal habitat totaling approximately 10.11 acres of off-site mitigation credit.

In addition, Amtrak will implement a long-term common reed control program on approximately 200 acres of state-owned portions of the Ragged Rock Creek Marsh Wildlife Management Area in Old Saybrook, beginning approximately 0.2 miles south of the bridge replacement location. The goals of the mitigation efforts are to control common reed for three years followed by a fourth year of monitoring and a fifth year of additional spot treatments as needed to rehabilitate brackish tidal wetland habitat and enhance habitat for state-listed plant populations.

⁴ Stantec Consulting Services Inc. 2023. Tidal Wetlands Mitigation Plan for the Replacement of Amtrak Connecticut River Bridge. May 2.

Overall, the Project's final design will have a greater extent of wetland and open water impacts than identified in the EA; however, Amtrak's implementation of appropriate mitigation will ensure the net impacts are unchanged. CTDEEP and USACE will ultimately be responsible for determining whether the proposed compensatory mitigation measures are adequate to ensure no net loss of aquatic resources. CTDEEP and USACE will review and approve a final mitigation plan. Amtrak will be responsible for implementing the required compensatory mitigation in accordance with the final mitigation plan. CTDEEP and USACE will maintain responsibility for ensuring compliance with the mitigation plan and providing oversight of the mitigation site(s), in accordance with the final mitigation plan.

Water and Aquatic Resources

Amtrak determined that incidental dredging of about 45,550 cubic yards would be required for the removal and installation of submarine cables in the Connecticut River; removal of unsuitable/unstable material under the proposed embankments, at the retaining walls, abutments, piers, and riprap scour protection; and removal of material for additional water depth adjacent to the temporary trestle work platforms at each abutment for construction barge access. The Contractor will use an excavator or clamshell bucket dredge to remove sediment and unsuitable material. Dredging would occur within approximately 2.52 acres of subtidal and nearshore habitats of the Connecticut River. Amtrak anticipates the duration of dredging to be approximately four months. Unconfined underwater excavation and dredging is restricted between March 1 and September 30, and no dredging activity of any kind would occur from April through June to minimize disturbance to diadromous fish. USACE, in coordination with CTDEEP, regulates dredging in the affected Project area; Amtrak is in the process of obtaining the necessary Clean Water Act Section 401 and 404 permits. Amtrak and its contractors will comply with any commitments specified within the permits to ensure no adverse effects.

The short duration and localized extent of activities and use of sediment containment measures would minimize temporary benthic habitat impacts from dredging activities. Permit limitations on in-water construction activities during essential fish migration windows would protect diadromous species that could move through the Project area to freshwater spawning habitats upstream. Therefore, this activity would result in no significant adverse impacts to water and aquatic resources. The Project's overall impacts to water and aquatic resources remains the same as disclosed in the EA.

Critical Habitats and Threatened and Endangered Species

NMFS

Because of the Project's design advancements and a new critical habitat designation for Atlantic sturgeon, FRA sent NMFS a request on August 31, 2020 to reinitiate Section 7 consultation for the Project (see Attachment H). NMFS's September 15, 2020 response letter highlighted the Atlantic sturgeon, shortnose sturgeon and four sea turtles (Kemp's ridley sea turtle [*Lepidochelys kempii*], loggerhead sea turtle [*Caretta caretta*], green sea turtle [*Chelonia mydas*], and leatherback sea turtle [*Dermochelys coriacea*]) as having the potential to be present in the general project vicinity.

FRA sent NMFS a continuing consultation letter on December 27, 2021, requesting NMFS concurrence with a finding of "may affect, not likely to adversely affect" for ESA listed species or designated critical habitat under their jurisdiction. NMFS requested more information and analysis to complete its review.

On December 29, 2022, FRA sent NMFS the requested information, including a detailed analysis of the effects of the proposed action (see Attachment H). FRA concluded that the Project may affect, but is not

likely to adversely affect Atlantic sturgeon, shortnose sturgeon, Kemp's ridley sea turtle, loggerhead sea turtle, green sea turtle, and leatherback sea turtle. Additionally, the Project may affect, but is not likely to adversely affect Atlantic sturgeon critical habitat. FRA requested NMFS concurrence with these determinations. On April 20, 2023, NMFS concurred that the proposed action is not likely to adversely affect any NMFS ESA-listed species or designated critical habitat (see Attachment H).

EFH

An Essential Fish habitat (EFH) Assessment was prepared as part of the 2014 NEPA EA. The 2014 EFH Assessment concluded the Project would not adversely affect EFH. In consideration of the Project's design advancements, FRA sent NMFS a request for EFH consultation on December 29, 2022. The request included an EFH assessment consultation worksheet and supplemental information (see Attachment I). In that letter, FRA requested NMFS concurrence that the Project's adverse effect on EFH is not substantial. NMFS responded on January 27, 2023 (see Attachment I). NMFS stated the project may adversely affect EFH and issued two EFH conservation recommendations:

1. *Appropriate soil erosion, sediment and turbidity controls (e.g. turbidity curtains, cofferdams) should be used and maintained in effective operating condition during construction. Activities capable of producing greater than minimal turbidity or sedimentation should be done during periods of low-flow or no-flow, when the stream or tide is waterward of the work, or when controls are used to obtain dry work conditions. Work that produces greater than minimal turbidity or sedimentation should not be done from February 1 to June 30 to protect sensitive life stages of winter flounder and migrating diadromous species.*
2. *Compensatory mitigation should be provided for the permanent loss of 69,500 SF of tidal wetlands. A copy of the final mitigation plan (including ILF payment and ratio information) should be sent to NOAA Fisheries for review.*

On March 1, 2023, FRA notified NMFS of its acceptance of the conservation recommendations and provided clarifying comments (see Attachment I). On March 1, 2023, NMFS accepted FRA's response to the conservation recommendations.

USFWS

On August 31, 2020, FRA sent a request to USFWS to re-initiate Section 7 consultation (see Attachment J). The request provided an updated Official Species List for the action area, which included the threatened Northern Long-Eared Bat (now endangered), the threatened Red Knot, and the endangered Roseate Tern, as well as a map published on March 6, 2019, by the CTDEEP showing the action area is not an area of concern for the Northern Long-Eared Bat. USFWS responded to FRA's Section 7 consultation request on November 9, 2020, asking for additional information to complete the concurrence request and also clarified that if a determination of no effect is established, then the consultation will be complete. The additional information requested by USFWS included:

- Regarding the Northern Long-Eared Bat, disclose whether the Project will remove trees.
- Regarding the Red Knot and Roseate Tern, clarify whether the habitats for these species are present within the action area.

Specific information regarding habitat and correspondence for the aforementioned species is shown below.

Red Knot

- It is highly unlikely that the Red Knot would utilize any of the habitats within or adjacent to the Project

limits based on the preferred habitats utilized by this species during its non-breeding occurrences in Connecticut as well as its recorded distribution.

- In 2018, 2019, and 2020⁵ Amtrak’s consultants did not observe this species during fieldwork. As such, Amtrak found no suitable habitat to be present within the Project’s action area.
- Based on the lack of suitable habitat for the species within the action area and the lack of observed species presence, the Project is expected to have “no effect” to the Red Knot.

Roseate Tern

- Field surveys to date and the CTDEEP Natural Diversity Data Base (NDDB) list as of February 22, 2023 (see Attachment K), did not identify the Red Knot or Roseate Tern as occurring within the Project boundary.
- Separately, in correspondence dated November 9, 2020, the USFWS confirmed that their records indicate the same.
- It is highly unlikely that Roseate Terns utilize any of the habitats within or adjacent to the Project limits based on their preferred habitats as well as its recorded distribution and its known breeding colonies.
- Based on the lack of suitable habitat for the species within the action area and the lack of observed or mapped species presence, the Project is expected to have “no effect” to Roseate Tern.

Northern Long-Eared Bat

- The CTDEEP published map that depicts areas of known hibernacula for the Northern Long-Eared Bat shows that the closest site is located in the Town of North Branford, which is about 20 miles from the action area. However, natural resource surveys confirmed that potential pup rearing trees do exist within the action area.⁶
- As part of the permit application review process, on December 1, 2021, USACE requested an updated Official Species List using a broader study area. Amtrak used the USFWS IPaC database to generate an updated letter per USACE’s request. The 2021 list included the same species as in the prior list.
- On January 12, 2023, due to the time elapsed, another updated letter was generated using the USFWS IPaC database (see Attachment L). The 2023 list includes the same species as in the prior list; therefore, the conclusions above remain the same. The 2023 IPaC letter notes that the Northern Long-eared Bat will be reclassified as endangered.
- On March 22, 2023, a letter was generated using the USFWS IPaC database, which confirmed a “No Effect” determination on the northern long-eared bat (see Attachment L).

Based on a review of the abovementioned species, their habitat requirements and the potential for impacts, FRA determined that the construction or operation of the Project would result in “no effect” species and therefore, consultation is not required. As stated above, work windows will likely be instituted as part of the USACE permit conditions to ensure major construction does not occur during sensitive time periods for threatened and endangered species.

CTDEEP NDDB

Separate from the federal Section 7 process, Amtrak consulted with CTDEEP NDDB and identified several State Protected species that might be present within the construction disturbance area of the Amtrak Connecticut River Bridge along the Northeast Corridor (MP106.89) at Old Saybrook and Old Lyme,

⁵ REMA Ecological Services, Letter Regarding Federally Listed Fauna, January 7, 2021

⁶ REMA Ecological Services, Letter Regarding Federally Listed Fauna, January 7, 2021. See Attachment M.

Connecticut. The State Protected species listed by CTDEEP NDDB are:

- One type of habitat: brackish intertidal marsh
- Nine vascular plant species: Eaton’s beggarticks, Bayonet grass, Salt marsh bulrush, Pygmyweed, Lilaeopsis, Mudwort, Eastern prickly pear, American reed, and Canada sand spurry
- Six vertebrate animal species: Shortnose sturgeon, Atlantic sturgeon, Saltmarsh sharp-tail sparrow, Spotted turtle, Least bittern, and Northern diamondback terrapin

A *Wildlife Species Protection Plan*, dated January 20, 2023, was submitted to and approved by CTDEEP NDDB on February 22, 2023, for the six listed vertebrate species that may be present within or in the vicinity of the bridge construction disturbance limits, including the Connecticut River. According to this plan, time of year restrictions will be incorporated into the Project construction schedule as appropriate along with contractor orientation training, erosion and turbidity controls, workplace barricading, and on-site environmental monitoring to minimize impact to wildlife habitat from the construction activities.

Through continued consultation with CTDEEP NDDB, Amtrak has developed and will implement a plan for the protection and incidental take of state-listed plant species and their associated brackish intertidal marsh habitat, along with compensatory measures (described above). Amtrak submitted the revised plan to NDDB on December 19, 2022. Final approved details of the restoration means and methods, long-term monitoring, and invasive species control are identified in the *Revised State-listed Plant Incidental Take and Mitigation Report*, dated on January 20, 2023 and approved by CTDEEP on February 22, 2023. The final NDDB determination is provided in Attachment K and NDDB reports may be made available upon request to Amtrak.

CTDEEP Wildlife

As part of the permitting process, Amtrak consulted with the CTDEEP Wildlife Division as part of pre-submission consultation regarding the presence of osprey nests on the existing bridge span, as well as about the bald eagle.

Osprey

- Osprey are protected under the Federal Migratory Bird Treaty Act of 1918 and the Connecticut General Statutes Section 26-92.
- In correspondence dated March 31, 2020, CTDEEP approved the removal of nests and nesting material without a permit (see Attachment N), requesting notification before relocation of Osprey nests before existing bridge demolition. Amtrak incorporated these conditions into the Project Specifications for Amtrak’s construction contractors.

Bald Eagle

- The bald eagle was removed from the federal list of threatened and endangered species in 2007.⁷ The bald eagle’s status remains threatened on Connecticut’s list of threatened and endangered species.⁸
- On October 24, 2022, CTDEEP confirmed that all known bald eagle nests are more than one mile away from the project site and therefore no time of year restrictions need to be imposed to accommodate bald eagle nesting (see Attachment N).

⁷ <https://www.fws.gov/species/bald-eagle-haliaeetus-leucocephalus> Accessed 11/2/2022

⁸ <https://portal.ct.gov/DEEP/Wildlife/Fact-Sheets/Bald-Eagle> Accessed 11/2/2022

CTDEEP Fisheries

Amtrak consulted with the CTDEEP Fisheries Division in April 2020. In May 2020, CTDEEP recommended a series of construction related measures including the following:

- Lighting restrictions, work windows, and the use of vibratory hammers during certain times.
- Prohibition of all in-water work, including the installation and removal of the temporary trestle bridge over the Lieutenant River, between March 1 and June 1 to protect the spawning migrations of Alewife and Blueback Herring.

These seasonal in-water activity restrictions ensure that migratory pathways are not obstructed for spawning shortnose or Atlantic sturgeon (see Attachment H). Amtrak's construction contractors would implement all recommended conservation measures and seasonal restrictions from CTDEEP.

In January 2023, the CTDEEP Fisheries Division sent additional recommendations (see Attachment O) shown below:

- Orienting the section of the proposed Ferry Landing fishing pier that would extend from the existing landside boardwalk south toward the new bridge pier #9 parallel to the flow of the river and as close to the southwest corner of the existing boardwalk as possible.
- A note that pending the outcome of consultation with the Boating Division, there may be additional guidance on the requirements for navigation and hazard warnings at the fishing piers.
- A request to be included in all phases of design for both the Ferry Landing and Eagle landing fishing piers, and to approve the final plans.

Amtrak is consulting with the CTDEEP Fisheries Division regarding mitigation for the temporary loss of the Ferry Landing fishing pier associated with the Project. Once Amtrak and CTDEEP have determined an agreeable mitigation approach, Amtrak will provide the final mitigation plan and associated regulatory approvals for the work at Eagle Landing State Park to FRA. FRA will assess if a subsequent NEPA re-evaluation will be required for the mitigation work.

With the appropriate permit restrictions and mitigation measures described above, the Project's overall impacts to critical habitats and threatened and endangered species remain consistent with the EA.

Section 4(f) Evaluation

The 2014 EA and Section 4(f) Evaluation identified 13 parks, wildlife areas, and cultural resources subject to Section 4(f) of the USDOT Act of 1966 within the project study area. Of these 13 resources, the EA concluded that the Project would result in a Section 4(f) use of the Connecticut River Bridge and Ferry Landing Park. The bridge is eligible for listing on the National Register of Historic Places (NRHP) and is listed on the State Register (SR). Removal of the bridge constitutes a use of this Section 4(f) resource. The 2014 EA and Section 4(f) Evaluation also disclosed that a portion of the boardwalk located in Ferry Landing Park, directly beneath the Connecticut River Bridge, would be temporarily removed in the short-term during bridge construction (for a period of up to three years) and rebuilt in kind. This temporary closure constitutes a use of this Section 4(f) resource. Section 4(f) properties are shown on **Figure 3**.

The 2014 EA and Section 4(f) Evaluation identified the Ragged Rock Creek Wildlife WMA in Old Saybrook as a Section 4(f) property within the study area but did not anticipate any temporary or permanent use of this property. The Ragged Rock Creek WMA is an approximately 204-acre preserve located to the

southwest of the Connecticut River Bridge and immediately south of the Amtrak ROW.⁹ The advanced design anticipates the temporary occupancy of one small area along the northern edge of the Ragged Rock Creek WMA, adjacent to the Amtrak ROW, for construction vehicle access (separate from the Phragmites control discussed above). The area (shown on **Figure 4**) is approximately 8,000 square feet in size or approximately 0.18 acres, which translates to about 0.09 percent of the total acreage of the Ragged Rock Creek WMA. Temporary construction mats would be placed in the area along the base of the riprap to provide protection from construction activities.

The temporary access path that would be located at the northern boundary of the Ragged Rock Creek WMA would not permanently incorporate land into a transportation facility and would not comprise a constructive use of land. While the access path would result in a temporary occupancy of land, it would not be adverse in terms of the statute's preservation purpose. The temporary occupancy of 0.09 percent of the total Ragged Rock Creek WMA for construction access would not adversely impact the Section 4(f) statute's preservation purpose as almost 100 percent of the WMA would still be available to wildlife species; the interior of the WMA would not be fragmented; the temporary wetland impacts would be mitigated (as stated above under "Wetlands") consistent with permit conditions; the affected access area would be restored to existing conditions; and the long-term use of the WMA would continue with the operation of the Project as it does today with the existing bridge.

As part of this re-evaluation, FRA determined that the temporary disturbance of the Ragged Rock Creek WMA would not constitute a use of this Section 4(f) resource. The disturbance would occur for less time than the overall construction duration; there would be no change in land ownership; the scope of work is minor as it involves some fill and construction mats; there would be no adverse temporary or permanent changes to the activities, features or attributes of the property as the areas are minor in size and function; the land would be fully restored as the fill would be removed once vehicle access across the tracks is no longer necessary, and areas affected by the mats would be restored to existing or improved conditions. Amtrak has coordinated with CTDEEP which is the current owner and official with jurisdiction of the Ragged Rock Creek WMA. On December 27, 2021, FRA wrote to CTDEEP requesting concurrence that the Project entails a temporary occupancy and does not constitute a use of the Section 4(f) property. In a response dated January 10, 2023, CTDEEP concurred with FRA's determination that the Project is a temporary occupancy of the WMA (see Attachment P).

The Connecticut National Estuarine Research Reserve (CT NERR) was officially designated as a National Estuarine Research Reserve in January 2022 under the Coastal Land Management Act by the National Oceanic and Atmospheric Administration (NOAA) in partnership with the State of Connecticut. The CT NERR spans 52,160 acres of Southeastern Connecticut and is comprised of upland and offshore areas within the project area. FRA determined that the CT NERR does not meet the criteria required for a property to qualify as a park, recreation area, or refuge under Section 4(f). Specifically, the CT NERR's primary purpose is not for park, recreation, or refuge activities. The primary purposes of the CT NERR are stewardship, research, education, and training. Any recreation occurring within the CT NERR is expected to be occasional and dispersed and would not be considered a primary purpose within the context of Section 4(f). The CT NERR designation does not confer ownership or regulatory authority of public lands and does not result in conservation or preservation of resources or habitat. Therefore, Section 4(f) does not apply to the CT NERR.

The Project's impacts to Section 4(f) properties remain the same as disclosed in the EA.

⁹ <https://ctdeep.maps.arcgis.com/>

Ongoing Public Involvement

In February 2023, Amtrak hosted a virtual public information session regarding the Project. The meeting provided an update on project status and gave the public an opportunity to comment before Amtrak submitted several environmental permitting applications to regulatory agencies. The primary questions asked by members of the public were regarding upcoming procurement opportunities, construction timelines and approach, and consideration for natural and cultural resources. Amtrak posted a summary of comments and responses, along with the presentation, to the project webpage (www.amtrak.com/connecticut-river-bridge).

Amtrak intends to hold additional informational meeting(s) as the Project approaches the start of construction to discuss the updated work schedule and address questions from the public. As part of the permit authorization process, CTDEEP and USACE have also published public notices to inform the public of the Project and the tentatively approved permits. The CTDEEP 30-day public notice was published in The Hartford Courant, The Day, and on the CTDEEP website on February 29, 2024. The USACE public notice was published on the USACE website on March 21, 2024. Amtrak will continue to actively respond to comments and questions received during the public notice periods. As construction progresses, updates and photographs will be posted to a project website to keep the public informed and engaged. Any navigation closures or other construction-related impacts to the public will be communicated through this website as well as directly notifying impacted stakeholders. The website will also allow the public to submit questions throughout the duration of the Project.

CONCLUSION

Overall, the nature and type of environmental impacts remain the same as described in the 2014 EA. **Table 2** presents an assessment of how Amtrak’s design changes described herein result in new benefits or impacts to the environmental categories evaluated in the EA. For several of the environmental categories, the advanced studies and field surveys performed by Amtrak as part of the Project’s final design phase revealed a greater understanding about the locations of environmental resources and/or details about how the Project will impact them. This in turn has led to FRA and Amtrak being able to provide more granular information during on-going coordination with various state and federal resource and regulatory agencies (e.g., CTSHPO, CTDEEP, USACE) regarding targeted avoidance, minimization, and mitigation measures such as time-of-year restrictions on performing certain project activities and construction of various compensatory mitigation elements. As a result, Amtrak has incorporated more elements into the Project’s design and construction techniques that will reduce the impact of the temporary disturbance and provide in-kind replacement for those unavoidably impacted resources. It is therefore anticipated that there will be an overall reduction in construction-related disturbance to the Project’s environmental setting as compared to EA.

In the 2017 FONSI, FRA found that the Preferred Alternative, as presented and assessed in the 2014 EA, satisfied the requirements of FRA's Procedures for Considering Environmental Impacts (64 FR 28545, May 26, 1999) and NEPA (42 USC § 4321), and the Preferred Alternative would have no foreseeable significant impact on the quality of the human or natural environment. Based on **Table 2** and the analyses conducted in support of this re-evaluation, the Project, at the advanced design stage, would not result in any additional significant adverse environmental impacts. Therefore, the conclusions of FRA’s January 5, 2017, FONSI remain valid and a supplemental NEPA document is not necessary. As the recipient of Federal grant funds, Amtrak is required to comply with the mitigation measures identified in Table 1 of the FONSI and the additional mitigation measures and commitments identified in **Table 2** in this re-evaluation.

Approved by:

LAURA ANNE
SHICK



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