Draft Environmental Assessment

Whittlesey Creek National Wildlife Refuge Coaster Classroom Interpretive Trail Plan

May 2022

Whittlesey Creek National Wildlife Refuge Ashland, WI

Estimated Lead Agency Total Costs Associated with Developing and Producing This Environmental Assessment: \$1500

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Environmental Assessment for Coaster Classroom Interpretive Trail

Date: May 2022

This Draft Environmental Assessment (EA) is being prepared to evaluate the effects associated with the proposed action and complies with the National Environmental Policy Act in accordance with Council on Environmental Quality regulations (40 CFR 1500-1509) and Department of the Interior (43 CFR 46; 516 DM 8) and U.S. Fish and Wildlife Service (550 FW 3) regulations and policies. The National Environmental Policy Act (NEPA) requires examination of the effects of proposed actions on the natural and human environment. Appendix A outlines all law and executive orders evaluated through this Environmental Assessment.

Proposed Action

The U.S. Fish and Wildlife Service (Service) is proposing to develop an interpretive hiking trail in accordance with the refuge's Comprehensive Conservation Plan (CCP). The trail is proposed to be approximately ¼ mile in length and located near the Coaster Classroom interpretive building. The trail will loop through an upland portion of the refuge above the floodplains north of both Little Whittlesey Creek and the mainstem of Whittlesey Creek, a Class I trout stream. The trail will include a small, accessible observation deck that overlooks the floodplain.

A proposed action may evolve during the NEPA process as the agency refines its proposal and gathers feedback from the public, tribes, and other agencies. Therefore, the final proposed action may be different from the original. The proposed action will be finalized at the conclusion of the public comment period for the EA.

Background

National wildlife refuges are guided by the mission and goals of the National Wildlife Refuge System (NWRS), the purposes of an individual refuge, Service policy, and laws and international treaties. Relevant guidance includes the National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997, Refuge Recreation Act of 1962, and selected portions of the Code of Federal Regulations and Fish and Wildlife Service Manual.

The mission of the NWRS, as outlined by the National Wildlife Refuge System Administration Act (NWRSAA), as amended by the National Wildlife Refuge System Improvement Act (16 U.S.C. 668dd et seq.), is

"... to administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans"

Additionally, the NWRSAA mandates the Secretary of the Interior in administering the NWRS (16 U.S.C. 668dd(a)(4)) tor

- Provide for the conservation of fish, wildlife, and plants, and their habitats within the NWRS.
- Ensure that the biological integrity, diversity, and environmental health of the NWRS are maintained for the benefit of present and future generations of Americans;
- Ensure that the mission of the NWRS described at 16 U.S.C. 668dd(a)(2) and the purposes of each refuge are carried out;
- Ensure effective coordination, interaction, and cooperation with owners of land adjoining refuges and the fish and wildlife agency of the states in which the units of the NWRS are located;
- Assist in the maintenance of adequate water quantity and water quality to fulfill the mission of the NWRS and the purposes of each refuge;
- Recognize compatible wildlife-dependent recreational uses as the priority general public uses of the NWRS through which the American public can develop an appreciation for fish and wildlife;
- Ensure that opportunities are provided within the NWRS for compatible wildlifedependent recreational uses; and monitor the status and trends of fish, wildlife, and plants in each refuge.

The community around Whittlesey Creek National Wildlife Refuge (refuge) has long been a proponent of a trail system on the refuge (public comments from Habitat Management Plan, 2006; and front desk staff at David R. Obey Northern Great Lakes Visitor Center, personal communications, 2021). The David R. Obey Northern Great Lakes Visitor Center has developed a couple miles of trails around the center, which has quickly become a premier attraction to the center grounds. Developing a trail at the refuge in this location would help to grow not only quality recreation opportunities for residents and visitors but also a facility that takes into consideration resilient function in order to minimize impacts from future disruptive events, such as flooding, high precipitation and wind events.

Purpose and Need for the Action

The purpose of this proposed action is to provide year-round opportunities for visitors to safely observe and photograph wildlife on the refuge as part of a quality recreation experience. This purpose is a goal described in the CCP for the refuge.

The need of the proposed action is to meet the Service's priorities and mandates as outlined by the NWRSAA; "It is the policy of the United States that compatible wildlife-dependent recreation is a legitimate and appropriate general public use of the System, directly related to the mission of the System and the purposes of many refuges, and which generally fosters refuge management and through which the American public can develop an appreciation for fish and wildlife" (16 U.S.C. 668dd(a)(4)). Adding a foot trail on the refuge has long been a proposed strategy for accomplishing the goal of providing year-round wildlife observation and photography opportunities. In the Whittlesey Creek National Wildlife Refuge Comprehensive Conservation Plan (2015), a trail is specifically proposed that would connect the trails at the David R. Obey Northern Great Lakes Visitor Center to that of the refuge's Coaster Classroom. However, because of increased flood frequency of Whittlesey Creek and associated streams, funding limitations, and staffing constraints, that trail never came to fruition. The refuge currently does not have an accessible area to view wildlife other than from the town roads. Because of this, many visitors use an old railroad grade that runs through the refuge and adjacent private property for hiking, wildlife observation, and photography that is problematic because of the mixed ownership and lack of any binding agreements between owners for use and maintenance outside the late fall and winter months. There is an easement between the landowners adjacent to the old railroad grade and the Bayfield County Snowmobile Alliance to operate and maintain the grade for a snowmobile trail during the late fall and winter months. The development of a refuge specific, clearly marked, hiking trail are important components of a quality recreation experience for visitors to enhance their enjoyment while using public lands.

Alternatives

Alternative A – No Action Alternative

Under the No Action Alternative, the refuge would not develop the Coaster Classroom trail. There would be no accessible hiking, walking, wildlife observation, wildlife photography, education or interpretation opportunities near the Coaster Classroom. These activities would continue to happen intermittently throughout the refuge on the shoulder of public roads or from moving vehicles or through unsanctioned use of the railroad grade. Occasional wildlife observation or photography visits would still occur on undeveloped areas of the refuge, as is currently allowed by refuge regulation. There would be few opportunities to engage with the public through interpretation or education while out on the refuge. Occasional education

activities would continue to happen through our partners at the Northern Great Lakes Visitor Center.

Alternative B – Coaster Classroom Trail Development

Under the Proposed Action Alternative B, we would develop a walking trail and observation deck near the Coaster Classroom. The trail would be ¼ mile long and would loop around the upland and connect to the existing infrastructure at the Coaster Classroom education shelter.

Trail Construction:

The trail would be constructed to meet the accessibility standards for Federal outdoor developed areas. Construction would begin in July by grading a path using heavy equipment. The graded path would be excavated a few inches below surface level. We would use filter fabric to line the path and then fill the bed with Class 5 rock. We would tamp the rock in place. We would then add granite fines over the surface of the Class 5 rock. The granite fines compact well and would serve as the surface grade. The layers of rock would add up to create a trail surface that sits slightly proud of the surrounding surface.

Trail Timeline:

Construction on the trail would begin with grading in mid-July of 2022 and end in August. A crew of volunteers from the American Hiking Association are scheduled to work on the refuge from August 14th to August 20th. The crew will help lay down the filter fabric, bed rock, and granite fines.

Observation Deck Construction and Timeline:

We will build a small 8-foot by 12-foot observation deck on the trail that overlooks the Little Whittlesey and Whittlesey Creek Floodplains. The deck will be installed using poured concrete pillars and pressure-treated lumber in accordance with Service standard designs provided by our engineering department. The construction of the deck would not take place at the same time as the trail to break up the cost burden. It would likely be constructed the following summer of 2023.

Timing and Duration of Hiking and Interpretive Opportunity:

Once the trail is complete, it would remain open year-round for wildlife observation and photography, education and interpretive opportunities, and any other recreational uses currently allowed in that area on the refuge. Visitors will be able to hike or walk on the trail during the summer months and snowshoe or ski on the trail during the winter months.

Timing and Duration of Educational Opportunity:

Refuge staff would use the trail frequently as an educational tool during school or special event trips. In conjunction with the educational shelter otherwise known as the Coaster Classroom, we are proposing an increase in educational programming on the refuge with local

schools. Environmental education is an objective in the refuge CCP and has been found to be compatible with refuge purposes.

refuge-specific regulations:

No regulations would need to be added to manage the use. Hiking on refuge grounds is currently allowed. The refuge is open from sunrise to sunset, which would apply to the trail as well. Snowmobiles, off-road vehicles and bicycles are prohibited on the refuge with opportunity for use on adjacent public roads. Snowmobiles, off-road vehicles and bicycles would be prohibited on the trail.

Connected Actions:

We propose to mechanically remove invasive buckthorn from portions of the area where the trail will be located. The removal of the buckthorn helps accomplish refuge goals of managing invasive species while also providing a better view of the surrounding landscape and interpretive opportunity to enhance the visitor experience. Invasive species management is an objective of the refuge CCP.

Measures to Avoid Conflicts:

To avoid erosion after trail construction that may affect the water clarity of Little Whittlesey Creek and Whittlesey Creek, filter fabric and a layer of Class 5 rock will be used at the base of the trail. To avoid disturbing nesting birds, no construction will take place until after July 15th.

Ongoing Trail and Observation Deck Management:

Because of the use of chiefly natural materials (rock) used to build the trail, the trail is expected to remain in good condition without substantial management for at least five years. Occasional herbicide treatment of the trail and compacting of the granite fines may be needed periodically to maintain the smooth surface needed for accessibility for all visitors. However, other trails at the Northern Great Lakes Visitor Center, which were built in a similar manner, require little vegetation control, and instead, frequent foot traffic appears to be sufficient to control weeds and compact the trail substrate. We would evaluate the trail annually, to determine the appropriate management action needed if any, to maintain the trail surface. It is likely that granite fines will need to be added every 5-10 years to maintain an accessible surface. The observation deck would be periodically surveyed to ensure it is stable and safe and replace or repair boards and railing as needed.

Monitoring of Visitor Use:

We would qualify the trail development as fulfilling the proposed need if refuge staff observe sustained, increased use of the trail and the Coaster Classroom. An increase in use by local schools and partners of the trail and the outdoor classroom is also a measure of success.

Though there are no plans to measure the number of foot-traffic users, we do plan to measure the number of groups who use the coaster classroom and its associated interpretive resources. If there is an increase to the number of groups utilizing the space, the project would be deemed successful.

This alternative fulfills the Service's mandate under the NWRSAA. The Service has determined that the Coaster Classroom Trail Development (Alternative B) is compatible with the purposes of Whittlesey Creek National Wildlife Refuge and the mission of the NWRS.

Alternative(s) Considered, But Dismissed from Further Consideration

The refuge Comprehensive Conservation Plan (2015) proposed a trail that would extend from the Northern Great Lakes Visitor Center to the Coaster Classroom. This trail has been deemed infeasible and not recreationally resilient considering recent flooding events. Such a trail would need to cross the Whittlesey Creek floodplain in several locations. Flooding events, such as those seen in recent years, would severely damage any trail located in the floodplain leading to periods of trail closures as well as an unsustainable maintenance issue incongruent with current refuge funding and staffing levels.

The refuge Comprehensive Conservation Plan also proposed utilization of an abandoned railroad grade (grade) that passes through the refuge. The grade is currently used as a snowmobile trail during the winter months via a legal easement to the Bayfield County Snowmobile Alliance. However, the easement only covers snowmobile use during the winter. Other forms of recreation are not allowed on the grade during non-winter months as there is currently a mix of private and public land parcels along the railroad grade. Efforts have been made in the past by local public officials and private user groups such as bicycle enthusiasts to secure easements for the entire section of grade extending from Washburn, WI to the Northern Great Lakes Visitor Center. However, these attempts have been unsuccessful. The large amount of private ownership of the grade would require every landowner to agree to an easement that spells out allowable uses, maintenance and liability before development of the trail could begin. Because of this, refuge staff have deemed the trail to be infeasible at this time. The refuge would carefully consider proposed recreational uses and their compatibility with the NWR system mission for its portion of the railroad grade if there was a coordinated effort by a partner or stakeholder to develop the corridor for outdoor recreational pursuits.

Affected Environment and Environmental Consequences

This section is organized by affected resource categories. For each affected resource follows an assessment of (1) the existing environmental and socioeconomic baseline in the action area for each resource and (2) the effects and impacts of the proposed action and any alternatives on each resource. The effects and impacts of the proposed action considered here are changes to the human environment, whether adverse or beneficial, that are reasonably foreseeable and

have a reasonably close causal relationship to the proposed action or alternatives. This EA includes the written analyses of the environmental consequences on a resource only when the impacts on that resource could be more than negligible and therefore considered an "affected resource." Any resources that will not be more than negligibly impacted by the action have been dismissed from further analyses.

The refuge consists of approximately 304 acres in Bayfield County, Wisconsin. See Appendix B. for a map of the refuge.

Whittlesey Creek National Wildlife Refuge is primarily wetland habitat. The proposed action is located near the Coaster Classroom off Wickstrom Road containing upland habitat above the Little Whittlesey Creek and mainstem Whittlesey Creek floodplains. See Appendix B. for a map of the general area and proposed project site on the refuge.

For more information regarding the general characteristics of the refuge's environment, please see Chapter 3 of the refuge's Comprehensive Conservation Plan, which can be found here: https://ecos.fws.gov/ServCat/Reference/Profile/103395.

The following resources either (1) do not exist within the project area or (2) would either be not affected or only negligibly affected by the proposed action:

- Geology and soils: not further analyzed in this EA.
- Air quality: not further analyzed in this EA.
- Water quality: not further analyzed in this EA.
- Floodplain: not further analyzed in this EA.

Natural Resources

Terrestrial Wildlife and Aquatic Species

Affected Environment

Description of Affected Environment for the Affected Resource

The significant wildlife species on Whittlesey Creek NWR include migratory birds and coldwater fish.

The historic native fish community of Whittlesey Creek consisted of primarily brook trout (*Salvelinus fontinalis*) and slimy sculpin (*Cottus cognatus*). Because of intentional or inadvertent introductions and alternations to the habitat within the watershed, the fish community of Whittlesey Creek is dominated currently, by non-native species, including brown trout (*Salmo trutta*), rainbow trout (*Oncorhynchus mykiss*), coho salmon (*Oncorhynchus kisutch*), and other species. Though great efforts have been made to restore brook trout on the refuge, they are now a very rare occurrence. Less than a couple brook trout are surveyed by refuge staff each year. Coho salmon, however, occupy the creek in great numbers. During annual electrofishing

surveys of portions of Whittlesey Creek, thousands of coho salmon young-of-the-year are reported.

Over 250 species of birds have been identified on Whittlesey Creek National Wildlife Refuge, including waterfowl, neotropical migrants, raptors, grassland birds, and shorebirds. Wetlands, woodlands, and agricultural grasslands within the watershed provide resting and breeding habitat for waterfowl and neotropical migrating birds. Shorebirds are common at the mouth of Whittlesey Creek as it enters Lake Superior. Bald eagles and sandhill cranes are also common at the mouth.

Description of Environmental Trends and Planned Actions

Coaster brook trout were once widespread on the refuge prior to European settlement. Starting in the late 1800s, clear-cutting in the watershed and subsequent fires led to widespread erosion and siltation. Log drives on the creek destroyed habitat and overfishing continued. Brook trout populations declined until near local extinction in the mid-1900s. Since the late 1990s, experiments have been conducted to restore brook trout to Whittlesey Creek, but they have not yet been successful. There is currently a small resident population of brook trout on the creek, but no coaster brook trout have been documented.

Non-native salmonoids, especially coho salmon, have been on the rise in Whittlesey Creek since their introduction in the 1960s. Annual surveys of Whittlesey creek show that the population of coho salmon is healthy and thriving. They make up the vast majority of biomass in Whittlesey Creek (Ogle, 2013-2018).

Recent high-intensity flooding on Whittlesey Creek has continued to degrade the in-stream habitat. The flooding causes high levels of erosion that can cause silt and sand to cover spawning habitat. The siltation also homogenizes the creek, creating vast sand flats where there was once diverse stream character. We expect the flooding to continue due to an increase in the frequency of high intensity and volume, short-duration precipitation events. Refuge staff have combatted erosion by replacing undersized culverts, installing large woody debris in the creek, and completing bank stabilization projects. Refuge staff are also planting native trees in the watershed to help slow the overland flow of water before it enters the creek. These actions help mitigate the impact of severe flooding events.

Many cold-water streams in Wisconsin are in danger of becoming cool-water systems due to climate change. However, because of Whittlesey Creek's springs, we expect it to be resilient to global temperature increases.

Impacts on Affected Resource

Alternative A

The no action alternative has little effect on wildlife or aquatic species. Visitors hiking off trail cause more wildlife disturbance than visitors using a designated trail, however, off-trail hiking is a rare occurrence at the refuge.

Alternative B

The proposed action alternative would likely cause an increase in foot-traffic on the refuge. This increase could disperse wildlife in that area. The proposed trail would be located near the Coaster Classroom and the snowmobile trail, so it is unlikely that wildlife disturbance would be significantly increased from current levels. The proposed trail is located in an upland portion of the refuge and would likely not affect nesting wetland species; however, it may disturb nesting grassland species. Construction will primarily be after the nesting season.

Trail construction may cause small levels of erosion that could affect cold-water fish in Little Whittlesey Creek. This erosion would be small in scale and would likely only cause a temporary alteration to water quality, if any. Because of other long-term impacts to the cold-water fishery, the trail is unlikely to add to the cumulative effects on brook trout and other aquatic species.

Threatened and Endangered Species, and Other Special Status Species Affected Environment

Description of Affected Environment for the Affected Resource

There are five federally threatened and endangered species that may be found on Whittlesey Creek NWR: piping plover (*Charadrius melodus*), red knot (*Calidris canutus*), Canada lynx (*Lynx canadensis*), northern long-eared bat (*Myotis septentrionalis*), and gray wolf (*Canis lupus*).

Piping plovers are listed as federally endangered in Wisconsin's Great Lakes watersheds. It nests on bare shoreline adjacent to water. It is known to nest on Lake Superior shoreline in a few locations, including Long Island in Chequamegon Bay. There are no records of nesting pairs on or in the immediate vicinity of the refuge as the shoreline habitat of the refuge is not adequate for piping plover. The proposed action is not near the shoreline and would not affect piping plovers if they were to use the mouth of Whittlesey Creek during spring migration.

The *rufa* subspecies of the red knot (*Charadrius melodus rufa*) is federally listed as threatened in Wisconsin. It is a rare spring migrant along the coastal beaches in the Chequamegon Bay region. It has been observed at the mouth of Whittlesey Creek, but there are no records of nesting pairs on or in the immediate vicinity of the refuge. The proposed action is not near the shoreline and would not affect red knots.

Canada lynx is listed as threatened in Wisconsin. It is occasionally found in the northern forested areas of the state. Bayfield and Ashland counties are included in the list of counties with the highest likelihood of occurrence, but lynx are considered to be very rare in Wisconsin, with only a few records in the state in the past 25 years. The proposed action is in a nonforested area of the refuge, which is not suitable habitat for Canada lynx.

Northern long-eared bat (NLEB) is listed as threatened in Wisconsin. None of the refuge parcels have known suitable winter habitat or suitable staging/fall swarming habitat. However, most

areas in the refuge have the potential to include suitable NLEB summer habitat. Any vegetation management actions that take place in suitable NLEB summer habitat will follow the 2016 Key to the NLEB 4(d) Rule for Federal Actions that May Affect NLEB. There are no known hibernacula within 0.25 miles of the proposed trail and no known maternity roosts within 150 feet of the proposed action. No tree clearing will take place under the proposed action.

Gray Wolf is federally listed as endangered in Wisconsin. There are occasional reports of incidental wolf use within the refuge boundary. There have been historical reports of wolf scat found on the refuge by Service employees. The proposed action is located near existing infrastructure, including a road, education shelter, major electrical powerline, and a residential home. As the area is already well developed, the proposed action is unlikely to alter wolf habits and patterns if they pass through the refuge.

Description of Environmental Trends and Planned Actions

The main threats to piping plovers include loss of shoreline habitat to development and disturbance from humans. The shoreline of Whittlesey Creek is undeveloped and will remain undeveloped to provide a sanctuary for migrating shorebirds. The shoreline of Whittlesey Creek is open to waterfowl hunting but migrating shorebirds have left the area by the time waterfowl hunting season begins. Visitors are allowed to access the shoreline, but it can only be done by boat. Thus, there is very little human disturbance to these species on the refuge.

Reasons for the decline in Canada Lynx in Northern Wisconsin include changes in habitat that are detrimental to their prey (snowshoe hare), and an increase in roads, which provide increased access for competitors such as coyotes and bobcats. Whittlesey Creek NWR is a small refuge located near two population centers, Ashland and Washburn. The refuge has several township roads as well as a highway. It also has several private in-holdings with permanent dwellings. Because of this, the segmented units of the refuge do not provide the suitable, contiguous habitat required by Canada lynx.

The main threat facing northern long-eared bat is white-nose syndrome. The disease has spread to 80% of the bat's range. Reducing the spread of white-nose syndrome is the main objective in restoring this species. There are no known hibernacula within the vicinity of Whittlesey Creek NWR. NLEB may occasionally use the refuge as summer habitat and may roost in mature trees on the refuge. There are no planned developments on Whittlesey Creek NWR or in the direct vicinity that would affect NLEB summer habitat. An existing electrical powerline was updated in 2021, where portions of the powerline on the refuge were replaced with larger poles and transmission lines. A few trees were removed during the project within the utility right-of-way. The tree removal was done outside of the dates when NLEB would use the refuge.

The decision to delist gray wolves in 2020 was recently overturned, putting gray wolves back on the endangered species list. Wolf populations in northern Wisconsin are considered stable. 218 wolves were harvested in the 2021 hunt, which is more than the 130-quota set by the

Wisconsin Department of Natural Resources. With the federal listing of wolves restored, there was no hunting season in 2022. There have been no sightings of wolves on the refuge in the area where the trail is proposed. This area of the refuge is closed to all hunting though archery deer and waterfowl hunting are allowed on other refuge tracts.

Impacts on Affected Resource

Alternative A

Under the no action alternative, no trail would be built. Populations of threatened and endangered species would remain similar to current conditions. However, there are no known populations of piping plovers, red knots, Canada lynx, NLEB, or gray wolves at the site location.

Alternative B

The following is a summary of the Section 7 findings for the proposed action. There would be no effect on species or critical habitat. Because the proposed trail is not near the Lake Superior shoreline, there are no anticipated impacts on piping plovers or red knots. Due to the small size of the proposed trail and its location next to an already disturbed area, there are no anticipated impacts to Canada lynx or gray wolves. There are no known hibernacula within 0.25 miles of the proposed trail and no known maternity roosts within 150 feet of the proposed trail. Also, no trees will be removed during this project. Due to these factors the proposed alternative is likely to have no effect on northern long-eared bats.

Habitat and Vegetation (including vegetation of special management concern) Affected Environment

Description of Affected Environment for the Affected Resource

The affected environment is disturbed grassland, according to the station's Habitat Management Plan (2006), with scattered, planted coniferous trees. The main grass is invasive reed canary (*Phalaris arundinacea*). The scattered trees include white pine (*Pinus Strobus*), white spruce (*Picea glauca*), red pine (*Pinus resinosa*), and balsam fir (*Abies balsamea*). There is also scattered invasive glossy buckthorn (*Rhamnus frangula*). As the site is highly disturbed from past agricultural practices and adjacent to an old railroad grade and utility rights-of-way, its wildlife habitat value is considered low.

Description of Environmental Trends and Planned Actions

The quality of the habitat on this portion of the refuge is improving. Coniferous trees have been restored through planting onto the site several times over the last 20 years. They are slowly maturing, though new recruitment from the planted trees is low. A recent trespass fire in 2021 killed several of the spruce and pine trees, while only damaging the lower branches of the others. An adjacent private landowner has also started to plant native trees on their property which is near the area of the proposed trail.

This portion of the refuge is dominated by invasive species, namely reed canary grass and buckthorn. The buckthorn will be treated and removed as a result of the trail project, but the reed canary grass is not likely to be controlled. As reforestation continues, the coniferous trees will eventually shade out the reed canary grass, but that is many decades in the future.

Impacts on Affected Resource

Alternative A

Under the no action alternative, the site will remain highly disturbed. Reforestation will slowly progress. Access for volunteers will be limited, therefore it may be difficult to monitor and treat the invasive buckthorn on the site.

Alternative B

Building the trail on this site will increase access for volunteers that will be the vanguard in controlling invasive buckthorn. Much, if not all, of the buckthorn on the proposed area will be removed because of the trail development.

There is a small threat that the cumulative effect of increased traffic on the trail could lead to the introduction of other invasive species. However, because the site is already highly disturbed and adjacent to utility rights-of-way and the old railroad grade, the trail would be unlikely to decrease habitat value.

Wilderness or Other Special Designation

Affected Environment

Description of Affected Environment for the Affected Resource

The refuge has no designated Wilderness. The lower Chequamegon Bay of Lake Superior, which includes Whittlesey Creek National Wildlife Refuge, is designated as an "Important Bird Area" (IBA) by the Audubon Society. It was designated as such because of the coastal wetlands near the shores of Lake Superior. This includes coastal wetlands near the mouth of Whittlesey Creek on the eastern edge of the refuge. This area has a rich abundance of migratory shorebirds and waterfowl.

Description of Environmental Trends and Planned Actions

Invasive species are a major threat to the IBA, especially from Lake Superior boat and ship traffic. Cooperative partnerships, including the Northwoods Cooperative Weed Management Area, work to keep invasive species from significantly impacting this important habitat. Water quality is also of special concern. Agricultural and forestry practices in the Lake Superior watershed cause widespread soil erosion and deposition in Chequamegon Bay. Many agencies and organizations, including the U.S. Forest Service, U.S. Fish and Wildlife Service, Northland College, and Landmark Conservancy are working to protect the watershed by slowing the flow of water through the system.

Impacts on Affected Resource

Alternative A

There will be no impacts, positive or negative, under the no action alternative.

Alternative B

As the proposed site is distant from the shoreline of Lake Superior and does not contain habitat suitable for the migratory shorebirds and waterfowl that led to the establishment of the IBA, the impacts to the IBA are likely to be negligible.

Visitor Use and Experience

Affected Environment

Description of Affected Environment for the Affected Resource

There are currently limited options for visitor use on the refuge. Whittlesey Creek is occasionally used for fishing and the coastal wetlands are used for waterfowl hunting. The refuge is also open to archery deer hunting on any parcel larger than 20 acres. The area of the refuge where the trail is proposed is not open to hunting because the parcel is less than 20 acres and includes the environmental education shelter. See Appendix B for areas open to hunting.

Environmental education and interpretation occur mostly off-refuge at the Northern Great Lakes Visitor Center. Staff occasionally lead classes and other groups near the environmental education shelter.

Wildlife observation and photography visits are low and take place mostly from the public roads that cross the refuge.

Whittlesey Creek NWR does not have a main visitor use area. There are currently no trails on the refuge other than those leading from the parking lot at the end of Wickstrom Road to the Coaster Classroom.

Description of Environmental Trends and Planned Actions

The refuge is planning to hire a visitor-use and education-oriented park ranger during the summer of 2022. The park ranger will increase educational and interpretive opportunities at the refuge. This should increase the number of visits as well as visitor engagement.

Electrical and communications utility work on rights-of-way throughout the refuge have been underway for over a year. This has temporarily diminished the aesthetic appeal of the refuge and has also hindered visitor use experiences on the refuge. This utility work should be completed by July 2022. We expect an increase in visitor use once the heavy equipment and matting is fully removed from the refuge and the disturbed areas are re-vegetated.

Impacts on Affected Resource

Alternative A

Under the no action alternative, no trail would be constructed. Most visitor experience would continue to be from public roadways, especially from the inside of vehicles.

Alternative B

Under this alternative, a trail would be created that would serve as the primary visitor use area of the refuge. We expect an increase in wildlife dependent recreation, especially wildlife observation and photography. With the addition of the new park ranger, we will also be able to lead environmental education classes on the trail as well. As there are no other developed visitor use areas on the refuge, we expect the trail to serve as an entry point for visitors to learn about the refuge with kiosks and interpretive signage near the trail head.

There is no hunting in the area where the trail is proposed. The construction and use of the trail should not impact hunting use and hunting visitors should not impact the safety of trail users.

The cumulative effect of increased visitor use may lead to an expansion of the visitor use program in the future.

Cultural Resources and subsistence

Affected Environment

Description of Affected Environment for the Affected Resource

The area where the trail is to be located is converted agricultural ground. It had been farmed since deforestation in the late 1800s and early 1900s. There are no buildings or infrastructure on site. Because this is such a disturbed site, there are no cultural, ethnographic, paleontological, or archaeological resources of significance.

Description of Environmental Trends and Planned Actions

The area of the proposed trail was converted to a natural landscape about 20 years ago. A mix of coniferous trees was planted on the site to restore the farm-ground to forest. Though it is in the beginning stages, the entire area will eventually be reforested, returning the landscape to pre-settlement-like conditions.

Impacts on Affected Resource

Alternative A

Under the no action alternative, no trail will be built. This would not affect any cultural resources.

Alternative B

Section 106 consultation determined that because the project area had been disturbed through plowing or other major ground disturbance activities in the past, then there was no potential to

cause an effect on historic properties. Because the site has been highly disturbed for decades, it will not affect any cultural resources.

Refuge Management and Operations

Land Use on the Refuge

Whittlesey Creek National Wildlife Refuge, established in the late 1990s, consisted primarily of poor cropland and pastureland within the Whittlesey Creek floodplain. Parcels now owned by the Service have been planted to mixed coniferous forest. Privately owned parcels within the acquisition boundary are groomed yards or natural areas. Five primary roads crisscross the refuge: State Highway 13, East Ondossagon, Ondossagon, Terwilliger and Cherryville Roads. Of these, only State Highway 13, recently designated part of the National Lake Superior Scenic Byway, receives a high volume of vehicle traffic. The refuge has three buildings: a large equipment storage shed on the east side of the refuge, an educational shelter near the proposed trail site, and a small equipment shed near the educational shelter. Office space for refuge personnel is located within the Northern Great Lakes Visitor Center.

Affected Environment

Description of Affected Environment for the Affected Resource

The site of the proposed trail is in the early stages of reforestation. It contains trees that were planted shortly after the refuge's establishment. The educational shelter will be at the trailhead of the proposed trail.

Description of Environmental Trends and Planned Actions

There are no planned actions or environmental trends that could cause an increase to traffic or an increase in infrastructure stress that are relevant to the proposed action.

Impacts on Affected Resource

Alternative A

Under the no action alternative, there will be no increase in traffic and no increase in infrastructure stress.

Alternative B

Under this alternative, there would be an increase in traffic on Cherryville Rd and Wickstrom Rd that lead to the educational shelter and the trailhead of the proposed trail. There is currently a parking lot that has space for up to 10 vehicles to meet any increase in parking space demand. There is also a pull-around parking lot for buses to allow for school groups to use the Coaster Classroom and trail. Additional visitors would not cause significant increased wear and tear to the educational shelter, the parking lot, or the roads leading to the parking lot. The cumulative impacts of increased visitor use may put strain on Wickstrom Road, the bridge of Whittlesey

Creek and the parking lot leading to an increased need for road grader use and gravel placement by Barksdale Township and the refuge.

Administration

Affected Environment

Description of Affected Environment for the Affected Resource

There is one permanent employee stationed at Whittlesey Creek NWR who serves as a wildlife refuge specialist. The refuge is complexed under St. Croix Wetland Management District, New Richmond, WI. The project leader at St. Croix supervises the Whittlesey Creek employee. Other staff at St. Croix provide additional support as needed at the refuge.

The estimated yearly budget of the refuge is \$150,000, which includes employee salary. This salary can vary because the refuge is complexed with St. Croix Wetland Management District.

About 30 hours have been spent on developing this Environmental Assessment, designing the project, recruiting volunteers, requesting quotes and services, and general planning. The estimated costs of the project is around \$35,000 which includes materials, supplies, staff and volunteer time.

Description of Environmental Trends and Planned Actions

There are no planned actions by other organizations or agencies that will impact the amount of time needed for visitor services administration.

Impacts on Affected Resource

Alternative A

Under the no action alternative, no money will be spent on the trail project. However, about 30 hours of employee time that was spent planning the project and developing this environmental assessment will be lost.

Alternative B

Under the proposed action alternative, \$3,000 - \$5,000 will be spent on materials and supplies for the trail construction. We anticipate another \$20,000 will be spent on the construction of the observation platform and interpretive signage. About 80 hours of staff time will be spent building the trail along with 30 hours of labor provided by six volunteers (180 hrs.). The total estimated costs of the project for time and material is estimated around \$35,000.

Once the trail is completed, less than 10 hours of staff time per year will be needed to properly maintain the trail and oversee the increased visitor services opportunities that the trail will provide.

Socioeconomics

Local and Regional Economies

Affected Environment

Description of Affected Environment for the Affected Resource

This section will focus on tourism data available from the Bayfield County website

Total visitor spending in Bayfield County was \$46.5 million in 2016, an increase of 2.84% from 2015. Total business sales in Bayfield County were \$62.6 million in 2016. 606 jobs with a total personal income of \$11.6 million were supported by visitors to Bayfield County. Visitors to Bayfield County generated \$5.9 million in state and local taxes during 2016 (Tourism Economic Impact Information).

Based on the above information, tourism plays a huge role in the local and regional economy. Currently, Whittlesey Creek NWR, as a partner at the David R. Obey Northern Great Lakes Visitor Center, serves as a gateway or entry-point to visitors of the northern Great Lakes Region.

Description of Environmental Trends and Planned Actions

Data from before the Covid-19 pandemic suggests that tourism revenue is increasing at a rate of around 3% per year. The local economy is becoming increasingly invested in outdoor recreation and tourism due to the abundance of the area's outdoor natural resources.

Impacts on Affected Resource

Alternative A

Under the no action alternative, no trail would be built on Whittlesey Creek NWR. Staff would continue to play a role in the visitor services provided by the David R. Obey Northern Great Lakes Visitor Center, but the refuge itself would not have any significant visitor opportunities other than limited fishing and hunting.

Alternative B

Under the proposed action alternative, visitors to the area would have another space on which to hike and recreate. This trail will be especially beneficial to families because of its short length and proximity to the Northern Great Lakes Visitor Center. It will not be a huge draw to the area, but it is expected to increase visitor use on the refuge. It is not expected to significantly increase tourism revenue to the area.

Environmental Justice

Affected Environment

Description of Affected Environment for the Affected Resource

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high

or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities.

There are two American Indian Tribes near the refuge: the Bad River Band of Lake Superior Chippewa Indians located in Ashland County and the Red Cliff Band of Lake Superior Chippewa located in Bayfield County. According to the Headwaters Economics Tool, the Red Cliff Reservation and Bad River Reservation have a median household income of approximately \$40,000 and \$51,458 respectively (*U.S. Fish and Wildlife Service Socioeconomic Indicators* 2020). The median household income for their respective counties is \$57,257 (Bayfield) and \$47,869 (Ashland). An estimated 32.51% of families are below poverty level in the Red Cliff Reservation. An estimated 12.98% of families are below poverty level in the Bad River Reservation. In Bayfield County, 11% are estimated to be below poverty level. In Ashland County, 12.5% are estimated to be below poverty level.

Description of Environmental Trends and Planned Actions

Access to free or inexpensive outdoor recreation and environmental education opportunities is important for low-income communities. These opportunities are increasing on the refuge and throughout the local area. It is important for members of the local Chippewa Tribes to continue to practice their Treaty Rights to hunt fish and gather on public lands within the Ceded Territory. While the refuge is closed to the general public for harvesting fruits of the soil like apples, mushrooms, and wild berries, a compatibility review is currently in process. During this period all tribal requests will continue to be considered upon request.

Impacts on Affected Resource

Alternative A

Under the no action alternative, no trail would be built, which limits access to outdoor recreation opportunities on the refuge. There are still other options for free or inexpensive outdoor recreation on Whittlesey Creek NWR and its neighboring areas, including the Northern Great Lakes Visitor Center, operated by the U.S. Forest Service as part of the Chequamegon-Nicolet National Forest, and the Apostle Islands National Lakeshore, a unit of the National Park Service.

Access to food resources and plants with medicinal, cultural or ceremonial values on the refuge by local Chippewa Tribal members will remain unchanged.

Alternative B

Under the proposed action alternative, low-income families would have another outdoor recreation opportunity in the local area. The trail will also provide outdoor education opportunities to the local schools that also serve low-income and under-served communities.

The vegetation in the area where the trail is proposed to be located is dominated by reed canary grass. Though the amount of reed canary grass will be diminished in the local area by the footprint of the trail, there are abundant alternate locations on the refuge that are

dominated by this vegetation community that can be made available to Tribal members should they request to access food or plant resources in this specific type of community.

Monitoring

Monitoring of invasive species near the trail will occur through routine checks. The trail will be easily accessed from a frequently used parking lot at the end of Wickstrom Rd. and will be easily monitored through weekly checks of the refuge grounds by staff.

Summary of Analysis

Alternative A - No Action Alternative

As described above, under the no action alternative, no trail would be constructed on the refuge. There would be no effect on terrestrial wildlife or aquatic species. There would be no effect on threatened or endangered species. The site will remain highly disturbed, and reforestation would occur slowly.

Outdoor recreation opportunities on the refuge would remain limited. Most visitor experiences would continue to be from public roadways, especially from the inside of vehicles. Visits to the refuge will remain low. This alternative would not help meet the purpose and need for action, which is to provide year-round opportunities for visitors to safely observe and photograph wildlife on the refuge.

Alternative B – Coaster Classroom Trail Development

As described above, under the proposed action alternative, a ¼ mile trail will be built near the existing environmental education shelter on the refuge. This alternative will help meet the purpose and need for action, which is to provide year-round opportunities for visitors to safely observe and photograph wildlife on the refuge.

This trail is expected to cause an increase in foot-traffic on the refuge. Because the proposed trail is on a highly disturbed site near a major electrical transmission line, and an old railroad grade, the increase in foot-traffic is not expected to cause a significant disturbance to wildlife. Trail construction may temporarily cause small levels of erosion into Little Whittlesey Creek. The trail is not expected to have significant impacts to terrestrial or aquatic wildlife, including threatened or endangered species.

There is a small threat that an increase in visitors could lead to the introduction or dispersal of invasive species. However, as the site is already highly disturbed through past agricultural activity, this threat is minor. To mitigate this threat, refuge staff will work with volunteers to remove invasive buckthorn that currently exists on the site, as well as monitor the site for invasive species as part of routine operations.

The trail is expected to enhance environmental education and interpretation opportunities on the refuge and provide for a quality recreation experience. Refuge staff, including a potential new park ranger, will be able to lead environmental education classes on the trail. The trail will also serve as a starting point for visitors to learn about the refuge through kiosks and interpretive signage near the trail. The trail will also provide a free wildlife observation and photography opportunity for the region, including members of the low-income community.

The trail is expected to cost about \$35,000, including labor (80 hours of staff time and 180 hours of volunteer time) and materials.

List of Sources, Agencies and Persons Consulted

Bridget Olson, Project Leader – USFWS, St. Croix Wetland Management District Complex, New Richmond, WI

Tom Marcouiller, Maintenance – USFWS, St. Croix Wetland Management District Complex, New Richmond, WI

James Myster, Regional Historic Preservation Officer - USFWS, Bloomington, MN

Hilary Markin, Center Director – U.S. Forest Service, David R. Obey, Northern Great Lakes Visitor Center, Ashland, WI.

List of Preparers

Mitchell Baalman – Wildlife Refuge Specialist, Whittlesey Creek National Wildlife Refuge Bridget Olson – Project Leader, St. Croix Wetland Management District and Whittlesey Creek National Wildlife Refuge

State Coordination

Requests for consultation were sent by email to the Wisconsin Department of Natural Resources. We are awaiting comments that will be included in the final draft of the environmental assessment.

Tribal Consultation

Request for consultation was sent to the deputy director of the Natural Resources Department of the Bad River Band of Lake Superior Chippewa. We are awaiting comments that will be included in the final draft of the environmental assessment.

Request for consultation was sent to the Natural Resources Department of the Red Cliff Band of Lake Superior Chippewa. We are awaiting comments that will be included in the final draft of the environmental assessment.

Public Outreach

A draft of the EA will be published on the refuge website for 30 days. A hard copy will also be available at the Northern Great Lakes Visitor Center.

Determination

| | ection will be filled out upon completion of the public comment period and at the time of ration of the Environmental Assessment. |
|----------------|--|
| | The Service's action will not result in a significant impact on the quality of the human environment. See the attached "Finding of No Significant Impact". |
| | The Service's action may significantly affect the quality of the human environment and the Service will prepare an Environmental Impact Statement. |
| Sign | atures |
| Subm | itted By: |
| | |
| Proje | ct Leader Signature: |
| Date: | |
| Concu | urrence: |
| | |
| Refug | e Supervisor Signature: |
| Date: | |
| Appro | oved: |
| Regio Date: | nal Chief, National Wildlife Refuge System Signature: |

References

- Tourism Economic Impact Information. Tourism | Bayfield County, WI Official Website. (n.d.). Retrieved May 10, 2022, from https://www.bayfieldcounty.wi.gov/150/Tourism
- Front desk staff at David R. Obey Northern Great Lakes Visitor Center, 2021. Personal communication [Ongoing conversations].
- U.S. Fish and Wildlife Service Socioeconomic Indicators. Headwaters Economics. (2020, February 27). Retrieved May 12, 2022, from https://headwaterseconomics.org/tools/usfws-indicators/
- U.S. Fish and Wildlife Service (2015). Whittlesey Creek National Wildlife Refuge Comprehensive Conservation Plan. Division of Conservation Planning; Bloomington, MN.
- U.S. Fish and Wildlife Service (2006). Whittlesey Creek National Wildlife Refuge Habitat Management Plan and Environmental Assessment. Division of Conservation Planning; Bloomington, MN.
- Ogle, D. (2013). (rep.). Whittlesey Creek Compiled Catch Reports. Ashland, Wisconsin.

Appendix A

This Appendix lists all applicable statutes, regulations, and executive orders not otherwise addressed in this EA, as well as how the proposed action and EA analysis comply with each, and any additional compliance steps taken by FWS.

Cultural Resources

A section 106 was completed to comply with the below statues, regulations, and executive orders. The section 106 consultation found there was no potential to effect cultural or historic resources.

American Indian Religious Freedom Act, as amended, 42 U.S.C. 1996 - 1996a; 43 CFR Part 7

Antiquities Act of 1906, 16 U.S.C. 431-433; 43 CFR Part 3

Archaeological Resources Protection Act of 1979, 16 U.S.C. 470aa-470mm; 18 CFR Part 1312; 32 CFR Part 229; 36 CFR Part 296; 43 CFR Part 7

National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470-470x-6; 36 CFR Parts 60, 63, 78, 79, 800, 801, and 810

Paleontological Resources Protection Act, 16 U.S.C. 470aaa-470aaa-11

Native American Graves Protection and Repatriation Act, 25 U.S.C. 3001-3013; 43 CFR Part 10

Executive Order 11593 – Protection and Enhancement of the Cultural Environment, 36 Fed. Reg. 8921 (1971)

Executive Order 13007 – Indian Sacred Sites, 61 Fed. Reg. 26771 (1996)

Fish and Wildlife

Endangered Species Act of 1973, as amended, 16 U.S.C. 1531-1544; 36 CFR Part 13; 50 CFR Parts 10, 17, 23, 81, 217, 222, 225, 402, 450

Section 7 consultation and analysis was conducted. We found there was no effects on threatened or endangered species.

Bald and Golden Eagle Protection Act, as amended, 16 U.S.C. 668-668c, 50 CFR 22

Fish and Wildlife Act of 1956, 16 U.S.C. 742a-m

Lacey Act, as amended, 16 U.S.C. 3371 et seq.; 15 CFR Parts 10, 11, 12, 14, 300, and 904

Migratory Bird Treaty Act, as amended, 16 U.S.C. 703-712; 50 CFR Parts 10, 12, 20, and 21

Executive Order 13186 – Responsibilities of Federal Agencies to Protect Migratory Birds, 66 Fed. Reg. 3853 (2001)

Natural Resources

Executive Order 13112 – Invasive Species, 64 Fed. Reg. 6183 (1999)

Clean Air Act, as amended, 42 U.S.C. 7401-7671q; 40 CFR Parts 23, 50, 51, 52, 58, 60, 61, 82, and 93; 48 CFR Part 23

Appendix B – Maps

Figure 1. Map of Whittlesey Creek National Wildlife Refuge showing Acquisition Boundary and USFWS owned land.

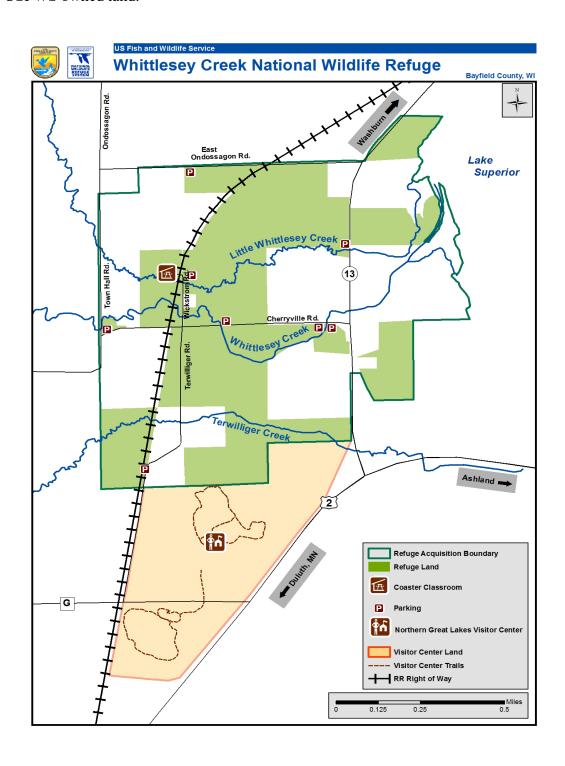
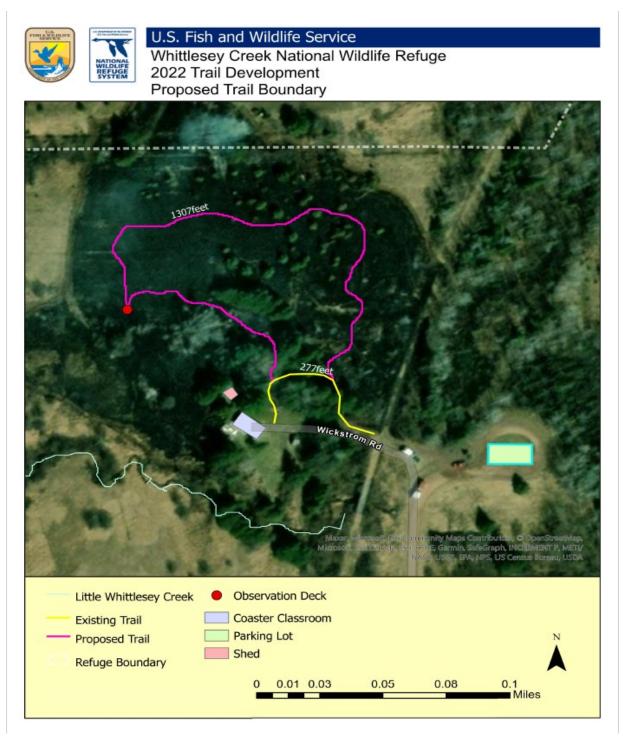


Figure 2. Map showing the proposed trail near the Coaster Classroom, including existing path.



 $\label{thm:conditional} \textbf{Figure 3. Map of the hunting areas on Whittlesey Creek National Wildlife Refuge.}$

