

Draft Compatibility Determination

Title

Draft Compatibility Determination for issuance of right-of-way permit to the Minnesota Department of Natural Resources for the construction, operation and maintenance of a non-motorized recreational trail known as the Minnesota Valley State Trail on Minnesota Valley National Wildlife Refuge.

Refuge Use Category

Rights-of-way and Rights to Access

Refuge Use Type(s)

Rights-of-way (trail).

Refuge

Minnesota Valley National Wildlife Refuge

Refuge Purpose(s) and Establishing and Acquisition Authority(ies)

The purposes of the refuge “are to (1) provide habitat for a large number of migratory waterfowl, fish and other wildlife species; (2) provide environmental education, wildlife recreational opportunities and interpretive programs for hundreds of thousands of Twin City residents; (3) protect important natural resource areas from degradation; and (4) protect the valley’s unique social, educational and environmental assets.” The secretary shall develop and administer...the refuge, in accordance with the National wildlife Refuge System Act...The Secretary may also exercise any other authority available to him for the conservation and management of wildlife and natural resources, the development of wildlife recreational opportunities wildlife interpretation, and environmental education, to the extent deemed by him to be appropriate...The secretary shall construct, administer, and maintain, ...a wildlife interpretation and education center. ...to promote environmental education and to provide an opportunity for the study and enjoyment of wildlife in its natural habitat. (Minnesota Valley National Wildlife Refuge [Public Law No. 94-466, 94th Congress 1976 and 1986 Amendment expansion for refuge])

"...for the development, advancement, management, conservation, and protection of fish and wildlife resources... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ..." (Fish

and Wildlife Act of 1956 [16 U.S.C. § 742(a)(4)] and (16 U.S.C. § 742(b)(1))

"... for any other management purpose, for migratory birds." (16 U.S.C. § 715d)

"... particular value in carrying out the national migratory bird management program."
(An Act Authorizing the Transfer of Certain Real Property for Wildlife, or Other
Purposes [16 U.S.C. § 667b])

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as Refuge System, 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 (Pub. L. 105-57; 111 Stat. 1252).

Description of Use

Is this an existing use?

No. Although there are natural surface trails in the vicinity, the use is considered new since it is proposed paved trail that will take up a similar but different footprint than the current natural surface trail. Non-motorized recreational trail use by foot, bicycle, skis, snowshoes, et cetera. for such activities as: walking, hiking, walking a leashed animal, bicycling, et cetera. was found to be appropriate and compatible uses within the Refuge's Comprehensive Conservation Plan (U.S. Fish and Wildlife Service 2004) and the 2016 non-motorized recreational trail use compatibility determination (U.S. Fish and Wildlife Service 2016).

What is the use?

Right-of-way (trail). The right to use and possibly alter the landscape through construction, maintenance and operation of a trail.

This compatibility determination evaluates the currently submitted right-of-way for constructing a trail on the Long Meadow Lake unit of Minnesota Valley National Wildlife Refuge along the Minnesota River as well as future rights-of-way for which the Minnesota Department of Natural Resources will be applying as funding becomes available. Future trail right-of-way permits will be administered under the same trail name and managed the same way. As the environmental assessment associated with the trail evaluated the entire trail, this compatibility determination follows suit. The Minnesota Department of Natural Resources is currently requesting a right-of-way permit for a 25-foot wide, 1.7-mile linear corridor for the construction, maintenance

and operation of the Minnesota Valley State Trail. Future rights-of-way will be on both the Long Meadow Lake and Bloomington Ferry Units of the refuge for an additional 25-foot wide, 5.3 miles of trail. This area is a small part of over 12,900 acres that encompass the refuge and comprises floodplain forest and wetland habitat; it has natural surface trails and parking lots for visitors. The right-of-way permits, totaling approximately 7 miles of trail on refuge lands, would allow the Minnesota Department of Natural Resources to develop the entire 13.5 miles of the Minnesota Valley State Trail from the Bloomington Ferry bridge to the refuge's Bloomington Education and Visitor Center.

The non-motorized recreational trail would facilitate participation in priority outdoor recreational uses such as wildlife observation, photography, environmental education, interpretation, fishing and hunting through such activities as walking, hiking, jogging, walking a leashed animal, bicycling, cross-county skiing and snowshoeing. These uses were previously found to be appropriate and compatible on the refuge as outlined in the 2016 non-motorized recreational trail use compatibility determination and as such will not be fully re-evaluated in this compatibility determination (U.S. Fish and Wildlife Service 2016). The additional use associated with the development of this trail, however, is included as part of the analysis.

Is the use a priority public use?

No

The trail will support hiking, jogging, bicycling, walking, snowshoeing and cross-country skiing that are not priority public uses; however, they can facilitate participation in priority outdoor recreational uses such as wildlife observation, photography, environmental education, interpretation, fishing and hunting.

Where would the use be conducted?

The Minnesota Department of Natural Resources has applied for a right-of-way permit for a portion of the Minnesota Valley State Trail on refuge property starting at Highway 77 and running approximately 1.7 miles west, encompassing about 5 acres on the Long Meadow Lake Unit. For map of area see Figure 2 in the associated draft Environmental Assessment for Issuing Right-of-Way Permits to the Minnesota Department of Natural Resources for the Minnesota Valley State Trail Across the Minnesota Valley National Wildlife Refuge (USFWS 2022). Two additional right-of-way permit applications will be submitted in the future as funding becomes available (Figure 1, USFWS 2022), estimated to impact 15 acres. One additional segment will be on the Long Meadow Lake Unit from Highway 77 to the refuge's Bloomington Visitor Center; the other on the Bloomington Ferry Unit will run from the Bloomington Ferry

bridge 1.7 miles east. About 5 miles of the proposed 7 miles of trail will be on the refuge's Long Meadow Lake unit and approximately 2 miles of the trail will be on the refuge's Bloomington Ferry unit.

The right-of-way permits, totaling 7 miles of trail on refuge lands, would allow the Minnesota Department of Natural Resources to develop the entire 13.5 miles of the Minnesota Valley State Trail from the Bloomington Ferry bridge to the refuge's Bloomington Education and Visitor Center. To complete the trail on refuge property, these rights-of-way would encompass approximately 20 acres of land on the Long Meadow Lake and Bloomington Ferry units.

Floodplain forest, a large emergent marsh, spring-fed streams, deep water fishing ponds and oak savanna are all part of the 2,411-acre Long Meadow Lake unit. Multiple species of birds take advantage of available habitats in the valley for breeding and year-round use. Long Meadow Lake is an important resource to migratory birds such as shorebirds, wading birds, waterfowl and other waterbirds. Forests and wetlands serve as important stop-over habitat for birds as they make their way through the flyway during migration. Several bald eagles nest on the unit and use Long Meadow Lake and other smaller wetlands as feeding areas. The Bloomington Ferry unit is made up of 347 acres of floodplain forest and wetlands between the Minnesota River and nearby bluffs. This unit provides habitat for bald eagles, prothonotary warblers and wood ducks. Other wildlife species in the project area include raccoon, mink, muskrat, deer, rabbit, squirrel, fox, beaver, bats, invertebrates, fish and a variety of amphibians and reptiles (U.S. Fish and Wildlife Service 2018). The 20 acres included in the right-of-way consist of floodplain forest, wetland, wet meadow, wet/mesic prairie and upland forest habitats.

When would the use be conducted?

Short-term use of lands will occur during the construction phase, during suitable construction conditions and seasonal constraints noted in this compatibility determination and right-of-way permits. Construction for the first segment is expected to take place between August 15, 2022 and December 31, 2023 in accordance with resource limitations and restrictions outlined in applicable permits and the draft Environmental Assessment for Issuing Right-of-Way Permits to the Minnesota Department of Natural Resources for the Minnesota Valley State Trail Across the Minnesota Valley National Wildlife Refuge (USFWS 2022). Specific measures to eliminate or minimize impacts to threatened and endangered species and other refuge resources will be addressed in these documents. Additional right-of-way permits for the remainder of the trail will be applied for as funding becomes available and actions will be required to meet this compatibility determination stipulations and

the rights-of-way permit requirements.

The trail use will be long-term and remain in place for 50 years. The rights-of-way will be maintained by Minnesota Department of Natural Resources standards, which includes maintenance of the trail, trash and graffiti removal and general cleanup of the area.

The trail will be open for visitation daily from sunrise to sunset. No seasonal closures are anticipated. Although the highest visitor use is anticipated during the spring, summer and fall, the trail will be used during the winter as well.

How would the use be conducted?

The refuge manager will restrict construction and staging of equipment to specific areas. Special needs will be considered on a case-by-case basis and are subject to the manager's approval. To avoid impact to listed species and other special status species such as the bald eagle, construction activities will be completed with appropriate timeframes and techniques consistent with permits, approvals and applicable avoidance plans in coordination with Minnesota Department of Natural Resources nongame wildlife and U.S. Fish and Wildlife Service. Special use permits will be required since access through U.S. Fish and Wildlife Service lands will be needed to get equipment to right-of-way permit areas. The necessary permits will cover all the specifications of construction, operation and management to minimize effects to wildlife and habitat. For more information on construction and invasive species management, see Alternative B under Habitat and Vegetation in the draft Environmental Assessment for Issuing Right-of-Way Permits to the Minnesota Department of Natural Resources for the Minnesota Valley State Trail Across the Minnesota Valley National Wildlife Refuge (USFWS 2022).

There will be an increased opportunity to hike, bike and observe wildlife as well as to use the trail for bike commuting. The trail will support hiking, jogging, bicycling, walking, snowshoeing and cross-country skiing that are not priority public uses; however, they can facilitate participation in priority outdoor recreational uses such as wildlife observation, photography, environmental education, interpretation, fishing and hunting. The non-priority public uses are "stepping-stones" of engagement for urban audiences to increase exposure to nature in familiar, non-threatening ways. Through these uses, persons are engaged will be exposed to the natural world and the concept of a refuge. They will have the opportunity to foster a better understanding of the mission of their refuge and the National Wildlife Refuge System.

We expect the paved trail to be the main trail for recreational use and emergency access, however, continued use will be allowed on natural surface segments defined

by the refuge.

Why is this use being proposed or reevaluated?

The Minnesota Department of Natural Resources would like to continue the Minnesota Valley State Trail through areas of the refuge to connect previously constructed segments. Legislation established the Minnesota Valley State Trail in 1969 to run along the Minnesota River Valley from Fort Snelling State Park to the city of LeSueur. In 2014, the Minnesota Legislature appropriated funding to develop the trail from the Bloomington Ferry Bridge to the Minnesota Valley National Wildlife Refuge Visitor Center. The Minnesota Department of Natural Resources, in consultation with primary landowners in the corridor, focused initial development on the segment between Cedar Avenue (State Highway 77) and Lyndale Avenue. The section of trail located on City of Bloomington property has already been constructed. The sections covered under this compatibility determination would ensure the entire 13.5 miles of the Minnesota Valley State Trail is connected and completed from the Bloomington Ferry bridge to the refuge's Bloomington Education and Visitor Center, enhancing accessibility for visitor recreational use.

Enabling legislation directs refuge staff to consider the state trail in unit planning. The Minnesota Valley National Wildlife Refuge Act states that the refuge shall "provide for the Minnesota Valley Trail Corridor, authorized by Minnesota Statute, 1969, section 85.198, as an integral part of the Minnesota Valley National Wildlife Refuge and the adjacent wildlife recreation area" (Minnesota Valley National Wildlife Refuge Act 1976). In addition, the National Wildlife Refuge System Improvement Act of 1997 identified six priority public uses that support the mission of the U.S. Fish and Wildlife Service when appropriate and compatible with the purposes for refuge establishment. Those priority public uses are hunting, fishing, wildlife observation, photography, environmental education and interpretation. The trail would support access for all these activities.

Availability of Resources

The refuge will incur a one-time expense of approximately \$75,000 to develop the Environmental Assessment and other National Environmental Protection Act documentation needed for this permit. In addition, refuge staff will spend about five staff days preparing supporting information and issuing the right-of-way permit. Staff will also periodically monitor trail construction activities. Additional law enforcement patrols may be needed along the trail however, refuge staff will coordinate with the Minnesota Department of Natural Resources and other local law enforcement officers as appropriate. There will be additional one-time costs to update trail brochures, maps and kiosks to include the new trail. These costs are estimated to be \$5,000 for staff

time, trail map re-prints, and updates to kiosk maps. Post construction, refuge visitor services staff and volunteers may need to increase trail roving to account for increased visitor use, including increased litter control and general interactions with the public.

The Minnesota Department of Natural Resources will bear all construction and maintenance costs. Since the operation of the trail will be the responsibility of the Minnesota Department of Natural Resources, the existing refuge resources are adequate to properly and safely administer the use. The annual administrative cost of monitoring the Minnesota Department of Natural Resources use of the rights-of-way will be minimal. Refuge staff frequent the project area throughout the year for normal refuge operations. Therefore, no special monitoring activity will be required.

Impacts of the Use

The impact of issuing the rights-of-way permit was evaluated in the associated draft Environmental Assessment for Issuing Right-of-Way Permits to the Minnesota Department of Natural Resources for the Minnesota Valley State Trail Across the Minnesota Valley National Wildlife Refuge (USFWS 2022). This environmental assessment is out for public review at the same time as this compatibility determination. The effects and impacts of the proposed use to refuge resources, whether adverse or beneficial, are reasonably foreseeable and have a reasonably close causal relationship to the proposed use. For more in-depth information, see the draft Environmental Assessment for Issuing Right-of-Way Permits to the Minnesota Department of Natural Resources for the Minnesota Valley State Trail Across the Minnesota Valley National Wildlife Refuge (USFWS 2022).

Potential impacts of a proposed use on the refuge's purpose(s) and the Refuge System mission

One of the primary purposes of the refuge is “to provide environmental education, wildlife recreational opportunities and interpretive programs for hundreds of thousands of Twin Cities residents.” The National Wildlife Refuge System Improvement Act of 1997 identified six priority public uses that support the mission of the U.S. Fish and Wildlife Service when appropriate and compatible with the purposes for refuge establishment. Those priority public uses are hunting, fishing, wildlife observation, photography, environmental education and interpretation. The issuance of the right-of-way permit will further achieve the purposes of the refuge and the refuge system as it will support access to these priority public uses.

The trail was outlined in the establishing legislation of the refuge, as the Minnesota Valley National Wildlife Refuge Act states the refuge shall “provide for the Minnesota

Valley Trail Corridor, authorized by Minnesota Statute, 1969, section 85.198, as an integral part of the Minnesota Valley National Wildlife Refuge and the adjacent wildlife recreation area” (Minnesota Valley National Wildlife Refuge Act 1976). Non-motorized recreational trail use was also found to be appropriate and compatible in the refuge’s 2016 Compatibility Determination (U.S. Fish and Wildlife Service 2016). Issuing the right-of-way permits will help facilitate the completion of the trail throughout the Minnesota River valley.

Short-term impacts

This compatibility determination 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.” Air quality, cultural resources and socioeconomics will not be more than negligibly impacted by the action and have been dismissed from further analyses.

Migratory Birds and Other Wildlife Resources

Wildlife and associated habitat would be affected by project-related construction, but these effects would be temporary. Potential environmental effects include changes in ground habitat due to limited removal of trees and understory vegetation along the trail; accidental introduction of invasive species; and human-related disturbance during construction, operation and maintenance.

Some trees will require removal during construction. Removing floodplain forest trees has the potential to reduce habitat for cavity and other nesting species. Refuge staff and Minnesota Department of Natural Resources will minimize impacts from tree removal through deliberate timing of work and conscientious trail alignment planning. Although there could be disturbances to wildlife during construction, there is adequate habitat adjacent to the trail for displaced wildlife.

There also will be measures incorporated into the project to minimize effects to wildlife and habitat. Such measures include leaving most of the tree canopy intact; aligning the trail to minimize loss of mature trees; minimizing impacts to ecologically significant areas to the extent practicable; and controlling the potential introduction and spread of invasive plant species. The new trail will follow the existing natural surface footprint as much as possible. Although wider than existing natural surface trails, a paved trail will encourage visitors to stay on the established surface and allow enough undisturbed habitat for wildlife species to thrive. Slopes of the trail will be conducive to allow for wildlife crossings. Therefore, these disturbances should not have sustained negative impacts on wildlife and their ability to have healthy viable populations. More details about impacts to wildlife can be found in Alternative B of

the Migratory Birds and Other Wildlife Resources section within the environmental assessment.

Threatened and Endangered Species

The Information for Planning and Consultation (IPaC) system and the Intra-Service Section 7 Biological Evaluation determined that the project will have *No Effect* on the Higgins eye (pearlymussel) and prairie bush clover since there are no confirmed sightings in the project area. It *May Affect but is Not Likely to Adversely Affect* the northern long-eared bat (but the timing of tree removal will eliminate or reduce any potential effects) and the rusty patched bumble bee and is *Not Likely to Jeopardize* the monarch butterfly, a candidate species.

The construction of the Minnesota Valley State Trail will cause some temporary disruption of habitats. However, since this segment of the trail is following an existing trail footprint, we expect any disruption to be minimal. Construction activities may temporarily alter the availability of nectaring or pollen resources for rusty patched bumble bees and monarchs. They could also have an impact on nectaring or larval species if plants are removed during trail construction. However, most of the area impacted by construction will be restored using native vegetation, so there will only be a temporary disruption. Tree removal conducted appropriately (e.g. cutting large trees in winter), should not impact northern long-eared bat maternity colonies. Overall, minimal impact is expected to threatened and endangered species since multiple conservation measures are employed as part of this project.

Although 8.6 acres of pavement will be added, in some places it will cover already disturbed areas and efforts will be made to minimize effects on high quality natural habitat. However, if natural habitat is impacted, it will be restored prior to completion of the project.

Instances of collisions with monarch butterflies or rusty patched bumble bees during trail use are expected to be minimal and should have no impacts to the overall population or continuation of these species. We do not expect any other impacts of trail use to other threatened or endangered species that may be in the area.

Habitat, Water Quality, Geology and Soils

Trails can often break up large blocks of habitat into smaller isolated fragments, which can impact wildlife. We expect impacts to habitat during construction, including clearing of an anticipated 25-foot trail corridor to allow for construction access, placement of fill, creating the trail surface, shoulders and the associated side slopes. We expect many of these effects to be temporary since careful trail planning can help minimize habitat fragmentation. By designing a narrow footprint as feasible

for the project and using existing trail corridors, the Minnesota Department of Natural Resources will reduce fragmentation as much as possible. Habitat adjacent to the footprint of the trail that may be impacted during construction will be restored using native species and will remain in native habitat during the lifetime of the permit.

To ensure the construction and maintenance of the state trail will not cause adverse effects to wetlands and other water resources, measures such as wildlife-friendly erosion prevention and sediment control and revegetating trail shoulders with an appropriate native erosion control seed mix will be utilized. In addition, Federal, state and local surface and groundwater management regulations require mitigation be provided in conjunction with the proposed development. Potential impacts of the project will be minimized or mitigated and not cause adverse effects on water quality.

Ground disturbance may increase risk of invasive species introduction during the construction phase. Avenues of invasion include to bringing equipment to the project area, bringing fill materials to the project area, movement of seeds and plant fragments within the site and through the disturbance of soil, which can provide an opportunity for invasive plants to take hold. The Minnesota Department of Natural Resources Operational Order Number 113 provides guidance and directives applicable to agency staff and contractors to implement site-level management to prevent or limit invasive species' introduction, establishment and spread (Minnesota Department of Natural Resources 2017).

Visitor Use and Experience

Trail construction could temporarily impact visitor use and experience. The operation of diesel tractors and medium-sized trucks would be the main source of construction noise. Noise pollution would be minimized by ensuring standard noise arrestors (mufflers) are on construction vehicles. Operation of construction equipment will be limited to several weeks at any given location and will occur only during daylight hours. Operation of construction equipment and machinery will adhere to the City of Bloomington's noise ordinance (City of Bloomington Code Sections 10.29 and 10.30). Any noise due to construction and trail maintenance will be temporary.

Long-term impacts

This compatibility determination 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." Air quality, cultural resources, socioeconomics and threatened and endangered species will not be more than negligibly impacted by the action and have been dismissed from further

analyses.

Migratory Birds and Other Wildlife Resources

While construction-related effects would be temporary, disturbance effects associated with trail use would be ongoing and vary as a function of the level of site use. Disturbances may vary with the wildlife species involved and the type, level, frequency, duration and time of year such activities occur. The presence of people on refuge trails and roads can lead to the displacement of animals from and around trails. However, disturbance usually is a negligible influence on large mammal distributions and movements (Purdy et al. 1987, Boyle and Samson 1985). In areas of high-level recreation, trail use does impact on the density and abundance of birds close to trails as opposed to areas further away (Bötsch et al. 2018). According to Marion and Wimpey, “wildlife impacts are greatly minimized when visitors stay on trails as wildlife have a well-documented capacity to habituate to non-threatening recreational uses that occur in consistent places.” Since visitors will be encouraged to stay on trails designated by the refuge and there is suitable habitat adjacent to the trail, there should not be any long-lasting impacts to migratory birds and other wildlife.

Habitat, Water Quality, Geology and Soils

Trail installation may fragment floodplain habitats. Limiting the trail corridors to a maximum width of 10 feet with 2-foot vegetated shoulders, following the existing trail footprint where possible, and limiting tree removal and canopy openings will help minimize habitat fragmentation.

During construction, soils will be excavated a minimum of one foot below the existing grade, then removed and replaced. An appropriate base material will be installed as specified by Minnesota Department of Natural Resources engineers. Suitable excavated material will be reused as topsoil or as fill on the slope along the length of the trail. Although there will be some loss of habitat with the footprint of the completed trail, we expect it to be minimal as the sides of the trail will be restored using native plant species.

The proposed 7 miles of trail is estimated to result in approximately 0.9 acres of direct wetland impacts due to the placement of fill to allow for the trail to be constructed on stable soils. Effects of proposed wetland fill within delineated wetland boundaries include loss of wildlife habitat and wetland function. Broader effects include floodplain storage loss, surface water runoff, some loss of recharge area and changes to local drainage patterns. Efforts will be made to avoid wetland impacts. If unavoidable, best management practices and mitigation will be used to minimize

impacts to these important areas. Mitigation for any impacts will be accomplished through applicable state and federal permitting processes, as well as through guidance from the refuge included in the right-of-way permits.

The authorizing language under Minnesota Statutes 85.015, subpart 6 requires that the trail be paved between the Bloomington Ferry bridge and Highway 77 primarily for hiking and biking. For the sake of continuity and accessibility, the Minnesota Department of Natural Resources proposes to pave all segments for which a right-of-way permit is granted. Paving the entire length of the trail will result in approximately 8.6 acres of paved surface, some of which would be constructed over a current gravel road. Impervious surface increases the frequency and intensity of downstream runoff and decreases water quality (Chithra et al. 2015). The new trail facility will increase stormwater runoff compared to current conditions, which may affect water quality. This is recognized as a possibility. However, Nemeth et al. (2010) found that, although asphalt did contain petroleum hydrocarbons, these molecules seem to be leaching into runoff at very low concentrations. Though the addition of paved impervious surface will reduce the floodplain's capacity to absorb precipitation, the overall effect is expected to be minimal due to being dispersed over a long distance.

Due to the proposed trail being located within the floodplain, frequent flooding is to be expected. Sections of the trail could break off during flooding events and be deposited into the Minnesota River or nearby wetlands and creeks. According to the U.S. Geological Survey, "There are many sources of [polycyclic aromatic hydrocarbons] to the environment, representing a wide range of [polycyclic aromatic hydrocarbon] concentrations, including asphalt (2-9 milligrams per kilogram, or mg/kg), tire particles (84 mg/kg), used motor oil (730 mg/kg), and coal-tar-based sealcoat (34,000-202,000 mg/kg)" (USGS 2019). Although asphalt alone could contain low concentrations of polycyclic aromatic hydrocarbons, without the addition of sealcoating and vehicle traffic, a large impact on the environment is not expected.

Maintenance and operation of the trail and ongoing or increased visitor use could provide opportunities for introducing and spreading of invasive plant species. To minimize the potential spread of invasive species, the newly constructed trail will be monitored during the first year after construction, and periodically thereafter, consistent with the management of other trail segments. Suitable control measures would be employed when invasive plants are located within the project area.

We expect there to be an increase in hiking and biking along the state trail and with that, subsequent impacts on habitat may occur. Marion and Wimpey found that "all of the existing scientific studies indicate that while mountain biking, like all forms of recreational activity, can result in measurable impacts to vegetation, soil, water

resources, and wildlife, the environmental effects of well-managed mountain biking are minimal.” They also found that “in the small number of studies that included direct comparisons of the environmental effects of different recreational activities, mountain biking was found to have an impact that is less than or comparable to hiking” when recreational users stay on designated trails (Marion and Wimpey). Due to this, visitors will be encouraged to stay on trails designated by the refuge.

Visitor Use and Experience

The state trail would increase opportunities to hike, bike and observe wildlife, and access for recreation and bike commuting. Although designated passing lanes are not planned for this trail, the trail width is conducive to allow users to safely pass. Since there will be natural surface segments that deviate from the paved trail, conflicts may result. Increased bike speed and the intersections of natural surface trails and the paved trail may result in collisions and negative interactions between user groups. To mitigate these, the Minnesota Department of Natural Resources intends to provide signed intersections between the paved trail and existing natural surface trails where applicable. We expect the paved trail to be the main trail for recreational use and emergency access, however, continued use will be allowed on natural surface segments defined by the refuge.

Refuge Management

There will be minimal additional costs to the refuge with the completion of the state trail. Additional costs will be due to law enforcement and visitor services staff time. The Minnesota Department of Natural Resources will be responsible for the operation and maintenance of the state trail facility through a formal agreement with the refuge. Refuge wildlife officers would expect to see an increase in use with the completed construction of the trail. Coordination of enforcement activities will occur between refuge wildlife officers, Minnesota Department of Natural Resources conservation officers, and local authorities. Post-construction, refuge visitor services staff may need to increase trail roving to account for increased visitor use, including increased litter control and general interactions with the public. The completion of the paved trail would prompt improvement to refuge interpretive signs and kiosks. This would incur staff time and cost to produce and print signs and update kiosk structures.

Public Review and Comment

The draft compatibility determination will be available for public review and comment for 45 days with a draft Environmental Assessment for Issuing Right-of-Way Permits to the Minnesota Department of Natural Resources for the Minnesota Valley State

Trail Across the Minnesota Valley National Wildlife Refuge from April 15 to May 29 (USFWS 2022). The public will be made aware of this comment opportunity through the refuge website and Facebook page, letters to potentially interested people such as adjacent landowners and other media outlets. The state and tribes have been asked to review and comment on the draft compatibility determination along with the draft Environmental Assessment for Issuing Right-of-Way Permits to the Minnesota Department of Natural Resources for the Minnesota Valley State Trail Across the Minnesota Valley National Wildlife Refuge (USFWS 2022). A hard copy of this document will be made available at the refuge visitor center (3815 American Blvd. East, Bloomington, MN 55425). It will also be made available electronically on the refuge website (<https://www.fws.gov/refuge/minnesota-valley>). Please contact us at MinnesotaValley@fws.gov or 952-854-5900 if you need the document in an alternative format. Concerns expressed during the public comment period will be addressed in the final document.

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

To ensure compatibility with the National Wildlife Refuge System and refuge goals and objectives and to minimize or exclude adverse impacts as described above, the activity can only occur under a number of stipulations:

1. The project complies with other Federal, State and local permitting requirements and regulations relating to environmental and cultural resource protection. Specifically, the project will be in compliance with the Environmental Assessment and Intra-Service Section 7.
2. The Minnesota Department of Natural Resources will follow guidelines outlined in the right-of-way permits.
3. Refuge lands temporarily disturbed during the construction process are revegetated with native species appropriate for floodplain habitats.
4. To take such soil and resource conservation and protection measures, including weed control on the land covered by the permit, as designated by the refuge.
5. The project is constructed as designed and maintained by the Minnesota Department of Natural Resources.
6. The Minnesota Department of Natural Resources will apply for future right-of-way permits as funding is available. At that time, the compatibility determination and all environmental compliance will be reviewed to ensure

they are still appropriate.

Terms and conditions of the right-of-way permit will allow for modifications to ensure compatibility (603 Compatibility Determination 4 FW 2.11(H)(3)).

Justification

The stipulations outlined above would help ensure that the use is compatible at Minnesota Valley National Wildlife Refuge. Granting rights-of-way to the Minnesota Department of Natural Resources for the construction, operation, and maintenance of a non-motorized recreational trail on Minnesota Valley National Wildlife Refuge, as outlined in this compatibility determination and described in the associated draft Environmental Assessment for Issuing Right-of-Way Permits to the Minnesota Department of Natural Resources for the Minnesota Valley State Trail Across the Minnesota Valley National Wildlife Refuge, would not conflict with the national policy to maintain the biological diversity, integrity, and environmental health of the refuge (USFWS 2022). Allowing these rights-of-way on the refuge will enable a more significant portion of the public to enjoy the outdoors while promoting the National Wildlife Refuge System. This access is consistent with the goals of the refuge. The uses will provide welcoming, accessible and safe outdoor recreation in a unique and nature-based setting. The potential exists that those who come to the refuge for recreational enjoyment will find value in this place and be inspired to learn more about it. Through this process of value and awareness-raising, visitors have the opportunity to become informed advocates for the refuge and natural resource conservation.

Based on available science and best professional judgment, the Service has determined that granting rights-of-way to the Minnesota Department of Natural Resources for the construction, operation and maintenance of a non-motorized recreational trail at Minnesota Valley National Wildlife Refuge, in accordance with the stipulations provided here, would not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purpose of the Minnesota Valley National Wildlife Refuge. Rather, appropriate and compatible granting rights-of-way to the Minnesota Department of Natural Resources for the construction, operation and maintenance of a non-motorized recreational trail would meet the Minnesota Valley National Wildlife Refuge purpose and authorizing legislation.

The Minnesota Valley National Wildlife Refuge Act, which established the refuge, states that the refuge Comprehensive Plan shall “provide for the Minnesota Valley Trail Corridor, authorized by Minnesota Statute, 1969, section 85.198, as an integral part of the Minnesota Valley National Wildlife Refuge and the adjacent wildlife

recreation area” (Minnesota Valley National Wildlife Refuge Act 1976).

The National Wildlife Refuge System Improvement Act of 1997 also identified six priority public uses that support the mission of the U.S. Fish and Wildlife Service when appropriate and compatible with the purpose for which the refuge was established. Those priority public uses are hunting, fishing, wildlife observation, photography, environmental education and interpretation. The trail would support access for all these activities and additional recreational opportunities. The use of the trail will allow the public more opportunities to develop an appreciation for wildlife and wild lands, which is compatible with refuge purposes as described above.

The Minnesota Department of Natural Resource’s Parks and Trails Division has a vision of creating unforgettable park, trail and water recreation experiences that inspire people to pass along the love for the outdoors to current and future generations. The mission for the Minnesota Valley State Recreation Area, managed by the Parks and Trails Division, is to protect, manage, restore and interpret the remaining natural features, cultural landscapes and sacred places in the Lower Minnesota River Valley; to focus on telling the stories of the people who have chosen to live in these landscapes; and to provide a recreational travel route through the valley that connects these features (Minnesota Department of Natural Resources 2006). Allowing the Minnesota Department of Natural Resources to continue the Minnesota Valley State trail on refuge property will help them meet their mission.

Signature of Determination

Refuge Manager Signature and Date

Signature of Concurrence

Assistant Regional Director Signature and Date

Mandatory Reevaluation Date

2072. More specifically, the compatibility determination will be reviewed when the

Minnesota Department of Natural Resources submits additional right-of-way permits.

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Figure(s)

See Figure 2: Minnesota Valley State Trail, Bloomington Segment: Estimated Project Area with Submitted Right-of-Way Application #1 on U.S. Fish and Wildlife Service Land, Based Upon Preliminary Design in the associated draft Environmental Assessment for Issuing Right-of-Way Permits to the Minnesota Department of Natural Resources for the Minnesota Valley State Trail Across the Minnesota Valley National Wildlife Refuge (USFWS 2022).

See Figure 1: Proposed Minnesota Valley State Trail on Refuge Property Submitted and Future Right-of-Way Applications in the associated draft Environmental Assessment for Issuing Right-of-Way Permits to the Minnesota Department of Natural Resources for the Minnesota Valley State Trail Across the Minnesota Valley National Wildlife Refuge (USFWS 2022).