



U.S. Fish and Wildlife Service

Moosehorn National Wildlife Refuge

Fishing Plan

June 2023



Annual Children's Fishing Event – Moosehorn NWR - Edmunds Division, USFWS File Photo

Appendix A – Fishing Compatibility Determination
Appendix B – Categorical Exclusion
Appendix C – Intra-Service Section 7 Evaluation

**Moosehorn National Wildlife Refuge
Fishing Plan**

June 2023

U.S. Fish and Wildlife Service

**Moosehorn National Wildlife Refuge
103 Headquarters Rd.,
Baring, Maine 04694**

Submitted By:
Project Leader

Signature

Date

Concurrence:
Refuge Supervisor

Signature

Date

Approved:
Regional Chief
National Wildlife Refuge System

Signature

Date

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Moosehorn National Wildlife Refuge Fishing Plan

I. Introduction

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

Moosehorn National Wildlife Refuge (NWR, refuge) was established on January 13, 1937, as a refuge for migratory birds with the first parcel acquired within the Baring Division. On July 1, 1937, President Franklin D. Roosevelt signed an Executive Order (Executive Order 7650) expanding the Baring Division an additional 16,000 acres. The 10,880-acre Edmunds Division boundary was similarly established on August 30, 1938 (Executive Order 7967). Not all lands within the approved boundaries have been acquired.

The primary purposes of Moosehorn NWR are:

- “...as a refuge and breeding ground for migratory birds and other wildlife: ...” Executive Order 7650, dated July 1, 1937.
- “...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act).
- “...suitable for (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species...” 16 U.S.C. 460k-1 (Refuge Recreation Act).
- “...the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions...” 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986).
- “... for the development, advancement, management, conservation, and protection of fish and wildlife resources ...” 16 U.S.C. § 742f (a) (4) ... 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 ... 16 U.S.C. § 742f (b) (1) (Fish and Wildlife Act of 1956).
- “... conservation, management, and restoration of the fish, wildlife, and plant resources and their habitats for the benefit of present and future generations of Americans...” 16 U.S.C. § 668dd (a) (2) (National Wildlife Refuge System Administration Act).

- “... wilderness areas ... shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness: ...” 16 U.S.C. § 1131 (Wilderness Act).

Moosehorn NWR consists of two divisions, Baring, and Edmunds, located 22 miles apart. The refuge was established for the paramount purpose of protecting the American woodcock. The coastal habitats of the refuge’s Edmunds Division were identified in the North American Waterfowl Management Plan (NAWMP) Black Duck Joint Venture as key areas for wintering American black ducks. The refuge has been open to public fishing since the 1940s.

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

“... 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.”

The NWRSAA mandates the Secretary of the Interior in administering the Refuge System to (16 U.S.C. 668dd(a)(4):

- Provide for the conservation of fish, wildlife, and plants, and their habitats within the Refuge System.
- Ensure that the biological integrity, diversity, and environmental health of the Refuge System are maintained for the benefit of present and future generations of Americans.
- Ensure that the mission of the Refuge System 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 Refuge System are located.
- Assist in the maintenance of adequate water quantity and water quality to fulfill the mission of the Refuge System and the purposes of each refuge.
- Recognize compatible wildlife-dependent recreational uses as the priority general public uses of the Refuge System through which the American public can develop an appreciation for fish and wildlife.
- Ensure that opportunities are provided within the Refuge System for compatible wildlife-dependent recreational uses; and

- Monitor the status and trends of fish, wildlife, and plants in each refuge.

Therefore, it is a priority of the Service to provide for wildlife-dependent recreational opportunities, including hunting and fishing, when those opportunities are compatible with the purposes for which the refuge was established and the mission of the Refuge System.

II. Statement of Objectives

Fishing will not affect the refuge's goal to preserve, restore, and enhance upland and wetland habitats and the wildlife that depend upon these areas. We do not anticipate any adverse effects on local populations of the species we propose opening to fishing.

The objectives of the fishing program on Moosehorn NWR are to:

- Provide the public with a quality recreational experience on refuge lands/waters and increase opportunities and access for fisherman.
- Design a fishing program that is administratively efficient and manageable with existing staffing levels and in alignment with Maine Department of Inland Fisheries and Wildlife (MDIWF) regulations when possible.
- Implement a fishing program that is safe for all refuge users.
- Design a fishing program that aligns with refuge habitat management objectives; and,
- Educate the public and neighboring landowners about the benefits of habitat management on national wildlife refuges, and the use of fishing as a management tool.

III. Description of Fishing Program

A. Areas to be Opened to Fishing

Public fishing will be offered on both the Baring and Edmunds Divisions. Each division has several fishing areas as described below:

Baring Division Fishing Areas

For a map of the Baring Division Fishing Areas, refer to Figure 2.

Baring Division – Lakes and Ponds

Bearce Lake is a shallow 295-acre lake located within the Baring Wilderness Area east of Route 191. Primary fish species include smallmouth bass and chain pickerel. No motorized or mechanized equipment is permitted in Wilderness Areas including electric trolling motors or foot pedal powered kayaks. A gravel road from Route 191 to the shore of the lake was excluded from the Wilderness Designation to provide continued access to Bearce Lake. A pair of common loons usually nest on the lake or along the shore.

Conic Lake is a shallow 30-acre lake located within the Baring Wilderness Area east of Route 191. Primary fish species include smallmouth bass and chain pickerel. No motorized or mechanized equipment is permitted in Wilderness Areas including electric trolling motors or foot pedal powered kayaks. Access is by a .3-mile foot trail. A pair of common loons usually nest on the lake or along the shore.

Vose Pond is a 43-acre shallow pond; the water and bottom owned by State of Maine, the refuge controls access. Warmwater species including chain pickerel, small and large mouth bass, yellow perch; bullhead. An unimproved gravel boat ramp is available. Outboard motors are permitted under state regulations. Vehicle access across refuge is permitted when conditions permit (Spring-Fall). Common loons sometimes nest on the pond.

James Pond is 28 acres in size; it is managed for brook trout. James Pond is located along the southerly boundary of the Baring Division. The refuge only owns approximately 0.5 miles of shoreline around the northern $\frac{3}{4}$ of the pond. Access to James Pond from the refuge is via foot or bicycle from the South Ridge Road, approximately 3 miles from the Charlotte Road.

Ledge Pond is 14 acres in size and managed for brook trout. Ledge Pond is located along the southerly boundary of the Baring Division. The refuge owns approximately 0.2 miles of the shoreline. Access from the refuge is by foot or bicycle from the South Ridge Road, approximately 3 miles from the Charlotte Road.

Baring Division - Brooks and Streams

West Branch Magurrewock Stream includes 1.8 miles of stream extending from the Observation Blind/Fishing Pier, south to the outflow of the Howard Mill Water Control Structure. The primary fishery is brook trout, which is maintained by annual stocking by the Maine.

Clark Brook flows northerly 1.3 miles, from the outlet of the Tyler Flowage bridge and water control structure to Upper Magurrewock Marsh. The stream drops approximately 40 feet in this 1.3-mile segment. The average width of the stream is 15 feet, and the banks are forested, primarily with softwoods.

Fishing is permitted during the State fishing season. The portion of the stream open to fishing is posted and begins approximately 0.3 miles above the Upper Magurrewock Marsh and continues for a mile to the Tyler Bridge and water control structure.

Access to the West Branch of Magurrewock Stream is gained from the Charlotte Road, from which it is a 600 to 700-foot walk. There is also a handicapped accessible paved trail to a fishing pier and wildlife observation blind located just off the Charlotte Road.

Anglers primarily fish for brook trout in this stream; other species that are fished include American eel, alewife, fallfish, pumpkinseeds, white suckers, blacknose dace and chain pickerel.

Moosehorn Stream 7.5 miles on refuge. Moosehorn Stream originates in the Baring Division just south of the Calais-Baring town line. Its upper reaches consist of several beaver flowages. For a time in the past, the roads from the Hanson and Lunn Gravel Pits crossed the brook and railroad grade to provide access to the Charlotte Road. These roads partially impounded the stream, although culverts were apparently used to maintain some flow. When the roads were abandoned, beavers periodically blocked the culverts and created the flowages, which are excellent habitat for migrating and breeding waterfowl and waterbirds.

Moosehorn Stream lies just west of the Charlotte Road, which it runs parallel to until it crosses under the road at the point where the railroad bed also crosses the Charlotte Road. The Stream then runs east of the Charlotte Road and eventually leaves the refuge. It empties into Pennamaquan Lake. Approximately 7 miles of the stream is within or along the refuge boundary.

Seeley “Spring Hole” is a one-half acre area of Moosehorn Stream that is periodically impounded by beavers. It is located north of, adjacent to, the end of the westerly end of the dike for Seeley Flowage off the Mile Bridge Road. It can provide some good fishing for brook trout.

Cranberry Brook 1.0 Miles from Cranberry Outlet to Mahar Brook. Cranberry Brook originates at Cranberry Outlet and flows easterly for approximately 1 mile, where it joins Mahar Brook. The gradient for the length of the stream is estimated to be 40 feet. Stream width is approximately 6 feet in the vicinity of Cranberry Outlet and at Charlotte Road. The water is lightly colored, and the banks are densely covered with alders. The substrate varies from muck and detritus covered silt to predominately small gravel.

The 1-mile reach of Cranberry Brook is an important spawning area for brook trout. Cranberry Brook is open to fishing throughout the State fishing season. Access is from Charlotte Road and by roads maintained by and for the refuge which are pedestrian access only.

Mahar Brook originates at the outflow of the Daly Flowage water control structure, it flows in a northeast, north, and then easterly direction to the point where it merges with Cranberry Brook and flows into Moosehorn Stream. When water levels and temperatures are optimal this stream provides habitat for native brook trout. During the summer months some large stands of cardinal flower are present in parts of the stream. It is also one of the few places on the refuge known to have a population of two-lined salamanders.

Barn Meadow Brook is a .2-mile-long stream and wetland area that is open to fishing; it lies between the Barn Meadow Road, adjacent to the western end of the Upper Barn Meadow Marsh, and the exterior refuge boundary. It is a small area that has some deep holes that provide habitat for brook trout.

Edmunds Division Fishing Areas

For a map of the Edmunds Division Fishing Areas, refer to Figure 3.

Edmunds Division - Lakes and Ponds

Hobart Lake: The refuge owns approximately 2,490 feet along the shore of Hobart Lake. Access is from the Dodge Road across private land. Brook trout and white perch are among the species sought after in this area.

Edmunds Division - Brooks and Streams

Hobart Stream: 11.7 miles on refuge: originates off the refuge in Marion Township, near the Edmunds-Marion Township boundary. It flows in an easterly direction, eventually crossing under the Dodge Road and into Hobart Lake. It exits Hobart Lake and flows into Hobart Bog, which is within the Edmunds Division National Wilderness. The river flows in a southeasterly, then in a northeasterly direction, approximately 6.5 miles, until it discharges into Denny's Bay.

For most of the 6.5 miles Hobart Stream forms the northern exterior boundary of the Edmunds Division of the refuge. According to the tract maps on file in the refuge office the boundary follows the thread of Hobart Stream (also referenced to as Little Falls Stream) to the center of the stream.

Hobart Stream is a large stream averaging approximately 25 feet in width along the refuge. It is estimated that the average depth is one foot. The gradient drops from the outlet at Hobart Bog to where it exits the refuge is approximately 100 feet, or 22 feet per mile. From a point west of the junction of the Weir Road and North Trail the stream is mostly riffle. Stream substrate from the junction west begins with rubble, goes through a steep area with boulder and ledge, re-enters a rubble segment that grades into gravel up to the outlet at Hobart Bog.

The banks of the stream are well defined. Portions of the stream bank in the vicinity of the Weir Road (now mostly a foot trail) and North Trail were burned by wildfires in 1985 and again in 2001. Unburned areas are primarily softwood with red spruce a major component of the overstory.

Young of the year native brook trout have been observed at several locations within the wilderness area. The stream served as a demonstration area for Atlantic salmon restoration projects in Maine in the 1960s. It has been reported by local anglers that "salters," or sea-run brook trout, spawn in the stream.

Fishing is permitted during the State-regulated season. The entire length of Hobart Stream is open to fishing including that portion in the wilderness area. Access within the wilderness area is by hiking only.

Two smaller streams that flow through the Edmunds Division Wilderness Area empty into Hobart Stream: Crane Meadow Brook and Cranberry Lake Brook (also called Cranberry Brook). Both streams support a brook trout fishery. Sunken Stream also empties into Hobart Stream from

the north.

The refuge proposed to improve habitat of the stream for Atlantic salmon and brook trout in the draft Comprehensive Conservation Plan (CCP). The water quality in Hobart Stream is rated Class AA, the highest possible rating in the State of Maine.

Crane Mill Stream and Flowage: Crane Mill Stream is a low gradient coastal stream with moderate flow and long pools. The headwaters area has been altered to form a series of flowages for waterfowl management. The stream is approximately 1.5 miles long, but only 1.1 miles are within the refuge boundary. A portion of the stream is within the Edmunds Unit Wilderness Area.

The stream has an estimated width of 8 feet and an average depth of 1 foot. The water is tea colored, but not turbid. Substrate within the stream is predominately sand, but there are gravel segments in the faster flowing, higher gradient, areas. The watershed is forested with northern softwoods, mostly spruce. The stream banks are covered by a dense growth of alder.

The stream is an important spawning area for brook trout. Brook trout occupy the entire length of Crane Mill Stream. Crane Mill Stream is open to fishing throughout the State fishing season from the outlet of Crane Mill Flowage downstream. Access is from the refuge's South Trail and Crane Mill Roads. Fishing in the stream is difficult because of the dense bank growth.

Crane Meadow Brook: is approximately 1.7 miles long, with 1.3 miles flowing through the refuge. The stream flows northwesterly, and discharges into Hobart Stream. Stream elevation at the refuge boundary is 120 feet above mean sea level and 72 feet above mean sea level where it discharges into Hobart Stream. Crane Meadow Brook is within the Edmunds Division National Wilderness. Pedestrian access is allowed in the wilderness area. Crane Meadow Brook is accessed from North and South Trails.

The estimated average width is 8 feet and estimated average depth is 1 foot. The water is tea colored, but not turbid. Except for the marsh area near the junction with Hobart Stream, the substrate is predominately rubble-gravel and scattered boulder. The segments of stream in the marsh area have a muck and sand substrata. The watershed is forested by softwood primarily spruce. The banks of Crane Meadow Stream are densely covered with alders. The stream is fished for native brook trout. Fish species present include American eel and white sucker. The stream is open to fishing during the State-regulated season.

Crane Meadow Brook is free of impoundments. Shoreline development is primitive with no evidence of human activity. Crane Meadow Brook is accessible only by foot trail.

Cranberry Brook: is approximately 1.5 miles long, with 1.2 miles flowing through the Edmunds Division, including part of the Wilderness Area. Cranberry Brook originates from Eastern and Western Lakes, located about .3 miles southeast of the refuge's boundary. The stream flows in a northern direction to its confluence with Hobart Stream.

The stream averages 12 feet in width and one foot in depth. It is a fast-flowing stream with few

pools. The substrate is primarily boulder-rubble, with areas of sand and gravel. The stream elevation varies from 122 mean sea level (M.S.L.) at the refuge’s southern boundary, to 75 M.S.L. at the confluence with Hobart Stream.

The watershed of Cranberry Brook is mostly forested with softwoods. In places, the stream banks are covered with a dense stand of alders. Brook trout, American eel, and white suckers are the most abundant fish species present. Access to Cranberry Brook is mostly pedestrian via the rustic trails in the Wilderness Area.

Closed Areas

Most areas on both divisions of the refuge are open to foot access by the public. A few areas are closed to all public access to reduce wildlife disturbance and/or to provide for public safety. These areas include the Magurrewock Dike, the Eagle Nesting Area, the fields on the east side of the Charlotte Road from US Route 1 to the trail and parking lot at the Fishing Pier and Observation Blind, the Lower Magurrewock Dike, and the gravel pit on the east side of the Charlotte Road across from Young’s Road. These areas are all posted with signs that read: “Closed Area – All Public Entry Prohibited”

All the refuge’s managed wetlands are closed to fishing to prevent disturbance to waterfowl and other wetland wildlife species.

B. Species to be Taken, Fishing Periods, Fishing Access

The following are the most sought fish species by refuge anglers:

Species	Status and Habitat
Eastern brook trout (<i>Salvelinus fontinalis</i>)	A native species found in cold water lakes, ponds, and streams
Smallmouth bass (<i>Micropterus dolomieu</i>)	An introduced species found in warmwater ponds and lakes
Largemouth bass (<i>Micropterus salmoides</i>)	An introduced species found in warmwater lakes and ponds
Chain pickerel (<i>Esox niger</i>)	A native species found in warmwater lakes and ponds
White perch (<i>Morone americana</i>)	A native species found in lakes and ponds
Yellow perch (<i>Perca flavescens</i>)	A native species found in warmwater lakes and ponds
Brown bullhead (<i>Ameiurus nebulosus</i>)	A native species found in warmwater lakes and ponds

Fishing Periods

Designated areas of the refuge are open to fishing during the seasons prescribed by MDIFW. There are sometimes special rules that apply to specific bodies of water, and season dates can change seasonally and annually. All anglers are urged to check for any special rules that may be in effect for areas they plan to fish.

Generally, lakes and ponds are **open** to ice and open water fishing from January 1 through December 31, in the south zone; rivers, brooks, and streams are **closed** to all fishing from October 1 to March 31.

Fishing Access

Fisherman may enter the refuge ½-hour before sunrise and must exit the refuge by ½-hour past sunset. Access to most brooks and streams is by foot. During the spring, summer, and fall the road to Vose Pond is open to the public, conditions permitting. An access road to Bearce Lake was excluded from the Wilderness Designation. That road is also open to the public during spring through fall, conditions permitting.

C. Fishing Permit Requirements

The refuge does not require a permit for fishing on designated areas of the refuge. Anyone wishing to be on the refuge outside of times it is officially open must obtain a Special Use Permit.

D. Consultation and Coordination with the State

National wildlife refuges, including Moosehorn NWR, conduct fishing programs within the framework of State and Federal regulations. The refuge has moved forward with developing this fishing plan based upon earlier formal coordination with MDIFW as well as intermittent informal discussions.

In developing this plan, we reviewed fishing regulations for the State of Maine to find consistency where possible. On July 1, 2022, refuge staff met with regional fishery biologists from MDIFW to discuss proposed changes to Service fishing plans. They expressed no concerns with our existing program and endorsed continuing it in the future.

Refuge staff will continue to consult and coordinate with MDIFW to maintain consistent regulations and programs, and to monitor populations of target fish species. We will work together to ensure safe and enjoyable recreational fishing opportunities. Law enforcement officers from both agencies will work together to conduct patrols, safeguard anglers and other visitors, and protect both game and nongame species. The Fishing Plan and associated Categorical Exclusion will be shared with MDIFW.

The refuge hosts an annual Children's Fishing Derby at Headquarters Pond located behind the Cobscook Bay State Park Maintenance Shop. Refuge staff handle the logistics and staff from the State Park provide picnic tables and mow the area prior to the event. MDIFW stocks the pond with brook trout prior to the event which occurs on the second Saturday in June. The event often attracts over 100 people. Prior to the COVID-19 pandemic, the refuge hosted an annual Veterans Fishing Day. Residents of a veteran's home in Machis were transported to the Headquarters Pond and enjoyed a few hours of fishing with a barbeque lunch. This activity was resumed in June 2022.

E. Law Enforcement

Enforcement of refuge violations, normally associated with management of a national wildlife refuge, is the responsibility of commissioned Federal Wildlife Officers (FWO). Other officers,

Special Agents, State game wardens, and the local Sheriff's Department, may assist the FWO's .

Refuge, Wilderness, and Closed Area boundaries will be clearly posted, and the refuge will provide a brochure with a map that shows fishing areas. Law enforcement staff may randomly check fishermen for compliance with Federal and State Laws. Refuge fishing maps and regulations will be readily accessible on the refuge webpage:
<https://www.fws.gov/refuge/moosehorn/visit-us/activities/fishing>

F. Funding and Staffing Requirements

Annual fishing program administration costs for Moosehorn NWR, including salary, equipment, law enforcement, brochures, and signs total approximately \$10,000. It is anticipated that funding would continue to be sufficient to continue the fishing program in the future. The following table provides an estimate of annual operation of the fishing program.

Funding and Staffing Requirements for Refuge Fishing Program

Item	Annual Costs
Kiosks with Maps and Regulations and Gate repair and maintenance	\$1000
Fishing Map/Brochure Printing	\$500
Program Administration: Annual Program Development and Review	\$2500
Law Enforcement - including salary and misc. expenses	\$6000
Signs and Posting (Public Fishing, Closed Area and Exterior Boundary)	\$1000
Total	\$10,000

IV. Conduct of the Fishing Program

A. Fishing Permit Application, Selection, and/or Registration Procedures

All fishing on Moosehorn NWR will be conducted according to State and Federal regulations. Any deviations from MDIFW species, season length, or method of take are outlined in this plan.

B. Refuge-Specific Fishing Regulations

Listed below are refuge-specific regulations that pertain to fishing on Moosehorn NWR as of the date of this plan. These regulations may be modified as conditions change or if refuge expansion continues/occurs (50 CFR 32.38):

Sport fishing. We allow sport fishing on designated areas of the refuge subject to the following conditions:

- (i) We only allow fishing from 1/2-hour before legal sunrise to 1/2-hour after legal sunset.
- (ii) We prohibit trapping fish for use as bait.

C. Relevant State Regulations

- Refuge fisherman must possess a valid State of Maine Fishing License.
- State law prohibits the use of lead tackle smaller than 2.5 inches and/or one ounce.

D. Other Refuge Rules and Regulations for Fishing

- Motorized vehicles may only be used on designated routes of travel. All vehicles must be properly registered in accordance with Maine law. Off-road vehicles are prohibited.
- We prohibit motorized or mechanized vehicles and equipment in designated Wilderness Areas, including Bearce Lake, Conic Lake, and Cranberry Lake. This includes electric motors and foot pedal kayaks and canoes.

V. Public Engagement

A. Outreach for Announcing and Publicizing the Fishing Program

The refuge maintains a mailing list for news release purposes to local newspapers, radio stations, and websites. Special announcements and articles may be released in conjunction with fishing seasons. In addition, information about the fishing program will be available at Moosehorn NWR headquarters and refuge website. Updated posts on the fishing program may also be made on the refuge's social media page.

Maps of refuge fishing areas and links to regulations may also be found on the Visitor Activities page of Moosehorn NWR website:

<https://www.fws.gov/refuge/moosehorn/visit-us/activities/fishing>

B. Anticipated Public Reaction to the Fishing Program

Fishing has been allowed on Moosehorn NWR for most of its 85-year history and little negative public reaction is expected. Fishing is an important economic and recreational use of Maine's natural resources and is generally a widely accepted practice in eastern Maine.

C. How the Public Will Be Informed of Relevant Rules and Regulations

General information regarding fishing and other wildlife-dependent public uses can be obtained at Moosehorn NWR headquarters at 103 Headquarters Road, Baring, ME 04694 or by calling (207) 454-7161. Maps, and basic information about the fishing program will be available on the station website at:

<https://www.fws.gov/refuge/moosehorn/visit-us/activities/fishing>

Once on the refuge, areas closed to public access and fishing will be clearly marked with "Closed Area" signs, as appropriate. The boundaries of all lands owned by the Service are posted with refuge boundary signs.

VI. Compatibility Determination

Fishing and all associated program activities proposed in this plan are compatible with the purposes of the refuge, and does not materially interfere with, or detract from, the mission of the Refuge System and the purposes for which the refuge was established. See attached Fishing Compatibility Determination, Appendix A.

VII. References

<https://www.lakesofmaine.org/your-lake.html>

<https://www.maine.gov/ifw/fishing-boating/fishing/index.html>

USFWS, 1943, Annual Narrative Report: 1943, Moosehorn National Wildlife, USFWS, Calais, ME.

USFWS, 1948, Annual Narrative Report: 1948, Moosehorn National Wildlife, USFWS, Calais, ME.

USFWS, 1959, Annual Narrative Report: 1959, Moosehorn National Wildlife, USFWS, Calais, ME.

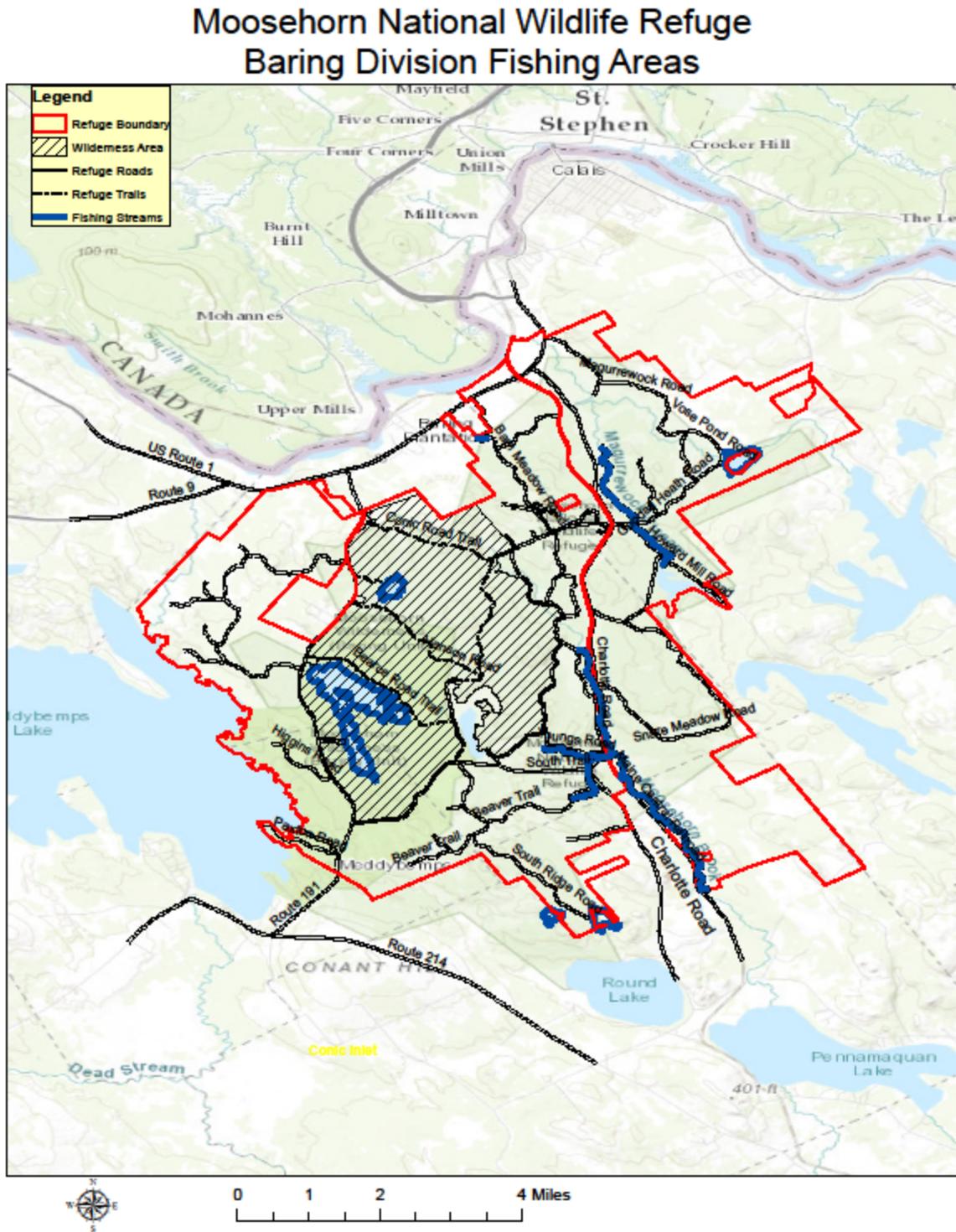
USFWS, 19XX, Fishery Management Plan: 19XX, USFWS

USFWS, 2021, Hunt Plan: 2021, Moosehorn National Wildlife, USFWS, Calais, ME.

USFWS, 1997 National Wildlife Refuge Improvement Act 1997. Public Law 105-57-Oct. 9. 1997.

USFWS. 2021 Environmental Assessment Public Hunting on Moosehorn National Wildlife Refuge February 2007.

Figure 2. Baring Division Fishing Map



Draft Compatibility Determination

Title

Draft Compatibility Determination for Fishing (non-commercial), Fishing (special events), Moosehorn National Wildlife Refuge.

Refuge Use Category

Fishing

Refuge Use Type(s)

Fishing (non-commercial), Fishing (special events)

Refuge

Moosehorn National Wildlife Refuge

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

“... as a refuge and breeding ground for migratory birds and other wildlife”: ... Executive Order 7650, dated July 1, 1937

“... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” 16 U.S.C. § 715d (Migratory Bird Conservation Act)

“... suitable for— (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species ...” 16 U.S.C. § 460k-1

“... the Secretary ... may accept and use ... real ... property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors ...” 16 U.S.C. § 460k-2 (Refuge Recreation Act (16 U.S.C. § 460k-460k-4), as amended).

“... the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions ...” 16 U.S.C. § 3901(b) (Emergency Wetlands Resources Act of 1986)

“... for the development, advancement, management, conservation, and protection of fish and wildlife resources ...” 16 U.S.C. § 742f(a)(4)

“... 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 ...” 16 U.S.C. § 742f(b)(1) (Fish and Wildlife Act of 1956)

“...to secure for the American people of present and future generations the benefits of an enduring resource of wilderness... wilderness areas ... shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use

and enjoyment as wilderness: ...” 16 U.S.C. § 1131 (Wilderness Act)

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?

Yes. The use is consistent with the 2023 Moosehorn NWR Fishing Plan and associated Categorical Exclusion. This compatibility determination reviews and replaces the 1994 compatibility determination (CD) for fishing.

What is the use?

We propose to continue to allow public fishing on designated areas of the refuge in accordance with State seasons and regulations, and to sponsor two annual events, a Veteran's Fishing Day and a Children's Fishing Derby.

Is the use a priority public use?

Yes

Where would the use be conducted?

Public fishing would occur on designated areas of both divisions of the refuge as shown on the attached Fishing Area Maps and described in the Fishing Plan. The two special events take place at the Headquarters Pond within the Cobscook Bay State Park, adjacent to the Edmunds Division.

A few areas are closed to all public access to reduce wildlife disturbance and/or to provide for public safety. These areas include the Magurrewock Dike, the Eagle Nesting Area, the fields on the east side of the Charlotte Road from US Route 1 to the trail and parking lot at the Fishing Pier and Observation Blind, the Lower Magurrewock Dike, and the gravel pit on the east side of the Charlotte Road across from Young's Road. These areas are all posted with signs that read: "Closed Area – All Public Entry Prohibited".

When would the use be conducted?

Public fishing would occur year-round during the hours the refuge is open, with public access from ½-hour before sunrise to ½-hour after sunset. The special fishing events usually take place during the third week of June.

How would the use be conducted?

The use would be conducted under Maine state fishing regulations for open water fishing and ice fishing, with some additional restrictions to protect fish, wildlife and habitat, and reduce potential

conflicts among public uses. All or parts of the refuge may be closed to fishing at any time if necessary for public safety, to provide wildlife sanctuary, or for administrative reasons.

Vehicle use will be limited to publicly accessible roads. On-refuge transportation to fishing areas behind refuge gates will be limited to foot traffic and bicycling. The use of non-motorized boats and non-pedal kayaks and canoes only is permitted on Bearce Lake and Conic Lake. Vehicle access to and motorized boat use on Vose Pond is authorized; however, the road to Vose Pond is closed seasonally to protect the road from damage and may be closed at other times for administrative reasons. Law enforcement efforts on the refuge will ensure compliance with state laws and refuge-specific regulations.

Why is this use being proposed or reevaluated?

The use is being reevaluated to accommodate one of the priority public uses of the Refuge System. We have the opportunity to continue to provide opportunities for public fishing in a manner and in locations that will offer high quality, wildlife-dependent recreation and maintain the level of current fish and wildlife values.

Availability of Resources

Existing launch sites at Vose Pond and Bearce Lake may require the installation of signs, as well as some site restoration work. Additional resources and staff time will be required to post fishing access signs for public fishing areas, seasonally close off wildlife nesting sites to the public, provide interpretive materials and brochures on fishing, and monitor the impacts of fishing. A Federal Wildlife Officer and the State of Maine Wardens provide law enforcement coverage during the State fishing seasons.

We do not anticipate charging fees for fishing. We estimate costs associated with this use:

Kiosk and gate repair and maintenance	\$1,000
Printing Fishing Regulation/Map Brochure	\$500
Program administration, monitoring, and review	\$2,500
Law enforcement (including salary, travel, misc.)	\$6,000
Signs and Posting (Public Fishing, Closed Area)	\$1,000
Total	\$10,000

Anticipated Impacts of the Use

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

The effects and impacts of the proposed use to refuge resources, whether adverse or beneficial, are those that are reasonably foreseeable and have a reasonably close causal relationship to the proposed use of Fishing (non-commercial), Fishing (special events). This CD 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.” Resources that will not be more than negligibly impacted by the action have been dismissed from further analyses.

Recreational fishing at its current level of use does not have significant adverse impacts on the fisheries resource at the refuge, or on other species of plants and animals. Designated areas of Moosehorn NWR have been open to public fishing during most of the refuge's 85-year history. No changes to the existing program are being proposed and no significant impacts to the refuge's resource resulting from fishing have been observed. The refuge presently has a warm-water fisheries resource capable of supporting sustained public use. Wild brook trout support a sustainable fishery on some streams; state stocking of brook trout provides a recreational fishery on the West Branch of Magurrewock Stream (Clark Brook), Ledge Pond, and James Pond. All managed wetlands are closed to fishing due to potential waterfowl disturbance.

Short-term impacts

Short-term impacts could include some temporary, minor disturbance to some species of wildlife, and trampling of vegetation by those who venture off designated trails and roads. Minor problems associated with littering can be countered through an effective law enforcement program and through public education.

There is also the potential for fishermen using boats to introduce aquatic invasive plants into refuge waters. Impacts are limited as the use of non-motorized boats only is permitted on Bearce Lake and Conic Lake. Potential impacts are further mitigated by providing information on invasive plants on the kiosks at Vose Pond and Bearce Lake and requesting that individuals inspect their boats for any plant material and remove and secure it prior to launching.

Fishing at Moosehorn NWR, is authorized following all state seasons. Fishing activities in the fall could result in some negative impacts on migratory waterfowl. Spring and early summer fishing could disturb nesting bald eagles. Studies on boating disturbance to nesting waterfowl and other waterbirds (Audubon, 2022; University of Florida, 2022) indicate that boating causes flushing of nesting birds and possible disturbance to nesting. The refuge will continue to maintain areas closed to public uses that protect nesting and migratory waterfowl and other migratory birds. These closed areas are sufficient to ensure that any disturbance from anglers would not materially interfere with or detract from the purpose of the refuge. While some disturbance may occur, ample protected habitats within the refuge exist to offset that disturbance.

The concern, therefore, is if disturbances from recreational fishing activities are sufficient to adversely affect the purposes for which the refuge was established. Since areas open to fishing on the refuge are carefully designed to avoid interior wetlands important for migratory birds and other closed areas, it is not likely that fishing will negatively impact wildlife species on the refuge.

People fishing from the shore may also inadvertently damage plants (e.g., via trampling or equipment use) while fishing. Trampling, damage, and killing of vegetation from walking off-trail is also a possibility as a result of this use (Kuss 1986, Roovers et al. 2004). It is unlikely that short term trampling will have significant impacts to plants or soil erosion, since bank fishing is relatively light due to the requirement of accessing the areas by foot.

Long-term impacts

Few, if any, long-term impacts caused by the public fishing on refuge lands have been documented

in the 85 years this activity has been taking place on the refuge. The relatively low numbers of fishermen are spread out over a large area, and many fish from small boats or canoes. Most impacts are not significant and short-term.

Recreational fishing could potentially cause negative impacts to fish populations if it occurs at unsustainably high levels or is not managed properly. Potential impacts include direct mortality from harvest, catch and release injury, changes in age and size class distribution, changes in reproductive capacity and success, loss of genetic diversity, altered behavior, and changes in ecosystems and food webs (Lewin et al. 2006, Cline et al. 2007). Fishing generally removes individuals from a population at high levels and can lead to reduced population sizes and loss of genetic diversity. The loss of genetic diversity can ultimately reduce a population's fitness, resilience, and ability to adapt to environmental changes and stressors. The higher the fishing mortality, the greater these types of impacts will be (Lewin et al. 2006).

While fishing removes individuals from the population, we do not anticipate that projected fishing pressure will affect the coastal fish population as a whole. MDIFW strives to ensure maintenance of healthy and diverse fish species populations. Anglers must abide by the State's seasons, catch limits, and regulations to protect the State's fish populations. Overall, impacts to the fishery are expected to be insignificant. Most game species present on the refuge are widespread throughout the watershed.

Fishing can also potentially cause death or serious injury to migratory birds by using lead sinkers that can become ingested or by discarding hooks, monofilament line, or other litter that can trap or entangle birds and other wildlife. The best available science indicates that lead ammunition and tackle may have negative impacts on wildlife and the environment (Golden et al. 2016). State law prohibits the use of lead tackle smaller than 2.5 inches and/or one ounce. The refuge will post information strongly supporting the use of lead-free, non-toxic tackle on kiosks, and include this information in the next revision of its Public Fishing brochures.

Based on recent research, the use of soft plastic fishing lures has been documented to have detrimental effects on fish. As mentioned above the refuge will strongly discourage the use of soft plastic fishing lures and attempt to educate fisherman using the refuge about this problem. Visits for this activity were estimated at 4,050 in fiscal year 2021.

Cumulative impacts on the environment result from incremental impacts of a proposed action when these are added to other past, present, and reasonably foreseeable future actions. While cumulative impacts may result from individually minor actions, they may, viewed as a whole, become substantial over time. The entirety of the fishing is regulated and managed by the State of Maine. Provided that the refuge maintains sensitive areas as closed to fishing access, especially during the breeding and migration season, long term impacts are will not impact the purposes the refuge was established for or the fishery resources within refuge boundaries.

Threatened and Endangered Species

Atlantic salmon – The population of Atlantic salmon that inhabit the Dennys River was listed as endangered in December 2000. The refuge owns lands on Dennys Bay, but not the Dennys River. During the months when most fishing on the refuge takes place, mature Atlantic salmon move from

saltwater to the freshwater rivers or streams where they were reared. In the case of the Dennys River population, salmon would travel the deep, cold waters of the Bay to the freshwater spawning habitats of the mainstem of the river and its tributaries. Refuge ownership on Dennys Bay only includes the intertidal zone where it is highly unlikely any salmon would be. Fishing at the refuge will be allowed on designated lakes, ponds, streams and brooks, as identified in the Fishing Plan (Figures 1 and 2). It is highly unlikely that any anglers on the refuge would come in contact with or affect Atlantic salmon in Dennys Bay or the Dennys River. Once the adult salmon spawn, they return to the open ocean via Dennys Bay. Additionally, given the state restrictions, lead tackle greater than 2.5 inches or one ounce is unlikely to be used near any designated fishing areas of the refuge because this type of tackle is used for saltwater and surf fishing; furthermore, this type of tackle is too large to be swallowed by salmon. There is a remote possibility that that anglers could use lead tackle other than sinkers (i.e., hooks, lures, line). Although unlikely, if this type of tackle entered the environment, it would likely sink in a location away from the salmon, and not reach a level high enough to accumulate in the environment. Any potential effects to this species from the proposed action are considered discountable because they are so extremely unlikely to occur such that they cannot be measured. Therefore, the proposed action is not likely to adversely affect this species.

Northern long-eared bat – The Northern long-eared bat was detected by acoustic monitoring in the past at several locations on the both the Baring and Edmunds Divisions. This species is usually only present on the refuge during the spring and summer months and moves to hibernacula in early fall. They are also usually only active from dusk to dawn and are unlikely to be seen or impacted by fisherman. Since the Northern long-eared bat is nocturnal, it is highly unlikely fisherman would encounter this species when walking through the refuge during the day. Furthermore, it is extremely unlikely that there would be disturbance to bats from fishing when bats are not active. There is no fishing near any cave or mine where Northern long-eared bats could hibernate (i.e., hibernaculum), and fishing programs would not result in any tree cutting or other habitat alteration.

Given the state restrictions on lead tackle, there is a remote possibility that anglers could use lead tackle other than sinkers (i.e., hooks, lures, line), or that weigh more than one ounce. In this unlikely scenario, lead tackle fragments would have to break down in the soil in order to be taken up by plants near the area in which the fragments fall on or penetrate the soil surface. Typically, however, plants do not take heavy metals up until they have reached critical thresholds in the soil (Sharma and Dubey 2005). Given that anglers are unlikely to use lead tackle, the soil is not expected to reach the critical threshold necessary to be taken up by plants. Although unlikely, if lead is taken up by plants, it is mainly through the root system and partly, in minor amounts through the leaves. Inside the plants lead accumulates primarily in the root, but a part of it is translocated to the aerial portions. Larvae of certain herbivorous insect species could ingest some of the lead when they eat the exposed plants. Some of the insects could then be consumed by bats. However, the potential for any lead impacts to bats through bioaccumulation is discountable due to Northern long-eared bats' diet and foraging habits. Northern long-eared bats' diet is insects such as moths, flies, leafhoppers, caddisflies, and beetles, only some of which are herbivorous. In addition, bats are transitory in nature and will not consume their entire diets on the refuge area. To summarize, in light of the state restrictions on lead sinkers, anglers are not likely to use lead tackle, and considering the chain of events that are necessary for exposure, it is very unlikely that bats would consume lead derived from tackle used by anglers on the refuge. Therefore, the proposed

action is not likely to adversely impact this species.

Public Review and Comment

The draft compatibility determination will be available for public review and comment for 45 days. The public will be made aware of this comment opportunity through posting at refuge headquarters, publication of notice in local newspaper, social media, and posting on refuge website. State and Tribes have been asked to review and comment on the draft compatibility determination. A hard copy of this document will be posted at the Refuge Headquarters or Visitor Center located at 103 Headquarters Road Baring, ME 04694. It will be made available electronically on the refuge website <https://www.fws.gov/refuge/moosehorn/>. Please contact the Refuge Manager if you need the documents made available 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

The following stipulations are necessary ensure compatibility of fishing on the refuge:

1. Vehicle use for fishing access is limited to publicly accessible roads.
2. On-refuge transportation to fishing areas behind refuge gates will be limited to foot traffic and bicycling.
3. The use of non-motorized and non-pedal boats only is permitted on Bearce Lake and Conic Lake.
4. The use of mechanized and/or motorized equipment in the designated Wilderness Areas is prohibited
5. Trapping of fish for bait is prohibited.
6. Public access for fishing on the refuge is from one-half hour before sunrise to one-half hour after sunset.

Justification

The stipulations outlined above would help ensure that the use is compatible at Moosehorn NWR. Fishing (non-commercial), Fishing (special events), as outlined in this compatibility determination, would not conflict with the national policy to maintain the biological diversity, integrity, and environmental health of the refuge. Based on available science and best professional judgement, the Service has determined that the Fishing (non-commercial), Fishing (special events) at Moosehorn NWR, in accordance with the stipulations provided here, would not materially interfere with or detract from the fulfillment of the Refuge System mission or the purpose of the Moosehorn NWR. Rather, appropriate and compatible fishing would be the use of the Moosehorn NWR through which the public can develop an appreciation for wildlife and wild lands.

Signature of Determination

Refuge Manager Signature and Date

Signature of Concurrence

Assistant Regional Director Signature and Date

Mandatory Reevaluation Date

2038

Literature Cited/References

- Audubon. 2022 March 14. Audubon Alliance Guide to Boating with Birds: Sharing the Waterways. Audubon.
- Cline, R., N. Sexton and S.C. Steward. 2007. A human-dimensions review of human-wildlife disturbance: a literature review of impacts, frameworks, and management solutions. Fort Collins, CO: U.S. Geological Survey, Open-File Report 2007-1111.
- Golden, N.H., S.E. Werner, and M.J. Coffey. 2016. A Review and Assessment of Spent Lead Ammunition and its Exposure and Effects to Scavenging Birds in the United States. P.de. Voogt (ed.), *Reviews of Environmental Contamination and Toxicology* 237:123-191.
- Kuss, F.R. 1986. A review of major factors influencing plant responses to recreation impacts. *Environmental Management* 10: 637-650.
- Lewin, W.C., R. Arlinghaus and T. Mehner. 2006. Documented and potential biological impacts of recreational fishing: insights for management and conservation. *Reviews in Fisheries Science* 14:305-367.
- Rattner, B.A., J.C. Franson, S.R. Sheffield, C.I. Goddard, N.J. Leonard, D. Stang, and P.J. Wingate, 2008. Sources and Implications of Lead-based Ammunition and Fishing Tackle to Natural Resources. *Wildlife Society Technical Review*. The Wildlife Society, Bethesda, Maryland, USA
- Roovers, P., K. Verheyen, M. Hermy, and H. Gulinck. 2004. Experimental trampling and vegetation recovery in some forest and heathland communities. *Applied Vegetation Science* 7:111-118.
- Sharma, P., and R.S. Dubey. 2005. Lead toxicity in plants. *Brazilian Journal of Plant Physiology* 17 (1). Available from: <https://doi.org/10.1590/S1677-04202005000100004>
- University of Florida. 2022 April 14. Sustainable Human-Bird Interactions. Bird-Friendly Fishing and Boating. <https://ncbs.ifas.ufl.edu/sustainable-human-bird-interactions/>

NOTE TO FILE

**U.S. FISH AND WILDLIFE SERVICE
ENVIRONMENTAL ACTION STATEMENT FOR
CATEGORICAL EXCLUSION**

The Service is continuing to provide fishing opportunities for species already being harvested on the 29,354-acre Moosehorn National Wildlife Refuge in accordance with the refuge's Fishing Step-Down Plan.

The Service has fully satisfied the other requirements for expanding these opportunities on the refuge, including:

determining that the opportunities are compatible with the purposes for which the refuge was established and the mission of the National Wildlife Refuge System (see attached);

ensuring the opportunities are consistent with existing State, local, and refuge-specific regulations (50 CFR 32.38);

*Use of signs and brochures may supplement the refuge-specific regulations

complying with the National Environmental Policy Act (see attached);

complying with the Endangered Species Act section 7 evaluation (see attached);
OR N/A because there are no candidate, threatened or endangered species present;

complying with the National Historic Preservation Act section 106 consultation (see attached);
OR N/A because there are no cultural or historic resources present;

The Service is, therefore, waiving the requirement to prepare an opening package in compliance with Service policy (605 FW 2.9A).

Signature _____

Date: _____

Title _____

CATEGORICAL EXCLUSION CHECKLIST FOR NEPA COMPLIANCE

Proposed Action

The U.S. Fish and Wildlife Service (Service) is updating the fishing plan for Moosehorn National Wildlife Refuge (NWR, refuge), and proposes to continue to allow public fishing on parts of the 29,354-acre area in accordance with existing State, local, and refuge-specific regulations (50 CFR 32.38). The fishing plan sets forth guidance on the expansion and implementation of the fishing program at the refuge. The most common species of fish caught include large and small mouth bass, brook trout, chain pickerel, and brown bullhead. Designated areas of the refuge are currently open to fishing of all of the above species. The refuge has been open to public fishing for most of its 85-year history with no significant impacts to its resources. No substantial changes in the existing program are being proposed.

We allow sport fishing on designated areas of the refuge subject to the following conditions:

- We only allow fishing from 1/2-hour before legal sunrise to 1/2-hour after legal sunset.
- We prohibit trapping fish for use as bait.
- Refuge fisherman must possess a valid State of Maine Fishing License.
- State law prohibits the use of lead tackle smaller than 2.5 inches and/or one ounce.

Recreational fishing at its current or proposed level of use does not have significant adverse impacts on the fisheries resource at the refuge, or on other species of plants and animals. All managed wetlands are closed to fishing due to potential waterfowl disturbance. Short-term impacts could include some temporary, minor disturbance to some species of wildlife, and trampling of vegetation by those who venture off designated trails and roads. Minor problems associated with littering can be countered through an effective law enforcement program and through public education.

While fishing removes individuals from the population, we do not anticipate that projected fishing pressure will affect the coastal fish population as a whole. MDIFW strives to ensure maintenance of healthy and diverse fish species populations. Anglers must abide by the State's seasons, catch limits, and regulations to protect the State's fish populations. Overall, impacts to the fishery are expected to be insignificant. Most game species present on the refuge are widespread throughout the watershed.

While remote, there is a possibility anglers could use lead tackle other than sinkers (i.e., hooks, lures, line), or that weigh more than one ounce. Lead tackle greater than 2.5 inches or one ounce is unlikely to be used near any designated fishing areas of the refuge because this type of tackle is used for saltwater and surf fishing; furthermore, this type of tackle is too large to be swallowed by threatened or endangered species in the area (Northern long-eared bat and Atlantic salmon). In this unlikely scenario, lead tackle fragments would have to break down in soil in order to be taken up by plants near the area in which the fragments fall on or penetrate the soil surface. Given that anglers are unlikely to use such lead tackle, the soil is not expected to reach the critical threshold necessary to be taken up by plants. The potential for any lead impacts to threatened or endangered species in the area (Northern long-eared bat and Atlantic salmon) through bioaccumulation is

discountable due to species diet and foraging habits. Refuge ownership only includes the intertidal zone where it is highly unlikely any Atlantic salmon would be. Fishing at the refuge will be allowed on designated lakes, ponds, streams and brooks, as identified in the Fishing Plan (Figures 1 and 2). It is highly unlikely that any anglers on the refuge would come in contact with or affect Atlantic salmon in Dennys Bay or the Dennys River.

In light of the state restrictions on lead sinkers, anglers are not likely to use lead tackle, and considering the chain of events that are necessary for exposure, it is very unlikely that any threatened and endangered species would consume or be impacted by lead derived from tackle used by anglers on the refuge.

This proposed action is covered by the following categorical exclusion: 516 DM 8.5 B (7):

“Minor changes in the amounts or types of public use on Service or state-managed lands, in accordance with existing regulations, management plans, and procedures”; **and 516 DM 8.5 B (10)** “The issuance of new or revised site, unit, or activity-specific management plans for public use, land use, or other management activities when only minor changes are planned. Examples could include an amended public use plan or fire management plan.”

This action is categorically excluded from further NEPA analyses, because it has been determined to be a class of action which does not individually or cumulatively have a significant effect on the human environment. There are no “extraordinary circumstances” which would apply to this project.

Extraordinary Circumstances (43 CFR 46.215)

Could This Proposed Action (*check (x) yes or no for each item below*):

- | <u>Yes</u> | <u>No</u> | |
|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | a. Have significant adverse effects on public health or safety? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | b. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (EO 11990); floodplains (EO 11988); national monuments; migratory birds; and other ecologically significant or critical areas? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | c. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA section 102(2)(E)]? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | d. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | e. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | f. Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | g. Have significant impacts on properties listed, or eligible for listing, on the |

National Register of Historic Places as determined by the bureau?

- h. Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?
- i. Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment?
- j. Have a disproportionately high and adverse effect on low income or minority populations (EO 12898)?
- k. Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007)?
- l. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and EO 13112)?
- m. Have material adverse effects on resources requiring compliance with Executive Order 11988 (Floodplain Management), Executive Order 11990 (Protection of Wetlands), or the Fish and Wildlife Coordination Act?

(If any of the above exceptions receive a “Yes” check (✓) , an EA/EIS must be prepared.)

Within the spirit and intent of the Council of Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA) and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and have determined:

- The proposed action is covered by a categorical exclusion as provided by 43 CFR §46.210 or 516 DM 8.5. No further NEPA documentation will therefore be made.**
- An Extraordinary Circumstance could exist for the proposed action and, so an EA/EIS must be prepared.**

Service signature approval:

Signature _____

Date: _____

Title _____