National Park Service
U.S. Department of the Interior

Isle Royale
National Park

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Superintendent's Compendium
Of Designations, Closures, Permit Requirements and Other Restrictions Imposed Under Discretionary Authority

Approved: Phyllis A. Green Date: 7/1/13

In accordance with regulations and the delegated authority provided in Title 36, Code of Federal Regulations ("36 CFR"), Chapter 1, Parts 1-7, authorized by Title 16 United States Code, Section 3, the following provisions apply to all lands and waters administered by the National Park Service (NPS), within the boundaries of Isle Royale National Park. Unless otherwise stated, these regulatory provisions apply in addition to the requirements contained in 36 CFR, Chapter 1, Parts 1-7.

Written determinations that explain the reasoning behind the Superintendent's use of discretionary authority, as required by Section 1.5(c), appear in Section IV of this document.

I. 36 CFR §1.5 – VISITING HOURS, PUBLIC USE LIMITS, CLOSURES, AND AREA DESIGNATIONS FOR SPECIFIC USE OR ACTIVITIES

(a)(1) The following visiting hours and public use limits are established for all or for the listed portions of the park; and the following closures are established for all or a portion of the park to all public use or to a certain use or activity:

Visiting Hours:

- All islands, including the main island of Isle Royale National Park, are closed to public use from November 1 – April 15.
- Portions of park docks may be closed to public mooring for the following periods of time, or as posted, to accommodate concessions and park operations.
  - The following docks are closed to accommodate passenger ferry operations according to the following schedule. Times are listed in eastern daylight time (EDT).

Daisy Farm	Tues/Thurs/Sun	9:00 am-10:00 a.m.
Chippewa Harbor	Tues/Thurs/Sun	9:30 a.m.-11:00 a.m.
Malone Bay	Tues/Thurs/Sun	10:30 a.m.-12:00 p.m.
McCargoe Cove	Mon/Wed/Sat	2:00 p.m.-3:00 p.m.
Belle Isle	Mon/Wed/Sat	2:30 p.m.-3:30 p.m.
Windigo – northeast	Sun through Thur. (June 1 – Labor Day)	12:00-2:30 p.m.
Windigo – southwest	Mon/Wed/Sat	10:15-11:30 a.m.
Windigo – southwest	Daily	10 a.m.-3:00 p.m.

  - The following docks are closed to accommodate the Rock Harbor Lodge tour boat *M.V. Sandy* according to the following schedule. Times are listed in EDT.

Passage Island	Mon/Fri	2:30 p.m.-5:30 p.m.
Hidden Lake	Tues/Thurs	9:30 a.m.-11:30 a.m.
McCargoe Cove	Wed	11:00 a.m.-3 p.m.

■ McCargoe Cove	Wed	11:00 a.m.-3 p.m.
■ Edisen Fishery	Thurs	2:30 p.m.-5:00 p.m.
	Sat	9:30 a.m.-12:30 p.m.
■ Raspberry Island	Daily	8:00 p.m.-9:00 p.m.

- The following docks are open for day use only from 6 a.m. until 10 p.m. EDT:
  - Amygdaloid Island (<u>except</u> for residents or invited guests of residents)
  - Crystal Cove
  - Edisen Fishery
  - Hidden Lake
  - Mott Island (<u>except</u> for residents or invited guests of residents)
  - Passage Island
  - Raspberry Island
  - Wright Island
  - Any NPS or concession fuel dispensing dock
  - Any other dock posted as closed to overnight use
- The following docks are closed to public use.
  - *America* Dock in Rock Harbor
  - Malone Bay Dock – North side
  - *Ranger III* Dock at Mott Island
  - *Ranger III* Dock in Rock Harbor
  - Any other dock posted as closed to public entry
- Shipwreck *America* is closed between the hours of 10:00 a.m. and 12:00 p.m. EST between June 1 and Labor Day.

<u>Boating and Aircraft</u>:

- (1) All inland lakes and streams are closed to the use or possession of motorized vessels and aircraft.
- (2) All vessels (including non-motorized craft such as canoes and kayaks), motors, and trailers transported to the park via the *Ranger III* (or other vessels) must be decontaminated prior to being loaded at the Houghton dock. "Decontamination" can be accomplished by any of the following:
  - Clean and dry watercraft, and/or all associated gear and equipment so they are dry and free of any vegetation, animals, and mud, and that the bilges, live wells, and other compartments are also clean, dry, and free of all organic material. A minimum of 5 days of drying before loading is required.
  - Wash the vessel, bilge, and equipment with hot (>104º F) and/or high pressure water.
  - Wash the vessel, bilge, and equipment with disinfectant.
- (3) All aircraft and vessels (including non-motorized craft such as canoes and kayaks), motors, and trailers visiting or transiting within the boundaries of Isle Royale National Park must be decontaminated prior to entering the waters of the park (which extend for 4.5 miles from Isle Royale and the outer islands, including Passage Island, or to the international boundary). "Decontamination" can be accomplished by any of the following:
  - Clean and dry the watercraft and/or all associated gear and equipment the vessel must be dry and free of any vegetation, animals, and mud, and that the bilges, live wells, and other compartments must be clean, dry, and free of all organic material. A minimum of 5 days of drying is required before loading.
  - Wash the vessel, bilge, and equipment with hot (>104º F) and/or high pressure water.
  - Wash the vessel, bilge, and equipment with disinfectant.
- (4) If the vessel is large and not trailerable, or below the water line is not visible, the vessel owner/operator shall inspect the vessel hull, outdrive, trim tabs, and motors for attached Aquatic Invasive Species prior to entering Isle Royale National Park waters. All vessels, regardless of size or configuration, are subject to inspection for Aquatic Invasive Species at the island. Vessel owners are responsible for Aquatic Invasive Species decontamination prior to entering park waters.

- (5) The Chickenbone Lake outlet, an unnamed stream between Chickenbone Lake and McCargoe Cove, is closed to all vessels including paddle craft.

  Determination for bullets 2, 3, 4 in Boating and Aircraft: *See Section IV, note 1.*

- Use of electronic devices, generators, and other mechanical devices within Isle Royale National Park.
  - The operation of electronic and motorized devices, including, but not limited to stereos, televisions, radios tuned to commercial stations, and portable generators, is prohibited within the following zones established by the park's GMP/FEIS: Frontcountry Zone, Wilderness Portal Zone, Backcountry Zone, Primitive Zone, Pristine Zone, and Quiet/No Wake Zone. These zones include approximately 99 percent of the terrestrial land area of the park. The use of marine band radios and other emergency communication devices is allowed within these zones consistent with the requirements of 36 CFR 2.10(a)(4) Camping and Food Storage, 36 CFR 2.12 Audio Devices, and 36 CFR 2.34 Disorderly Conduct.
  - The use of electronic devices such as stereos, televisions, and radios tuned to commercial stations is allowed within the Developed Zones (Windigo, Rock Harbor, and Mott Island) and the Lake Superior Open Water Motorized Zone, subject to the requirements of 36 CFR 2.10(a)(4), 2.12, and 2.34. Park employees and life-leasees, whose residences are located within Quiet/No Wake Zones, may operate electronic devices if the noise associated with such devices is kept low enough that it cannot be heard outside the immediate vicinity of the residence.

    Determination: *See Section IV, note 2.*

- Use of permanently installed on-board vessel generators.
  - Operation or use of a permanently installed on-board vessel generator is prohibited at public docks at the following locations:
    - Birch Island
    - Chippewa Harbor
    - Daisy Farm
    - Duncan Narrows
    - Duncan Bay
    - McCargoe Cove
    - Merritt Lane
    - Moskey Basin
    - Three Mile
    - Todd Harbor
    - Tookers Island
    - Siskiwit Bay
  - Operation or use of a permanently installed (by the boat manufacturer) on-board vessel generator is allowed at all other boat docks otherwise open and available for public camping or overnight use, subject to the requirements of 36 CFR 2.10(a)(4), 2.12, and 2.34.
  - Operation or use of a permanently installed on-board vessel generator is allowed by vessels at anchor within Quiet/No Wake Zones <u>except</u> when anchored within 1/4 mile of a designated park campground (see Boating and Water Use Activities, Section 3.6 – Prohibited Operations).

    Determination: *See Section IV, note 3.*

<u>Fishing</u>:

- State regulations apply unless otherwise specified.
- Fishing on Lake Superior waters (Determination number 4).

- Transporting fish or fish parts for use as bait to the park is prohibited.
- The possession or use of fish as bait within the Lake Superior waters of the park is limited to:
  - Only those fish and or fish parts taken from fish that are caught within Isle Royale National Park waters, where the fish or fish parts used for bait are taken by lawful fishing methods, OR
  - Fish or fish parts obtained by the park and distributed to anglers as bait that is clear of viruses or diseases.
  - Fish or fish parts used for bait within the Lake Superior waters of the park can only be used during the current visit and cannot be used during subsequent visits.
- Brook trout (Determination number 5).
  - Daily Catch and Possession Limit:
    - Catch and release only; no possession allowed.

- Fishing the inland lakes, streams, and rivers of Isle Royale.
  - Method of take; all species:
    - Live, dead, or preserved bait or organic food may not be used or possessed at any time.
    - Only barbless hooks may be used.
    - Artificial lures only may be used. "Artificial lure" means any lure that is man-made, an imitation of or as a substitute for natural bait, used to attract fish for the purpose of taking them, and includes artificial flies.
  - Brook trout (Determination number 5). It shall be unlawful to take brook trout in any manner from Hidden Lake, or the streams, rivers, and creeks of Isle Royale National Park that are tributaries of Lake Superior, <u>except</u> as "catch and release" and with the following restrictions:
    - Season:
      - Last Saturday in April through Labor Day.
    - Size Limit:
      - Catch and release only; no size limit.
    - Daily Catch and Possession Limit:
      - Catch and release only; no possession allowed.
  - Rainbow trout (Determination number 6) may be taken in the streams, rivers, and creeks of Isle Royale National Park that are tributaries of Lake Superior with the following restrictions:
    - Season:
      - Last Saturday in April through Labor Day.
    - Size Limits:
      - Minimum size is 7 inches.
    - Daily Catch and Possession Limits:
      - Five fish with no more than three fish over 15 inches.
  - Lake trout in Siskiwit Lake (Determination number 7) may be taken with the following restrictions:
    - Season:
      - April 16 through October 31.
    - Size Limits:
      - Minimum size is 15 inches.
    - Daily Catch and Possession Limits:
      - Three fish.
  - Northern pike (Determination number 8). It shall be unlawful to possess northern pike from any interior lakes within Isle Royale National Park that are greater than 30 inches in length.
    - Season:
      - May 15 through October 31.
    - Size Limits:
      - No Minimum size; maximum size is 30 inches.
    - Daily Catch and Possession Limits:

        - Five in combination with walleye, but no more than two northern pike.
    - Lake Herring (cisco) and Lake Whitefish, *Coregonus sp.* (Determination number 9). It shall be unlawful to take cisco or whitefish in any manner from inland lakes within Isle Royale National Park, <u>except</u> as "catch and release" and with the following restrictions.
        - Season:
            - April 16 through October 31.
        - Size Limits:
            - Catch and release only; no size limit.
        - Daily Catch and Possession Limits:
            - Catch and release only; no possession allowed.

    Determination: *See Section IV, notes 4-9.*

<u>Diving</u>:

- The following areas are closed to diving use:
    - Passage Island small boat cove.
    - Inland lakes.
    - Shipwreck *America* between the hours of 10:00 a.m. and 12 noon EST, between June 15 and Labor Day.
- Wreck mooring buoys.
    - Shipwreck buoys are to be used only by divers with a valid permit during actual dive operations.
    - No more than two vessels are to be moored at any one time.
    - Overnight mooring on buoys is not allowed.
- All SCUBA diving equipment (Determination number 10), regardless of dive locations prior to arriving at the park, must be decontaminated and clear of aquatic nuisance species before diving in the waters of Isle Royale National Park. This can be accomplished by the following:
    - Soak all dive equipment in a chlorine solution of ½ ounce bleach per gallon of hot (>104º F) water for 10 minutes and then rinse with tap water, OR
    - Allow dive equipment to dry thoroughly for at least 14 days ensuring that all interior and exterior surfaces and parts, including, but not limited to the internal BCD bladder, inside inflator and regulators, and pockets or hard to dry areas of exposure suits, are completely dry.

    Determination: *See Section IV, note 10.*

<u>General</u>:

- Use of motorized or non-motorized, wheeled vehicles such as bicycles, tricycles, "deer carriers," boat/canoe portaging devices, and wagons are prohibited in all areas, <u>except</u> for tricycles, bicycles, and similar devices in developed area of Mott Island, and the immediate employee housing areas of Rock Harbor and Windigo.
- Camping conditions are identified in Section 2.10 of this compendium.
- Transportation, importation, and/or possession of firewood obtained (Determination number 11) from sources outside of Isle Royale National Park are prohibited.

    Firewood Determination: *See Section IV, note 11.*

<u>Closures</u>:

- No person shall knowingly enter an area within ¼ mile of an active eagle or osprey nest.

Determination: *See Section IV, note 12.*

- No person shall knowingly enter an area within ¼ mile of an active wolf den site.

  Determination: *See Section IV, note 13.*

(a)(2) The following areas have been designated for a specific use or activity under the conditions and/or restrictions as noted:

Compressors:
The use or operation of a portable or permanently installed on-board compressor to fill SCUBA diving tanks is prohibited at all times and locations within the park except as provided below.

- A portable or permanently installed on-board compressor may be operated as follows:
  - While underway in the Lake Superior Open Water Motorized Zone.
  - When moored at any shipwreck mooring buoy within the park, between the hours of 6 a.m. to 10 p.m. EDT.
  - At the Windigo and Snug Harbor public docks between the hours of 8 a.m. to 12 p.m. (noon) and 3:30 p.m. to 5 p.m. EDT.
  - The far west end of Florence Bay, Glenfiddick Bay (west and north of Duncan Bay), and the unnamed southwestern arm of Five Finger Bay (lying between Stockly Bay and Duncan Bay), between the hours of 8 a.m. to 5 p.m. EDT.

    Determination: *See Section IV, note 14.*

Camping:

- Please refer to §2.10 for detailed camping area designations.

Public Assemblies, Meetings:

- Please refer to §2.51 for detailed public assembly area designations.

Sale or Distribution of Printed Matter:

- Please refer to §2.52 for detailed area designations for the distribution of printed matter.

Quiet/No Wake Zones:

- Operating a vessel in excess of 5 mph or creating a wake in areas so designated is prohibited.
  - Establishment of Quiet/No Wake Zones. The following Quiet/No Wake Zones are designated within the boundaries of Isle Royale National Park:
    - *Barnum/Washington Islands:* the sheltered waters bordered on the North by Barnum Island, on the west and south by Washington Island, and on the east by Booth Island.
    - *Chippewa Harbor:* all of Chippewa Harbor beginning at the small, unnamed island of rock located at the narrow entrance to the harbor.
    - *Conglomerate Bay:* all of Conglomerate Bay.
    - *Crystal Cove:* all of Crystal Cove on the northeast end of Amygdaloid Island.
    - *Hay Bay:* beginning at a point 1/8 mile northeast of the Hay Bay Campground and dock, thence southwesterly to the end of the bay.
    - *Duncan Bay:* all of Duncan Bay, including side bays, beginning at the Duncan Bay Narrows.

- *Five Finger Bay (including Stockly Bay):* all waters within these two bays located south of a line running from Hill Point, thence northeasterly on a straight line through Battleship Island to the main island of Isle Royale.
- *Johns Island:* the entire small cove located on the northeast side of the island.
- *Lane Cove:* all of Lane Cove.
- *Lorelei Lane:* the narrow waterway beginning at the northeast end of Mott Island, thence northeasterly to Smithwick Channel. This designated zone is bordered on the south by a line of named and unnamed islands including (from southwest to northeast) Outer Hill, Mad, and Heron islands. The zone is bordered on the north by Inner Hill, Star, Davidson, Tookers, Shaw, and Smithwick islands.
- *Malone Bay:* that portion of Malone Bay bordered on the east and south by Hat, Ross, and Malone islands, thence northwesterly to the point of land adjacent to the Malone Bay dock, thence northeasterly along the shoreline back to Hat Island.
- *McCargoe Cove (including Brady Cove):* all of McCargoe Cove, beginning at Indian Point at the mouth of McCargoe Cove.
- *Merritt Lane:* all of Merritt Lane, beginning at Red Rock Point near the southwest end of Porter Island, thence northeasterly to a point 1/8 mile northeast of the Merritt Lane Campground dock, and including all waters bounded by Porter Island on the west, Long Island, and Third islands on the south, and Elizabeth and Merritt islands on the east.
- *Moskey Basin:* beginning at Baker Point and including all of Moskey Basin.
- *Passage Island:* all of the Small Boat Cove on the south side of Passage Island.
- *Robinson Bay, Pickerel Cove, and Belle Harbor Area:* all of the named waters. The coastline of Belle Isle (south shore) and the main island (Isle Royale) define the north, west, and south perimeters of the zone. The eastern perimeter begins at the northeast end of Belle Isle, thence southeast to the southwest end of Cork Island, thence northeasterly to the southwest end of Dean Island, thence northeast along the south shore of Dean Island to the northeast end of the island, and finally on a direct line to Hill Point.
- *Tobin Harbor:* the western half of Tobin Harbor, beginning at a line connecting Moose Point on the south and the Duncan Bay Portage Trail on the north, thence southwesterly to the west end of the harbor.
- *Todd Harbor:* beginning at Kamloops Point, thence following the coastline southwesterly around the perimeter of the harbor to Wilson Point, thence northeasterly on a direct line back to Kamloops Point.
- *Wright Island:* the sheltered cove adjacent to the historic Wright Island Fishery located on the southwest side of Wright Island.

Determination: *See Section IV, note 15.*

<u>Discharge of Ballast Water:</u>

- The discharge of any untreated ballast water that comes from outside of park waters is prohibited within the boundaries of Isle Royale National Park.
  - The boundaries include those waters within the territorial jurisdiction of the United States within 4.5 miles of the shore of Isle Royale and immediately surrounding islands, including Passage Island, Gull Islands, and international boundary.
  - Untreated ballast water is defined as ballast water that is not treated by one or more of the State of Michigan Department of Environmental Quality treatment methods. The following ballast water treatment methods are acceptable: 1) hypochlorite treatment; 2) deoxygenation treatment, 3) chlorine dioxide treatment; and 4) ultra violet light radiation treatment preceded by suspended solids removal. Requirements for each of these treatment techniques can be found within the State of Michigan Department of Environmental Quality, Ballast Water Control General Permit, Port Operations and Ballast Water discharge, Permit No. MIG140000.

Determination: *See Section IV, note 16.*

II. 36 CFR §1.6 – ACTIVITIES THAT REQUIRE A PERMIT

Unless otherwise indicated for specific permits, all inquiries should be made to:

Superintendent
Isle Royale National Park
800 East Lakeshore Drive
Houghton, MI 49931

(f) The following is a compilation of those activities for which a permit from the Superintendent is required:

- §1.5(d) The following activities related to Public Use Limits
- §2.4(d) Carry or possess of certain types weapons, traps, or nets.
  Contact Chief Ranger at the above address.
- §2.5(a) Research specimen collection (take plant, fish, wildlife, rocks, or minerals).
  Contact Chief of Natural Resource Management at address above.

- §2.10(a) The following camping activities:
  - Camping - available at visitor centers; boating parties can also obtain permits online at www.nps.gov/isro.
  - Cross-Country Camping - available at visitor centers.
  - Group Camping - contact Group Camping Office at 906.482.0984, or email ISRO_groupreserve@nps.gov.

  Camping conditions are identified in Section 2.10 of this compendium.
- §2.12 Audio Disturbances:
  - (a)(2) Operating a chain saw in developed areas.
  - (a)(3) Operation of any type of portable motor or engine, or device powered by a portable motor or engine in non-developed areas (e.g., portable generator).
  - (a)(4) Operation of a public address system in connection with a public gathering or special event for which a permit has been issued pursuant to §2.50 or §2.51.
- §2.17 Aircraft and Air Delivery:
  - (a)(3) Delivery or retrieval of a person or object by parachute, helicopter, or other airborne means.
  - (c)(1) Removal of a downed aircraft.
- §2.37Soliciting or demanding gifts, money goods, or services (pursuant to the terms and conditions of a permit issued under §2.50, §2.51, or §2.52).
- §2.38 Explosives:
  - (a) Use, possess, store, or transport explosives or blasting agents.
  - (b) Use or possess fireworks.
- §2.50(a) Special Events: Conduct a sports event, pageant, regatta, public spectator attraction, entertainment, ceremony, and similar events (e.g., weddings).
  - Contact Chief Ranger at address above.
- §2.51(a) Public assemblies, meetings, gatherings, demonstrations, parades, and other public expressions of views.
- §2.52(c) Sale or distribution of printer matter.
- §2.61(a) Residing on Federal lands (use and occupancy).
- §2.62 Memorialization:
  - (a) Erection of monuments (requires approval from regional director).

    - (b) Scattering ashes from human cremation.
- §3.19 Use of manned or unmanned submersibles.
- §5.1 Advertisements (display, posting, or distribution).
- §5.2(b) Sale of intoxicants on private lands.
- §5.3 Engaging in or soliciting any business - requires a permit (CUA, SUP), contract, or other written agreement with the United States, or must be pursuant to special regulations.
    - Contact Chief Ranger at address above.
- §5.5 Commercial Photography/Filming.
- §5.7 Construction of buildings, facilities, trails, roads, boat docks, path, structure, etc.
- §6.9(a) Operation of a solid waste disposal site.
- §7.38(b) Underwater diving, with the aid of an underwater breathing apparatus.
    - Available in person at visitor centers.
- §7.38(c) Entry of service dogs in compliance with ADA regulations.

III. GENERAL REGULATIONS

36 CFR §2.1 – PRESERVATION OF NATURAL, CULTURAL, AND ARCHEOLOGICAL RESOURCES

(a)(4) Dead wood on the ground and driftwood may be collected for use as fuel for campfires within the park in the following areas:

- In areas with park-provided fire rings or grills (see Section 2.13).
- Near campgrounds when using a self-contained wood-burning backpacking stove.
- Driftwood along Isle Royale's Lake Superior shoreline.

(c)(1) and (c)(2) Fruits, nuts, or berries may be gathered by hand for personal use or consumption, only in accordance with the noted size, quantity, collection sites and/or use or consumption restrictions:

- The following fruits, nuts, and berries may be gathered:
    - Apples
    - Beach peas
    - Blueberries
    - Chokecherries
    - Cranberries
    - Currants
    - Elderberries
    - Hazel nuts
    - Juneberries
    - Mushrooms
    - Pin cherries
    - Raspberries
    - Rhubarb
    - Rose hips
    - Strawberries
    - Thimbleberries
    - Wintergreen berries
- Listed fruits, nuts, and berries may be gathered in quantities not to exceed one quart per person per day; except for apples which may be gathered in quantities not to exceed two gallons per person per day; and blueberries, raspberries, thimbleberries, and mushrooms which may be gathered in quantities not to exceed four quarts per person per day.

  Determination: *See Section IV, note 17.*

36 CFR §2.2 - WILDLIFE PROTECTION

(d) The transporting of lawfully taken wildlife through the park is allowed under the following conditions and procedures:

- Transporting wildlife through Isle Royale National Park is prohibited.

(e) The following areas are closed to the viewing of wildlife with the use of an artificial light:

- Use of artificial light to view wildlife is prohibited except by: 1) flashlights not exceeding 2,000 candlepower, and 2) individual photographic strobe flash units.

36 CFR §2.3 - FISHING

(d)(2) Possession or use of live or dead minnows or other bait fish, amphibian, non-preserved fish eggs, or roe is allowed in the following fresh water areas:

- Possessing or using as bait for fishing in inland waters, live or dead minnows or other bait fish, amphibians, non-preserved fish eggs, or fish roe is prohibited. Possession or use of insects and invertebrates (e.g., leeches, worms, and clams) is prohibited.

(d)(8) Fishing is allowed in or from the following otherwise prohibited areas:

Public boat docks:

- Fishing is allowed from all public boat docks, so long as it does not interfere with boat traffic.

36 CFR §2.10 – CAMPING and FOOD STORAGE

(a) The sites and areas listed below have been designated for camping activities as noted. A permit system has been established for certain campgrounds or camping activities, and conditions for camping and camping activities are in effect as noted:

- Permit required for all overnight stays within the park, except Rock Harbor Lodge guests, and guests of employees and/or authorized residents staying at their assigned quarters, dock, or guest housing.
- Small parties are defined as parties consisting of 1-6 persons.
- Groups are defined as parties from seven persons to no more than 10 persons.
- The following areas are closed to camping:
  - Within ½ mile of all eagle and osprey nests.
  - Passage Island.
  - All off-shore and inland lake islands except those officially designated with campsites.
  - Park zones 6, 7, 18, 19, 21, 24, 25, 38, and 43 from April 16 - September 1, except at designated campsites.
  - Park zones 42, 44, and 45, from April 16 - September 1, except at established NPS campsites and a strip ¼-mile wide along Lake Superior shoreline for cross-country canoeists, kayakers, hikers, and boaters.
  - Zones 27, 28, and 39 from April 16 September 1, except for a strip ¼-mile wide bordering Siskiwit, Intermediate, Wood, and Whittlesey lakes, for cross-country canoeists, kayakers, and hikers.
  - Zones 32, 33, 34, 35, 36, and 50 are closed all year except at designated campgrounds due to proximity of developed areas.
  - Within ¼ mile of any trail or portage.
  - Within ½ mile from all developed areas, designated campgrounds, and fire towers.
- The following area is closed to commercial kayak trips (Determination number 18):
  - West end of the Island between Todd Harbor to the north and Fisherman's Home to the south.

    Determination: *See Section IV, note 18.*

- The following docks are closed to camping and overnight docking/mooring. Docking/mooring is prohibited between the hours of 10 p.m. EDT and 6 a.m. EDT:
    - *America* Dock (Snug Harbor).
    - Amygdaloid Island Dock (except for residents or invited guests of residents).
    - Crystal Cove.
    - Edisen Fishery Dock (except for residents or invited guests of residents).
    - Hidden Lake Dock.
    - Malone Bay Dock, north side (except for residents or invited guests of residents).
    - Mott Island Docks (except for residents or invited guests of residents).
    - Passage Island Docks.
    - *Ranger III* Dock at Rock Harbor.
    - Raspberry Island Dock.
    - Wright Island.
    - Any NPS or concession fuel dispensing dock except the south side of Malone Bay dock.
    - Any other dock posted or signed as closed to overnight use or public entry, or private.
    - All docks assigned to life leasees, park VIPs, use and occupancy permits, and assessment fishermen, except by permission of authorized resident.
- The following buoys are closed to camping and overnight use:
    - Any shipwreck mooring buoy, except for permitted dive operations.

      Determination: *See Section IV, note 19.*

- Camping outside of the following conditions is prohibited:
    - Groups
        - Groups (camping parties of 7-10 people) must have advance reservations for camping before arriving on the island.
        - 10 persons is the maximum size of any camping party.
        - No organization/group may have more than 20 persons camping within the boundaries of Isle Royale National Park at any one time.
        - No organization/group may exceed 80 persons per year camping within the boundaries of Isle Royale National Park.
        - Groups must use established group campsites.
        - Groups may not use shelters or campsites other than designated group sites, or engage in cross-country overnight travel.
        - Groups must not deviate from itineraries listed on backcountry permits, except when changed by an authorized NPS representative.
        - Small parties (six persons or less) that are associated with other parties from the same group/organization that are camping on the island during the same time period **must** apply for their permits in advance. *(For example, if you are organizing two small parties of six persons from your church to go canoeing at Isle Royale, you must apply for your permit in advance.)*
        - Small parties (six persons or less) associated with other parties from the same group/organization may not change their permits or itineraries in a way that cause two or more parties from the same group/organization to camp in the same campground on the same night. *(For example, your summer camp has scheduled and applied for permits in advance, for three small parties of six backpackers each to Isle Royale. During their trips, the parties may not change their itineraries in such a way as to end up in the same campground on the same night.)*
    - All
        - A party may only use or occupy one site at a time.
        - A party may not split up or register separately obtaining two permits for the purpose of

obtaining two sites.

- Shelters may not be used for the sole purpose of storage and/or cooking.
- Temporary additions to shelters such as food storage boxes, lean-tos, clothes drying racks, lining with plastic, when attached with nails, staples, tape, and/or tacks, are prohibited.
- Shelters designated for power boaters or backpackers/paddlers may be used only by power boater or by backpacker/paddler parties respectively, <u>except</u> after 6 p.m. EDT.
- Tents may not be erected at shelter sites, <u>except</u> for free standing tents within shelters.
- Tents may not be erected outside of tent pads where provided.

- Cross-Country
  - Only small parties of 1-6 individuals are allowed to camp in cross-country areas.
  - A cross-country permit is required for camping outside of developed campsites.
    - The camp must be out of sight and sound of other camping parties.
    - Maximum stay at any location is one night.
    - Must camp at least (tent and camping gear must be moved) ½ mile from the previous night's stay.

- Camping longer than stay limitations at designated campgrounds and their associated docks between June 1 and Labor Day, as indicated below, is prohibited:

Campground	Stay Limitation (Nights)
Beaver Island	3
Belle Isle	5
Birch Island	3
Caribou Island	3
Chickenbone Lake, East	2
Chickenbone Lake, West	2
Chippewa Harbor	3
Daisy Farm	3
Desor, North	2
Desor, South	2
Duncan Bay	3
Duncan Narrows	3
Feldtmann Lake	2
Grace Island	3
Hatchet Lake	2
Hay Bay	3
Huginnin Cove	3
Intermediate Lake	2
Island Mine	3
Lake Ritchie, Canoe In	2
Lake Ritchie, Hike In	2
Lake Whittlesey	2
Lane Cove	3
Little Todd	2
Malone Bay	3
McCargoe Cove	3
Merritt Lane	3
Moskey Basin	3
Pickerel Cove	2
Rock Harbor	1
Rock Harbor Marina	unlimited

- Siskiwit Bay 3
- Three Mile 1
- Tobin Harbor 5
- Todd Harbor 3
- Tooker's Island 3
- Washington Creek 3
- Windigo Dock 5
- Wood Lake 2

(b)(3) Camping within 25 feet of a fire hydrant or main road, or within 100 feet of a flowing stream, river or body of water is authorized only in the following areas, under the conditions noted:

- Camping within 100 feet of a flowing stream, river, or body of water is allowed only at designated campsites.

(d) Conditions for the storage of food are in effect, as noted, for the following areas:

- All park areas.
- All food, lawfully taken fish, garbage, and scented items (such as toothpaste, sunscreen, lip balm, etc.) shall be kept secured in a boat, ice chest, camping structure, or other container constructed of a solid, non-pliable material, and with a secure lid.
- In the backcountry, all food, garbage, and scented items shall be sealed so as to prevent smells; and secured so as to prevent access by animals.

Determination: *See Section IV, note 20.*

<u>36 CFR §2.13 – FIRES</u>

(a)(1) The lighting or maintaining of fires is prohibited, <u>except</u> as provided for in the following designated areas and/or receptacles, and under the conditions noted:

<u>Designated Areas:</u>

- Belle Isle
- Caribou Island (community fire ring only)
- Chippewa Harbor
- Duncan Bay
- Duncan Narrows
- Island Mine
- Little Todd
- Malone Bay
- McCargoe Cove (community fire ring only)
- Rock Harbor Marina
- Siskiwit Bay (community fire ring only)
- Todd Harbor (community fire ring only)

<u>Receptacles Allowed:</u>

- Park-provided fire rings or grills, in areas designated above.

(a)(2) The following restrictions are in effect for the use of stoves or lanterns:

- Lighting or maintaining an open fuel-burning stove or lantern within 50 feet of a fuel-storage tank or dispensing facility is prohibited at all times.
- Self-contained backpacking wood-burning stoves are allowed (e.g., Zip Stove).
    - Self-contained wood-burning stoves hold the fire and ambers within a small fire box preventing escape, prevent the scorching of soil, and leave very little ash.

(b) Fires must be extinguished according to the following conditions:

- Fires must be extinguished with water and stirred until cool to the touch, with no residual hot embers.

36 CFR §2.14 – SANITATION and REFUSE

(a)(7) Conditions for the disposal of fish remains near docks or within developed areas have been designated as follows:

- Cleaning of fish directly on docks or picnic tables is prohibited.

Developed Areas

- Disposing of fish remains at Rock Harbor is prohibited except at the designated fish cleaning station.
- Disposing of fish remains at Mott Island is prohibited except by puncturing the air bladder and disposing of them in Lake Superior water greater than 50 feet deep with flow-through circulation, or by double bagging and disposing of in a freezer to be dedicated for fish offal disposal.
- Disposing of fish remains at Windigo is prohibited except by puncturing the air bladder and disposing of them in Lake Superior water greater than 50 feet deep with flow-through circulation, or for shore anglers without access to a boat may dispose of fish remains off the end of the main Windigo Dock.
- Disposing of fish remains at Davidson Island is prohibited except by puncturing the air bladder and disposing of them in Lake Superior water greater than 50 feet deep with flow-through circulation.

Undeveloped Areas, On Lake Superior Waters

- Disposing of fish remains in undeveloped areas (other than Mott, Windigo, Rock Harbor, and Davidson Island) on Lake Superior waters is prohibited except by puncturing the air bladder and disposing of them in Lake Superior water greater than 50 feet deep with flow-through circulation, or for shore anglers without access to a boat may dispose of fish remains by cutting them into pieces 4 inches or less, puncturing the air bladder, moving at least 200 feet along the shoreline away from the campground, and throwing remains as far as possible into deep water.

Undeveloped Areas, On Inland Lake Waters

- Disposing of fish remains on inland waters is prohibited except by cutting the remains into pieces 4 inches or less, puncturing the air bladder, and disposing of them into deepwater via canoe, or by cutting the remains into pieces 4 inches or less, puncturing the air bladder, moving at least 200 feet along the shoreline away from the campground, and throwing remains as far as possible into deep water.

(b) Conditions for the disposal, containerization, or carryout of human body waste have been established as follows:

- Disposing of human waste in established backcountry sites other than in designated privies is prohibited.
- In backcountry areas where privies are not available, disposing of human waste is prohibited expect by burial in a hole 6 inches deep, covered with soil, out of site from a trail, and least 100 feet from any water source, high water mark of any body of water, or campsite.
- All toilet paper shall be packed out, except toilet paper disposed of in a designated privy.

36 CFR §2.15 – PETS

(e) Pets may be kept by park residents under the following conditions:

- Possession of certain pets by park residents on the islands and waters of Isle Royale National Park may be permitted with Park Superintendent review and approval. Goldfish, amphibians, turtles, and some bird species will not be allowed.
- 36 CFR 7.38 (c) closes the park area to the possession of dogs, cats, and other mammals except service dogs. A non-fee permit and a valid health certificate are needed to enter the park with a service dog.

36 CFR §2.17 – AIRCRAFT and AIR DELIVERY

(a)(1) Areas designated for operating or using aircraft are provided for in 36 CFR §7.38.

(a)(2) Boat docks or piers designated as open for the use of seaplanes. All docks and piers are closed to non-administrative seaplane use except the following, subject to other park rules and regulations:

- Windigo small boat dock.
- Windigo seaplane dock, open for fifteen-minute loading and unloading only from 8:00 a.m. to 5:30 p.m. Mon. through Sat., open for overnight use at other times, except Sunday open all day.
- Tobin Harbor seaplane dock, open for fifteen-minute loading and unloading only from 8:00 a.m. to 5:30 p.m. Mon. through Sat., open for overnight use at other times, except Sunday open all day.
- Mott Island seaplane dock, open from 6:00am to 10:00pm only, two hour maximum stay.

(c)(1) The removal of a downed aircraft, components, or parts thereof are subject to procedures established by the Superintendent through written authorization.

36 CFR §2.20 – SKATING, SKATEBOARDS and SIMILAR DEVICES

The use of roller skates, skateboards, roller skis, coasting vehicles, or similar devices are allowed only in the following areas:

- Using roller skates, skate boards, roller skis, coasting vehicles, or similar devices is prohibited except for roller skates and inline roller skates in the developed area of Mott Island during non-business hours.

36 CFR §2.21 – SMOKING

(a) The following portions of the park, or all or portions of buildings, structures, or facilities are closed to smoking as noted:

- Smoking is prohibited in all government-owned and operated facilities, vessels, and vehicles with the exception of certain marked designated smoking areas on the M.V. *Ranger III*, the work barge *Beaver*, the M.V. *Angelique* and the Tug *Shelter Bay*.
- Smoking is prohibited in all concessions dining and associated areas, stores, and shops, and any other area with concession facilities so designated by “No Smoking” signs.

36 CFR §2.22 – PROPERTY

(a)(2) Property may be left unattended for periods longer than 24 hours in the following areas and under the following conditions:

- Leaving property unattended in excess of 24 hours, without written permission of the Superintendent, is prohibited except at long-term parking areas.
- Leaving vessels unattended at concession facilities, in excess of 24 hours, without making appropriate arrangements with the concessioner, is prohibited.

36 CFR §2.23 – RECREATION FEES

(b) Recreation fees, and/or a permit, in accordance with 36 CFR part 71, are established for the following entrance fee areas, and/or for the use of the following specialized sites, facilities, equipment or services, or for participation in the following group activity, recreation events or specialized recreation uses:

Daily Site Use Fee Areas:

Daily User Fee	$4.00 per person per day. Children 11 and under are exempt from the fee.
Individual Season Pass (optional)	$50.00 This pass is valid from April 16 through October 31 of the year indicated. The pass covers the User Fee for the person whose signature appears on the pass.
Season Boat Rider Pass (optional)	$150.00 This pass is valid from April 16 through October 31 of the year indicated. The pass covers the User Fee for all persons onboard, when affixed to the private boat. When camping, the pass is only good for the passengers in and following the itinerary of the vessel.

36 CFR §2.35 – ALCOHOLIC BEVERAGES and CONTROLLED SUBSTANCES

(a)(3)(i) The following public use areas, portions of public use areas, and/or public facilities within the park are closed to consumption of alcoholic beverages, and/or to the possession of a bottle, can or other receptacle containing an alcoholic beverage that is open, or has been opened, or whose seal has been broken or the contents of which have been partially removed:

- Within visitor centers, historic structures, and on board the park vessel *Ranger III*, except for employees authorized to utilize such structures or vessel as quarters.

36 CFR §2.38 – EXPLOSIVES

(b) Fireworks and firecrackers may be possessed and/or used in the following areas, under the conditions noted:

- Using or possessing fireworks and firecrackers (including sparklers) is prohibited in all land and water areas of the park.

36 CFR §2.51 – PUBLIC ASSEMBLIES, MEETINGS

(e) The Superintendent shall designate on a map, which shall be available in the office of the Superintendent, the locations available for public assemblies:

- Public assemblies or meetings are permitted only in the areas designated at Rock Harbor, Mott Island, and Windigo.
- Grounds of historic structures, visitor centers, designated wilderness areas, or any park area during scheduled interpretive programs are closed to public assemblies without permission from the Superintendent.

36 CFR §2.52 – SALE or DISTRIBUTION of PRINTED MATTER

(e) The following areas are closed to the distribution of printed matter:

- Sale or distribution of printed matter is allowed by permit and only in the areas designated at Rock Harbor, Mott Island, and Windigo.
- Grounds of historic structures, visitor centers, designated wilderness areas, or any park area during scheduled interpretive programs are closed to sale or distribution of printed matter without permission from the Superintendent.

36 CFR §2.62 – MEMORIALIZATION

(b) The scattering of ashes from cremated human remains.

- A permit is required to scatter cremated human remains.

36 CFR §3.8 – BOATING OPERATIONS

(b)(3) Operating a vessel in excess of flat wake speed in the following areas is prohibited:

- In all water areas surrounding any beached boat or canoe within 300 feet.

  Determination: *See Section IV, note 21.*

36 CFR §3.12 – WATER SKIING and TOWING of AIRBORNE DEVICES

(a) The towing of persons using water skis, or similar devices, is prohibited within the waters of Isle Royale National Park.

(b) The towing of a person using a parasail, hang-glider or other airborne device is prohibited within the waters of Isle Royale National Park.

36 CFR §4.30 – BICYCLES

(a) Park roads and parking areas that are closed to bicycle use are listed in Section 1.5 of this document.

(b) The following additional routes, in developed areas or special use zones, have been designated for bicycle use:

- Use of bicycles is prohibited on all islands, except tricycles, bicycles, and similar devices in the developed area of Mott Island, and the immediate employee housing areas of Rock Harbor and Windigo.

IV. DETERMINATIONS

Introduction

These Determinations cover the new rule changes to the previous Isle Royale National Park Superintendent's Compendium approved and in use since the year 2000.

Special Statement about Determinations

Rules identified in Determinations 1, 4 and 15 have been in place since the fall of 2007. These rules were promulgated by Superintendent's order amending the year 2000 Superintendent's Compendium. There has not been signification disruption to visitor use patterns and public reaction has been supportive.

Determinations 1, 4, 9 and 15 are based on similar backgrounds and science. These are interim restrictions based on emerging threats to the natural resources of Isle Royale National Park. These restrictions are needed until permanent rules can be put into place, anticipated within 5 years. This 5 year window addresses the issue of duration as outlined in 36 CFR 1.5 (3)(b) . Scientific analysis is on going to better understand the potential threats, as are the development of response plans and prevention methods.

National Park Service ballast water rule making needs to coincide with U.S. Coast Guard rule making to create a level of consistency across Lake Superior. A closure on the release of all untreated ballast water within (and near) Isle Royale National Park waters, would provide fuller protection and needs to be promulgated by the U.S. Coast Guard. The National Park Service would follow suite shortly thereafter. Rules allowing partial protection or voluntary compliance would be ineffective.

Every new outbreak of Viral Hemorrhagic Septicemia (VHS) is reported to, and is considered a disease of concern by the OIE International Aquatic Animal Health Code (OIE 2004). Because of the concern for this disease most countries initiate quarantine and disinfectant actions when it appears. OIE updates their regulatory code annually at http//www.oie.int/eng/normes/fcode/fcode2004/en_acode.htm.

These restrictions are similar in scope to voluntary rules that are present throughout Michigan and promulgated by the Michigan Department of Natural Resources. Therefore visitors are being asked to perform a function or task that they are already familiar with, addressing the issue of a "*signification alteration to public use pattern"* as outlined in 36 CFR 1.5 (3) (b).

Public Use Limits

1. **Public Use Limits - Decontamination of vessels and aircraft**

Reason for Restriction

The purpose of this emergency restriction is to avoid severe damage to park resources and catastrophic loss of recreational opportunities that would occur from the introduction and spread of Viral Hemorrhagic Septicemia (VHS) into Isle Royale National Park via the use of infected bait fish or parts of infected fish by recreational anglers, either directly via bait fishing, or through transport via water, mud, etc on aircraft, recreational vessels and transported to the park via the Ranger III.

Background

The VHS virus, an exotic fish pathogen, was diagnosed for the first time ever in the Great Lakes in 2005 though it is now known to have been present since 2003 through diagnosis of archived fish samples. It has been responsible for causing extensive fish kills in Lake Huron, *Lake St. Clair, Lake Erie, Lake Ontario, the St. Lawrence and Detroit Rivers, and inland lakes in Wisconsin, lower Michigan, New York, and Ontario, in 2005 and 2006. The virus is classified as Type I – IV with unique strains or isolates occurring within each type. The virus found in the Great Lakes is classified as Type IV-b and appears to have mutated from the marine isolate known previously from the Atlantic coast of North America. In addition to the North American Atlantic Coast and Great Lakes isolate, other isolates occur on the North American Pacific Coast and in Europe and Asia. European isolates have caused massive mortalities in rainbow trout production facilities and in wild populations of brown trout. Several other species have also been affected in Europe. VHS has been recently discovered the Lake Superior Basin according to academic and government researchers.*

VHS has the potential to be more devastating environmentally and ecologically than the sea lamprey, which caused the extirpation of lake trout in all Great Lakes except Lake Superior and a few locations in Lake Huron. The damage from sea lamprey has cost hundreds of millions of dollars in losses to fisheries throughout the Great Lakes. The Great Lakes Fishery Commission and sea lamprey control offices invest approximately $18 million annually to control populations of this species. Other invasive species such as zebra and quagga mussels have been responsible for massive ecological change in the basin and damage to community infrastructure such as clogging water intake pipes, water filtration and electric plants. The associated control costs from this damage have been estimated at $100 million per year by New York Sea Grant (Pimentel et al 2000). Estimated costs to control all aquatic non-indigenous species in the United States are approximately $2.5 billion per year (Pimentel et al 2000).

Most significant about this virus's invasion of the Great Lakes is that it has impacted species of fish across several taxonomic families, including some that were not known to be affected by other variants of the virus. Because newly impacted species continue to be found, it is still not known how many families of fish could ultimately be affected. However, the VHS virus is known to affect nearly fifty species of fish including trout and other salmonids and it has been suspected of causing outbreaks in lake trout. The Great Lakes variant has caused die offs in at least 12 species of fish in the Great Lakes including commercially and recreationally important species such as northern pike, walleye, smallmouth bass, and yellow perch. Other species that have been affected by the virus include freshwater drum, white bass, black crappie, muskellunge and bluegill (USDA 2006). Species that are known to be carriers of the virus in the Great Lakes include Chinook salmon, rock bass, silver and shorthead redhorse, northern pike, burbot, spottail shiners and emerald shiners (Wisconsin Sea Grant fact sheet). Species such as lake trout and brook trout have been shown to be experimentally susceptible to VHS, (Skall et al 2005) and whitefish (Coregonus sp.) in Europe have been infected and show signs of infection such as septicaemic hemorrhages (Meier et al

1986).
Preliminary investigations of the Great Lakes variety of VHS show that it does cause moderate mortality in salmonids, including lake trout, Chinook salmon and steelhead (rainbow trout) (USDA 2006).

This is the first time that a virus has affected so many different fish species from so many fish families in the Great Lakes, and because European variants impact many species of salmonids (the family which includes trout, salmon, whitefish and char), the potential for the Great Lakes strain to have impacts on lake trout and several other species is very high.

The VHS virus is readily transmissible to fish of all ages, and survivors of infection can become lifelong carriers that shed virus with urine and sex products. Fish of any age are susceptible to infection, and epizootic losses occur at temperatures of 3° to 12°C (37-54 °F) (mortality is greatest at 3° to 5°C (37-41°F). The optimum temperature for virus replication is 14-15°C; virus yield is reduced at 6°C, and little replication occurs above 20°C. (Fish Disease Leaflet 83, USGS Leetown Science Center) Because the virus replicates and is particularly virulent at cooler temperatures, Lake Superior could provide an ideal environment for large scale replication and many species found in the lake could be susceptible.

Because of the susceptibility of lake trout, the documented infections of whitefish and the cooler water temperatures of Lake Superior, potential impacts to Lake Superior species, and in particular Isle Royale populations, could be catastrophic.

Isle Royale is a unique refuge for Lake Trout with approximately 12 morphological variants across 3 genetically distinct phenotypes found around the island. Lake trout is the most common sport fish sought at Isle Royale, and a limited assessment fishery using commercial fishing techniques is still supported by populations at and around the island. Nearly 10,000 lake trout were harvested by sport anglers at Isle Royale during a survey conducted in 1998. Lake Superior is the only Great Lake where lake trout populations are considered to be rehabilitated following population crashes in the mid 20th century due to sea lamprey invasions. Isle Royale is considered as one of only a few locations where lake trout stocks still maintain a high level of their original genetic composition. Any loss of stocks from the island would be a loss of genetic material and valuable information that would compromise ongoing efforts to restore lake trout populations in the other Great Lakes.

The potential impact to lake trout and the need for additional protection from potential disease transmission via the use of fish and fish parts for recreational bait fishing could be catastrophic for Isle Royale populations. Isle Royale has an extensive network of reefs across its waters, and lake trout utilize these to congregate for spawning and feeding. Lake trout begin spawning in late August, and spawning continues into October and November. Congregating for feeding or because of other stimuli has also been observed in other seasons, but it is not as well understood at the island. When lake trout spawn at Isle Royale, fish move from a more dispersed state into dense congregations at spawning reefs around the island. Infection of one or a few fish that move into spawning congregations could potentially spread the virus to an entire stock of fish in a short amount of time. After spawning, fish tend to re-disperse around the island and will often mix with fish of other stocks. This re-dispersal could quickly spread the virus to all stocks around the island.

Introduction and spread of VHS also would cause catastrophic loss of recreational fishing opportunities at Isle Royale National Park by decimating other important recreation and commercial fish stocks. In addition to lake trout, species such as coaster brook trout, lake whitefish, round whitefish (menominee), cisco (lake herring) including the rare shortjaw cisco and other coregonids could be impacted. These are all either commercially or recreationally important species throughout Lake Superior. In addition to their commercial importance, the coregonids are a primary and important food base for lake trout, brook trout and other predator species and loss of these

species would affect not only Isle Royale but the entire Lake Superior food web.

The coaster brook trout populations from Isle Royale are two of only a few populations in the Great Lakes that are considered to be self-sustaining. Fish from these populations have been used to create brood stocks to aid in restoration efforts in other parts of the lake. Additionally, coaster brook trout were recently petitioned for listing under the Federal Endangered Species Act. Because it provides a federally-owned haven for the survival of the species, Isle Royale would likely be designated as Critical Habitat for species protection and recovery by the U.S. Fish and Wildlife Service should coaster brook trout be federally-listed as threatened or endangered. Catch and release only restrictions have already been enacted at all of Isle Royale to protect this species. Any impact to the Isle Royale populations could severely compromise the long term sustainability of these populations and lake-wide restoration efforts.

Current Protective Measures

The use of fish, fish parts, or roe (fish eggs) for recreational bait fishing is a means by which the disease can be transmitted to new populations of fish. Michigan, Wisconsin, and Ontario have all established regulations to reduce the risk of VHS transmission via bait (New York has voluntary rules.) The USDA Animal and Plant Health Inspection Service has placed restrictions on movement of fish (including bait species) throughout the Great Lakes States.

The State of Michigan has enacted new regulations for sale, collection, and use of bait fish in its waters due to the presence of VHS in some waters and the threat of its occurrence in currently uncontaminated waters. The State of Michigan's Department of Natural Resources (MDNR) regulates sport and commercial fishing within Isle Royale's Lake Superior waters. The MDNR has divided its waters into 3 Management Areas: VHS-Positive; VHS Surveillance; or VHS-Free. It uses these zones, plus the Prohibited Species list (a list of species which have been shown to be susceptible to VHS) as the foundation for its new regulations. For prohibited species, the new regulations require that bait dealers either certify that their bait is virus-free, or provide a receipt to buyers indicating in which Management Area(s) the bait can be used. Receipts must be kept by anglers and presented upon request during the fishing trip and are valid for 7 days. Uncertified bait cannot be used in a Management Area that is less contaminated than that in which it was collected or reared. The same restrictions apply for personal collection of wild bait which is on the Prohibited Species List. For those species not on the list, there are no VHS restrictions.

"Clean boat" initiatives have been established by state resource agencies in Michigan, Wisconsin, and Minnesota, in an effort to reduce the spread of aquatic invasive species (AIS), including VHS. Inadvertent transport via mud, weeds, and water on recreational boats moving among water-bodies has been suspected in several instances of new outbreaks of exotic species. Boats transported on the Ranger III also have the potential to carry AIS to the park.

The park has already enacted emergency regulations to protect its waters from the potential release of VHS via commercial vessel ballast water. Ballast water, the use of bait fish, and recreational boats containing water or sediments from contaminated waters are all considered potentially high risk vectors in the NPS and Grand Portage Band of Lake Superior Chippewa's 2008 Viral Hemorrhagic Septicemia Prevention and Response Plan (Plan).

Why Current Restrictive Measures Will Not Suffice

1. The potential impacts of a VHS outbreak could be catastrophic for Isle Royale's genetically distinct near-shore populations of coaster brook trout and its populations of genetically diverse lake trout. The park's vulnerability may be increased because lake trout congregate to spawn at reefs within park waters, thereby creating an atmosphere where the disease could be rapidly transmitted to many fish that will then disperse (as well as to eggs during fertilization.) See background section above for details.

2. The State of Michigan's current VHS regulations require that boaters drain all water from live wells and bilges upon leaving any body of water. While this addresses standing water in boats, it does not address the potential for sediments, fish remains, etc that may still be in a boat between fishing trips. VHS transported via sediments on recreational boats (anchors, etc) is identified as a moderate vector risk in the Plan. Therefore, the park is requiring that recreational boats are decontaminated prior to loading onto the Ranger III. Decontamination options are hot water wash, or extended drying on land. All decontamination activities should be conducted where the runoff cannot enter surface water. No washing, rinsing or decontamination will be allowed at the park headquarters.

3. Restrictive, park-specific measures to prevent the introduction of VHS by human-associated vectors may prove effective because the park is isolated from non-park user groups that do not fall under NPS jurisdiction. The park shares no adjacent shorelines and is not located near heavily-used state or provincial sites. Therefore, the most likely transmission sources to the park are those that specifically travel to or through the park, and therefore can be effectively regulated to reduce risk of VHS contamination.

4. Though there has been a ground swell of support for voluntary disinfection and treatment outside NPS jurisdictions, these programs are not mandatory. Dr James Winton, USGS expert has said "As you are aware, invasive species including important pathogens of aquatic animals represent a substantial threat to the Great Lakes ecosystem"

5. NPS is on record with USCG rule-making that the current USCG rules relating to the release of ballast using the words "avoid" are inadequate to protect park resources. The Parks without shipping lanes have placed a complete prohibition within Park waters using compendium authority, and ISRO, having a designated shipping lanes and a ship that routinely has to discharge ballast within Park waters, used Michigan State prohibitions/standards for salt water vessels for all ships (salt and fresh) transiting Park waters to increase Park protection until USCG rules are finalized to NPS satisfaction.

2. **Public Use Limits - Use of Electronic Devices, Generators, and other Mechanical Devices**
   Reason for Restriction
   This action implements specific provisions of the park's GMP/FEIS, which was approved by a Record of Decision, signed on May 11, 1999, by the Midwest Regional Director of the National Park Service. This action helps protect the natural quiet and wilderness values sought by most Isle Royale visitors. It reduces the impact of electronic and mechanical noise on visitors camping in or otherwise using Wilderness and/or non-developed areas of the park. The action promotes a quality visitor experience by providing relatively tranquil, natural marine and/or wilderness surroundings consistent with the values enunciated by the Wilderness Act, Park Purpose Statements, and other applicable law and policy.

3. **Public Use Limits - Use of a Permanently Installed Onboard Generator**
   Reason for Restriction
   This action implements specific provisions of the park's GMP/FEIS, which was approved by a Record of Decision, signed on May 11, 1999, by the Midwest Regional Director of the National Park Service. All of the listed docks are located close to primitive campgrounds. A generator operated at these docks would be clearly audible in the adjacent campgrounds. This action helps protect the natural quiet and wilderness values sought by most Isle Royale visitors. It reduces the impact of mechanical noise on visitors camping in or otherwise using Wilderness and/or non-developed areas of the park. The action promotes a quality visitor experience by providing relatively tranquil, natural marine surroundings.

<u>Public Use Limits, Fishing</u>

4. **Public Use Limits – Fishing - Lake Superior Bait Restriction**

Reason for Restriction

The purpose of this emergency restriction is to avoid severe damage to park resources and catastrophic loss of recreational opportunities that would occur from the introduction and spread of Viral Hemorrhagic Septicemia (VHS) into Isle Royale National Park via the use of infected bait fish or parts of infected fish by recreational anglers, either directly via bait fishing, or through transport via water, mud, etc on recreational boats transported to the park via the Ranger III.

Background

See Note 1 background statement

Current Protective Measures

The use of fish, fish parts, or roe (fish eggs) for recreational bait fishing is a means by which the disease can be transmitted to new populations of fish. Michigan, Wisconsin, and Ontario have all established regulations to reduce the risk of VHS transmission via bait (New York has voluntary rules.) The USDA Animal and Plant Health Inspection Service has placed restrictions on movement of fish (including bait species) throughout the Great Lakes States.

The State of Michigan has enacted new regulations for sale, collection, and use of bait fish in its waters due to the presence of VHS in some waters and the threat of its occurrence in currently uncontaminated waters. The State of Michigan's Department of Natural Resources (MDNR) regulates sport and commercial fishing within Isle Royale's Lake Superior waters. The MDNR has divided its waters into 3 Management Areas: VHS-Positive; VHS Surveillance; or VHS-Free. It uses these zones, plus the Prohibited Species list (a list of species which have been shown to be susceptible to VHS) as the foundation for its new regulations. For prohibited species, the new regulations require that bait dealers either certify that their bait is virus-free, or provide a receipt to buyers indicating in which Management Area(s) the bait can be used. Receipts must be kept by anglers and presented upon request during the fishing trip and are valid for 7 days. Uncertified bait cannot be used in a Management Area that is less contaminated than that in which it was collected or reared. The same restrictions apply for personal collection of wild bait which is on the Prohibited Species List. For those species not on the list, there are no VHS restrictions.

"Clean boat" initiatives have been established by state resource agencies in Michigan, Wisconsin, and Minnesota, in an effort to reduce the spread of aquatic invasive species (AIS), including VHS. Inadvertent transport via mud, weeds, and water on recreational boats moving among waterbodies has been suspected in several instances of new outbreaks of exotic species. Boats transported on the Ranger III also have the potential to carry AIS to the park.

The park has already enacted emergency regulations to protect its waters from the potential release of VHS via commercial vessel ballast water. Ballast water, the use of bait fish, and recreational boats containing water or sediments from contaminated waters are all considered potentially high risk vectors in the NPS and Grand Portage Band of Lake Superior Chippewa's 2008 Viral Hemorrhagic Septicemia Prevention and Response Plan (Plan).

Why Current Restrictive Measures Will Not Suffice

1. The MDNR's 2008 bait fish regulations will not provide adequate protection from the potential spread of VHS for the following reasons:

- The regulations rely on accurate species identification of fish parts and roe.
- There is no effective way to prevent anglers from combining bait from different sources after purchase or detect when it has occurred.
- Management Area boundaries include natural barriers to fish passage on specific tributaries that may not be readily known by anglers or bait dealers trying to define which

areas they collected bait fish and which management area(s) those fish can be used.

- There is no effective way to enforce wild bait collection restriction except in those cases where a given bait species is known not to occur within a specific Management Area (minority of cases.)
- The State of Michigan's Management Areas do not extend to other Great Lake states or Canada, and bait use is being regulated differently in different jurisdictions.
- In addition to the above, an Isle Royale limitation is that many anglers come directly to Isle Royale from MN, WI, and Canada. Purchase of certified bait or bait from a Michigan-licensed dealer is not possible/feasible. Also, some angler trips are longer than 7 days, making their bait supply unusable and no ready source for buying new bait.
- The potential VHS-positive water sources for bait fish and fish parts increase because Isle Royale's visitor base is from several states and Canada.

2. Staff knowledge indicates that a minimum of 20% of Lake Superior anglers at Isle Royale may use real fish bait. In addition, preliminary results of an informal poll in 2008 by the Isle Royale Boaters Association of its members show that as many as 43% of its members may use real bait for a portion of their Isle Royale fishing trips. A 1998 survey of Lake Superior boat anglers at Isle Royale determined that 19,340 hours (+/- 5,356) of fishing effort by non-charter boat anglers occurred from June through August (Lockwood et al, 2001.) Fishing at Isle Royale is a primary attraction for visitors; many come to Isle Royale primarily to fish for lake trout.

3. The potential impacts of a VHS outbreak could be catastrophic for Isle Royale's genetically distinct near-shore populations of coaster brook trout and its populations of genetically diverse lake trout. The park's vulnerability may be increased because lake trout congregate to spawn at reefs within park waters, thereby creating an atmosphere where the disease could be rapidly transmitted to many fish that will then disperse (as well as to eggs during fertilization.) See Background section above for details.

4. Restrictive, park-specific measures to prevent the introduction of VHS by human-associated vectors may prove effective because the park is isolated from non-park user groups that do not fall under NPS jurisdiction. The park shares no adjacent shorelines and is not located near heavily-used state or provincial sites. Therefore, the most likely transmission sources to the park are those that specifically travel to or through the park, and therefore can be effectively regulated to reduce risk of VHS contamination.

5. The park is considering the option to provide a frozen bait supply for anglers. If feasible, the park could obtain Lake Superior basin-caught bait from species not on the Prohibited List and would complete the certification process for it (as an extra measure of protection; this is not required for non-Prohibited List species), and would give limited amounts to anglers to use as starter bait as a way to reduce the need to bring in bait from outside the park. This provides an extra measure of protection while providing for the additional inconvenience due to the new regulations.

5. **Public Use Limits – Fishing - Brook Trout**

Reason for the Restriction

The National Park Service has adopted recreational fishery management policies which reflect resource protection and lower harvest and consumption of the fishery resource. At least one park fish species, the coaster brook trout, is rare and annual surveys show extremely low population numbers. Isle Royale National Park is home to two genetic variants of coaster brook trout. These are believed to be some of the last viable native coaster populations in the Great Lakes. Ongoing research efforts are underway at Isle Royale, Pictured Rocks National Lakeshore, and within the U.S. Fish and Wildlife Service to determine life history requirements, and genetic variations among populations and within the species Salvelinus fontinalis. It is believed that, in part, historic fishing practices at Isle Royale have resulted in depressed population numbers. Currently, the low

numbers and the desire by anglers to catch and keep "trophy" fish (often the most viable breeding stock) have combined to threaten the viability of the 2 known strains at the park. This restriction is being enacted to protect the remaining fish until research provides more reliable information on which to base management actions.

Why Less Restrictive Measures Will Not Suffice

The coaster brook trout population is currently at the point where continued harvest may cause local extinction of the species. In 1994, the park reduced the allowable daily possession limit to 2 fish, with no more than one over 12 inches, and a minimum size of 7 inches. Subsequent surveys through 2004 did not show a significant increase in numbers, and suggested that long-term viability may be in jeopardy. This restriction is considered an interim measure, until research provides definitive answers regarding coaster population viability, genetic diversity, and minimum life history requirements. Recent survey indicates a slight rebound in population, indicating the measures are at least a neutral to positive contribution in managing the population. The State of Michigan has implemented a "catch and release" designation for coasters in the park's Lake Superior waters, again reflecting resource agencies' concerns over the very low populations along the Lake Superior shoreline. Isle Royale is over 99% federally-designated Wilderness, which carries a strong resource protection mandate, both for the resources themselves, and to maintain them for future generations to experience and enjoy.

6. **Public Use Limits – Fishing - Rainbow Trout**

Reason for Restriction

Rainbow trout (Oncorhynchus mykiss) are a non-native Pacific Coast species believed to have been introduced into the Great Lakes in the 1870s (Mills et al, 1993). State stocking programs for rainbow trout and steelhead sport fishing in Michigan began in the 1920s, and stocking continues today (MDNR website, 2007). Isle Royale waters contain both rainbow trout and steelhead (the anadromous form) as a result of Great Lakes stocking efforts. Rainbow trout utilize the same spawning streams as native brook trout and anadromous coaster brook trout at Isle Royale. One of the limiting factors for coaster brook trout viability at Isle Royale is suitable spawning habitat. Rainbow trout compete for limited spawning habitat and food for fry and fingerlings in the streams, and may also prey on brook trout fingerlings.

The park is allowing anglers to continue to take rainbow trout and steelhead from its streams while at the same time protecting native brook trout/coasters by closing the season for rainbows during coaster/brook trout spawning, and by requiring the same lure, bait, and barbless hook restrictions as it does for brook trout/coasters. (Rainbow trout and brook trout respond to many of the same angling techniques, lures and bait.) A minimum size limit of 7 inches maximizes the opportunity for anglers to take rainbows without jeopardizing brook trout (at smaller than 7 inches, trout species often are hard to distinguish from each other.) Anglers targeting rainbow trout would not be likely to be able to exceed the daily possession limit of five fish, with no more than three fish over 15 inches, however removing a daily possession limit might result in additional fishing pressure in these streams and subsequent unintended impacts to coasters/brook trout.

7. **Public Use Limits – Fishing - Lake Trout in Siskiwit Lake**

Reason for the Restriction

This is a revision to address an omission in park regulations that was created as a result of the 2005 change in State of Michigan statewide fishing regulations. In the absence of a need for park-specific fishing regulations on its inland lakes and streams, Isle Royale regulations are consistent with the State of Michigan regulations in Keweenaw County. The 2005 revision of state regulations resulted in no clear definition of lake trout (Salvelinus namaycush) fishing regulations in Siskiwit Lake (the park's only inland lake that contains lake trout.)

The interim emergency amendment is a combination of state and park regulations. It allows a daily

possession limit of no more than three of any one species of salmonid, which is consistent with the state's lake trout regulations in the park's Lake Superior waters. The seasonal dates reflect the park's operating season. Finally, the requirement to use only artificial lures and bait is the same restriction that is applied to all of the islands inland lakes and streams.

The park is adopting an interim size and possession limit in order to correct this preterition created by the new state regulations until its Fish Management Plan is completed and formal rulemaking occurs to establish new limits on fishing in inland lakes and streams.

Why Less Restrictive Measures Will Not Suffice

The most recent data on the fish community in Siskiwit Lake are from a 1996 survey. The survey showed that Siskiwit Lake contains all 3 haplotypes found in the park's Lake Superior waters (Burnham-Curtis et al), that the Siskiwit Lake fish were slower-growing than their Lake Superior counterparts, and comparable sized individuals weighed less than lean lake trout in Lake Superior (Kallemeyn, 1998.) Anglers and others have reported that lake trout fished from Siskiwit Lake have a darker coloration than Lake Superior fish. Conflicting opinions exist about whether the park's inland lake species such as lake trout may have developed into genetically distinct subspecies (Hubbs and Lagler,1944; Bailey and Smith, 1981). Genetic tests will be necessary to determine if speciation has occurred.

The park is in the process of completing a Fish Management Plan that will include a park-wide synopsis of current and historical fish community research, potential and current threats to fish populations, and research, monitoring, and management recommendations. The plan is a coordinated effort among resource managers and fish biologists, and is expected to be completed in 2007-2008.

Due to the uncertainty about genetic variation, and the expected completion of a management plan, the park is choosing to enact temporary restrictions that are consistent with its historic take limits for lake trout on Siskiwit Lake. Current data do not support less restrictive measures (higher daily possession limits), and in the absence of the genetic information, a more current population size estimate, and the results of the fish management plan, less restrictive measures would not be prudent.

Public Notice

Public notice will be given through publication in the park newspaper. Since this is more of a clarification or reiteration of existing regulations, and the number of Siskiwit anglers is small, additional notice to the public is not necessary.

8. **Public Use Limits – Fishing - Northern Pike in Inland Lakes**

Reason for the Restriction

For many years' park staff, have observed anglers keeping fish that were undersize as they were unable to catch a legal size fish (currently, minimum legal length at Isle Royal is 24") to prepare for a backcountry meal. Many fish smaller than 24" are caught and released in an effort to catch a legal northern pike. Though often promoted as a means of sustaining certain populations of fish, catching and releasing fish does cause some injury and can lead to unforeseen impacts to populations. At Isle Royale, anglers that attempt to catch a legal size fish may catch the same fish more than one time, or may catch several while pursuing a fish of 24" or greater. Both of these situations are undesirable. To give backcountry users a greater opportunity to catch and prepare a northern pike, while still protecting the fishery, the lower limit has been removed.

To protect the most productive spawners, an upper limit of possession of 30" was put into place. This allows up to 30" fish to be available for anglers to possess, while protecting the larger fish (over 30"). These larger fish can be caught and released.

Since 2005 barbless hooks have been required in creeks, streams, rivers, and Hidden Lake. Barbless hooks on all interior lakes reduces damage to caught and released fish within these waters, and simplifies the park fishing regulations for anglers. The term barbless hook applies to the hook being used by the angler at the time of fishing (on the line).

Why Less Restrictive Measures Will Not Suffice
The permissible possession of up to 30" allows anglers the opportunity to keep and prepare a fresh fish meal in a backcountry setting. Larger fish over 30" are often too large to consume and keep fresh in a backcountry setting, and go wasted. These larger fish are also the most productive spawners.

These new regulations include all interior lakes which simplifies regulations park-wide, are easier to understand and follow, and provide angler opportunities while protecting the park's fishery resources.

Using barbless or pinched hooks is an effective method to reduce damage (to mouth parts, gills, etc.) to fish, while being easy for anglers to comply with, by just pinching the barbs down. This reduced damage is especially important to any fish that doesn't meet size requirements, or fish just being caught and released. Anglers fishing with barbless hooks have found they are still able to land fish, with the benefit of much quicker and easier releases.

Public Notice
Public notice will be given through publication in "Michigan Fishing Guide", the park newspaper, park brochures, and on the backcountry permits. Signs will be posted at all visitor centers, ranger stations, and appropriate lakeshore campgrounds announcing the fish regulations.

9. **Public Use Limits – Fishing – Lake Herring (cisco) and Whitefish in Inland Lakes**

Reason for the Restriction
The National Park Service has adopted recreational fishery management policies which reflect resource protection and lower harvest and consumption of the fishery resource. Several park fish species, including the coaster brook trout (determination 5) and cisco are rare and surveys show extremely low population numbers. The inland lake populations of ciscoes, *Coregonus* spp., found in Isle Royale National Park are distinct variants of the species. These inland lake populations are distinct enough to warrant separate species or subspecies status. The population found in Siskiwit Lake are known as Siskiwit Lake cisco, *Coregonus bartletti* (Koelz), and are given full species status. This species is listed as Threatened by the State of Michigan. The remaining populations found in Lake Desor, Lake Richie, and Lake Sargent are variants of *Coregonus artedi*. This species is also listed as Threatened by the State of Michigan. The population(s) found in Lake Sargent are Lake Superior Cisco, *Coregonus artedi arcturus*, and Sargent Lake cisco, *C. artedi sargenti*. Those in Lake Desor are known as Lake Desor cisco, *C. artedi* sp. and those found in Lake Richie are simply Cisco, *C. artedi*. Three of these inland lake populations (*C. bartletti*, *C. artedi arcturus*, and *C. artedi sargenti*) are currently thought to be endemic populations. Ongoing research efforts are underway at Isle Royale with researchers from the U.S. Geologic Survey (USGS) to determine the validity of the taxonomic status. Regardless of the taxonomy, recent survey efforts have revealed that the populations of these fish are severely depressed in all inland lakes that they are known to occur. It is believed that, in part, changes in lake temperatures and water quality have resulted in these depressed population numbers. This restriction is being enacted to protect the remaining fish until research provides more reliable information on which to base management actions.

Why Less Restrictive Measures Will Not Suffice
The inland lake populations of cisco are currently at the point where continued harvest may cause local extinction of the species, if has not already occurred. In 1997, USGS researchers

documented low population numbers of fish in all four inland lakes where they occur. No management actions were taken at that time. Subsequent surveys in 2010-2011 showed a significant decline in the already exceptionally low population numbers. Extensive survey work in Lake Richie produced no fish and work in Sargent Lake yielded just a single fish, suggesting that long-term viability in these lakes may be in jeopardy. This restriction is considered an interim measure, until research provides definitive answers regarding cisco population viability, genetic diversity, and minimum life history requirements. The State of Michigan has both these species *C. bartletti* and *C. artedi* (and all its subspecies) listed as Threatened species. However, the Lake Superior population of *C. artedi*, is thought to have high enough population density in this lake to allow for recreational fishing of this species in Lake Superior waters. Isle Royale National Park is implementing a "catch and release" designation for ciscoes and whitefish (all Coregonid species) in the park's inland lake waters, again reflecting resource agencies' concerns over the very low populations within these lakes. This action does not limit fishing in the Lake Superior waters surrounding Isle Royale. The Lake Superior population of Cisco*, C. artedi*, is still governed by the State of Michigan fishing regulations for this species. Isle Royale is over 99% federally-designated Wilderness, which carries a strong resource protection mandate, both for the resources themselves, and to maintain them for future generations to experience and enjoy.

Public Notice

Public notice will be given through publication in the park newspaper, the *Greenstone*. This information will also be transmitted to the State of Michigan, Department of Natural Resources (MIDNR) for inclusion as they see necessary in the State of Michigan fishing regulations. Since the number of cisco anglers is small, additional notice to the public is not necessary.

10. **Public Use Limits – Diving - Decontaminating dive gear to prevent spread of AIS/ANS**

Reason for Restriction

Discovery of Zebra mussels, non-native Aquatic Invasive/Nuisance Species (AIS/ANS) at Isle Royale in the fall of 2009 necessitates that we begin taking precautions to minimize the spread of Zebra mussels throughout the park or to other parts of the country. This measure is consistent with what the State of Michigan Department of Natural Resources (DNR) and other National Parks and State Parks in the Great Lakes region are doing with regard to other methods of transportation and transmission of AIS/ANS.

Isle Royale has a very diverse and important native mussel population and one of the most complete and significant collections of underwater archeological resources in the National Park Service. Both of these resources could be irreversibly devastated by Zebra Mussel infestation.

11. **Public Use Limits – General - Transportation of firewood to Isle Royale**

Reason for Restriction

This restriction is necessary to prevent the spread of invasive insect species to Isle Royale. The Emerald Ash Borer (EAB) was found in Michigan in 2002, Wisconsin in 2008, and Minnesota in 2009. All of the surrounding states in the upper mid-west have enacted some form of state or local quarantine as well as the federal government (7 CFR 301.53-1 through 9). It appears the most likely way for an individual in a non-commercial capacity to aid the spread of the EAB is through the transportation of firewood. One of the primary public education messages the states are pushing is not to transport firewood generally at a county to county level.

Firewood transportation to the island is most likely to occur by private boat. However, staff knowledge indicates few known instances of transportation of firewood in recent history. Given this it seems that very few visitors would be affected by a ban on transportation of firewood to Isle Royale.

12. Closures - No person shall knowingly enter within ¼ mile of an active eagle or osprey nest.

Reason for Restriction

Bald Eagles, osprey and other large platform nesting birds can be adversely affected by human activities near nesting sites. *Grub and King (1991) found that pedestrian foot traffic near nests was the most disturbing activity to nesting eagles, even more then gunshots and airplane traffic **Mathisen (1968) also found that distances to nests could affect fledging success. The threshold distance of these birds to human disturbances varies by population. However the distance of ¼ mile set forth in this regulation allows for reasonable human use in the area without significantly impacting the nesting success of these protected raptors.

* Grubb , TG & RM King. 1991. Assessing Human Disturbance of Breeding Bald Eagles with Classification Tree Models , Journal of Wildlife Management, 55(3): 500-51.

** Mathisen, JE 1968. Effects of Human Disturbance on Nesting of Bald Eagles. Journal of Wildlife Management, 32(1): 1-6.

13. Closures - No person shall knowingly enter within ¼ mile of an active wolf den site.

Reason for Restriction

Wolves are intolerant of human activity near den sites in April and May when whelping (birthing) occurs and in the months that follow when humans may be accidently in close proximity to the pups *(Thiel et al 1998). This has a direct management implication in that wolf pups are unable to regulate their body temperatures effectively during the first three weeks of life, are extremely vulnerable and remain close to their mothers near the den site. Alpha female wolves are very protective during this time frame and negative wolf-human interactions can be expected **(Mech et al 1991). Constant disturbance at the den site will prompt the female to move her pups to an alternate den site, possibly exposing the pups to inclement weather creating unnatural stress and mortality. While pup mortality has not been documented due to this behavior, the risk is present. This unnatural level of risk and disturbance is unacceptable to manage these highly intelligent and social animals. In recent years, bold wolf behavior has been seen in the Isle Royale wolf population. Due to the known disturbance effects of humans on wolf dens and rendezvous sites, it is prudent to provide a buffer zone between wolves and humans, especially during the critical time that wolves are raising young. The average mortality rate of wolves on Isle Royale is extremely high with one wolf in four dying each year. The distance of ¼ mile set forth in this regulation allows for reasonable human use in the area without significantly impacting the denning activities of these protected canines'.

* Thiel, RP., Merrill, S & LD Mech. 1998. Tolerance by denning Wolves, Canis lupus, to human disturbance. Canadian Field-Naturalist, 122(2); 340-342.

**Mech, LD, Meier, TJ & JW Burch. 1991. Denali Park Wolf Studies: Implications for Yellowstone. Transactions of the 56th Annual Wildlife & Natural resources Conference

14. Compressor Use

Reason for Restriction

This action implements specific provisions of the park's GMP/FEIS, which was approved by a Record of Decision, signed on May 11, 1999, by the Midwest Regional Director of the National Park Service. A compressor (and the generator used to power them) used to fill SCUBA diving tanks produce significant noise and potential disturbance to park visitors. This action helps protect the natural quiet and wilderness values sought by most Isle Royale visitors. It reduces the impact of mechanical noise on visitors camping in or otherwise using Wilderness, non-developed, and/or developed areas of the park. The action promotes a quality visitor experience by providing relatively tranquil, natural marine surroundings. Park zoning in the GMP/FEIS makes specific provision for allowing the operation of a compressor within Developed and Lake Superior Open Water Motorized Zones (sub-parts a-d, above). Sub-part (e) describes three locations where the operation of an on-board compressor has historically been allowed. These locations are not near any park campgrounds or trails. The Superintendent has determined that the occasional use of an on-board compressor at these locations is not likely to disturb other visitors, and is consistent with allowing, subject to restrictions specified herein, the operation of an on-board generator by a vessel at

anchor within Quiet/No-Wake Zones.

15. Quiet / No Wake Zones

Reason for Restriction

This action implements specific provisions of the park's General Management Plan. Quiet/No Wake Zones were established in the GMP/FEIS for Isle Royale National Park, which was approved by a Record of Decision, signed on May 11, 1999, by the Midwest Regional Director of the National Park Service. The zones are established to protect the natural quiet and wilderness values sought by most Isle Royale visitors, and to reduce wake impacts on park resources and paddlers. The zones promote a quality visitor experience by providing relatively tranquil, natural marine surroundings. Resource condition and character: These zones are located in sheltered Lake Superior harbors and bays where calm water and relative quiet are desirable for safety, resource and visitor experience reasons.

16. No Discharge of Untreated Ballast Water

Reason for the Emergency Regulation

This emergency closure is being enacted to protect Isle Royale National Park fish populations from loss due to transmission of Viral Hemorrhagic Septicemia (VHS).

The VHS virus, a fish pathogen and invasive species, was diagnosed for the first time ever in the Great Lakes in 2005 though it is now known to have been present since 2003 through diagnosis of archived fish samples. It has been responsible for causing extensive fish kills in Lake Huron, Lake St. Clair, Lake Erie, Lake Ontario and the St. Lawrence River in 2005 and 2006. The virus is classified into multiple types I – IV with unique strains occurring within each type. The virus found in the Great Lakes is classified as Type IV-b and appears to have mutated from the isolate known previously from the Atlantic coast of North America. In addition to the North American Atlantic Coast and Great Lakes isolate, other isolates occur on the North American Pacific Coast and in Europe and Asia. European isolates have caused massive mortalities in rainbow trout production facilities and in wild populations of brown trout.

This latest invasive into the Great Lakes system is not known to have been transported into the Lake Superior Basin yet, although infected ballast may have been discharged at Lake Superior ports (from: Wisconsin DNR fact sheet 2007). It has the potential to be more devastating environmentally and ecologically than the sea lamprey which has cost hundreds of millions of dollars in loss to fisheries and requires an annual investment of approximately $18 million by the Great Lakes Fishery Commission and sea lamprey control offices to control populations of this species. Other invasive species such as zebra and quagga mussels have been responsible for massive ecological change in the basin and damage to community infrastructure such as clogging water intake pipes, water filtration and electric plants. The associated control costs from this damage have been estimated at $100 million per year by New York SeaGrant (Pimental et al 2000). Estimated costs to control all aquatic non-indigenous species in the United States are approximately $2.5 billion per year (Pimental et al 2000).

Most significant about this virus's invasion of the Great Lakes is that it has impacted several species, many which were not known to be affected by other variants of the virus. Since we continue to find newly impacted species, it is still not known how many families of fish could ultimately be affected. However European varieties are known to affect trout and other salmonids and have been suspected in causing outbreaks in lake trout. The Great Lakes variety is currently causing massive die offs in 8 species in the Great Lakes including commercially and recreationally important species such as walleye, smallmouth bass, muskellunge and yellow perch. Other species that have been affected by the virus include freshwater drum, white bass, black crappie and bluegill. Species that are known to be carriers of the virus in the Great Lakes include Chinook

salmon, rock bass, silver and shorthead redhorse, northern pike, burbot, spottail shiners and emerald shiners (Wisconsin SeaGrant fact sheet). This is the first time that a virus has affected so many different fish species from so many fish families in the Great Lakes, and because European varieties impact many species of salmonids (the family which includes trout, salmon, whitefish and char), the potential for the Great Lakes variety to have impacts on lake trout and several other species is very high.

The VHS virus is readily transmissible to fish of all ages, and survivors of infection can become lifelong carriers that shed virus with urine and sex products. Fish of any age are susceptible to infection, and epizootic losses occur at temperatures of 3° to 12°C (37-54 °F) (mortality is greatest at 3° to 5°C (37-41 °F). The optimum temperature for virus replication is 14-15°C; virus yield is reduced at 6°C, and little replication occurs above 20°C. (Fish Disease Leaflet 83, USGS Leetown Science Center) Because the virus replicates and is particularly virulent at cooler temperatures, Lake Superior could provide an ideal environment for large scale replication and many species found in the lake could be susceptible.

Because of the possible infection of lake trout and documented infections of coregonids (whitefish, lake herring and related species), potential impacts to Lake Superior species and in particular the Isle Royale fishery could be catastrophic.

Why Less Restrictive Measures Will Not Suffice

Isle Royale is a unique refuge for Lake Trout with approximately 12 phenotypes found around the island. Lake trout is the most common sport fish sought at Isle Royale, and a limited commercial fishery is still supported by populations at and around the island. Nearly 10,000 lake trout were harvested by sport anglers at Isle Royale during a survey conducted in 2000. Lake Superior is the only Great Lake where lake trout populations are considered to be rehabilitated following population crashes in the mid 20th century due to sea lamprey invasions. Isle Royale is considered as one of only a few locations where lake trout stocks still maintain a high level of their original genetic composition. Any loss of stocks from the island would be a loss of genetic material and valuable information that would compromise ongoing efforts to restore lake trout populations in the other Great Lakes.

In addition to several phenotypes of lake trout at Isle Royale, species such as coaster brook trout, lake whitefish, round whitefish (menominee), cisco (lake herring) and other coregonids could be impacted. These are all either commercially or recreationally important species throughout Lake Superior.

In addition to their commercial importance, the coregonids are a primary and important food base for lake trout, brook trout and other predator species and loss of these species affects the entire Lake Superior food web.

The coaster brook trout populations from Isle Royale are two of only a few populations in the Great Lakes that are considered to be self sustaining. Fish from these populations have been used to help restoration efforts in other parts of the lake. Additionally, coaster brook trout were recently petitioned for listing under the Federal Endangered Species Act. Catch and release only restrictions have already been enacted at all of Isle Royale to protect this species. Any impact to the Isle Royale populations could severely compromise the long term sustainability of these populations and lake-wide restoration efforts.

Ships may increase the chances of the virus being spread from infected areas within the Great Lakes. The current voluntary actions of the Lake Carriers Association are insufficient. In short, 2 years from the time VHS was found in Lake St. Claire it has been transported to Lake Huron, Lake

Michigan and two inland lakes in Wisconsin. If contaminated ballast water from a lower lake is untreated and discharged within Park waters Isle Royale National Park could record the first impacts in Lake Superior. Target species affected includes brood stocks of coaster brook trout and severely alter the population dynamics and populations on the Island in violation of 36 CFR 2.1(a)(2), "Introducing wildlife, fish or plants, including their reproductive bodies, into a park area ecosystem."

Movement of the virus can occur by transportation of water or through infected fish. Because movement of fish through the Soo Locks from Lake Huron to Lake Superior is very limited, the most likely way the virus would be spread to Lake Superior is through ballast water. The states of Michigan and Wisconsin have already established stringent regulations on the bait fish industry, and the USDA Animal and Plant Health Inspection Service has placed restrictions on movement of fish throughout the Great Lakes States. The virus cannot withstand passage through bird digestive tracts, so transport through avian species is not likely.

According to the EPA Ballast water transfers are responsible for 30 % of the invasive species found in the Great Lakes (EPA Website Accessed August 31, 2007 EPA - Great Lakes - Invasive Species). More than one third of Great Lakes invasive species have been introduced in the past 30 years, coinciding with the opening of the St Lawrence Seaway (Great Lakes Information Network Website, Accessed August 31, 2007 - Invasive Species in the Great Lakes Region#ballast).

Due to the hydrology of the Lakes the virus can be contained if transmission vectors are closed, at an optimum, and at a minimum, its rate of spread to Lake Superior slowed allowing fish species affected to survive and develop immune strains if rapid response is initiated.

By limiting the discharge to only treated ballast water within Park waters, the primary vessel affected is the NPS m/v Ranger III, or future cruise ships where the issue can be addressed during the Special Use process. Recent USCG reports have indicated commercial vessels using the shipping lanes are complying with the closure and enhanced awareness of USCG regulations. Additional restrictions of these vessels may become necessary as the virus spreads.

The action promotes a quality visitor experience by providing relatively tranquil, natural marine and/or wilderness surroundings consistent with the values enunciated by the Wilderness Act, Park Purpose Statements, and other applicable law and policy.

17. Fruits, nuts, or berries may be gathered by hand for personal use or consumption

Reason for Restriction

The picking of edible berries is to be allowed due to the non-destructive, non-invasive nature of the activity. The consumption limits set forth in the compendium provide adequate protection of the resources to prevent over-use and a decrease in the subsequent availability to these resources in future years. Further, at the currently set limits, sufficient amounts will remain available for wildlife use. Care should be taken to disturb plants as little as possible during all subsistence gathering activities

18. Area Closure for Commercial Kayak Trips

Reason for Restriction

This action implements part of the GMP for Pristine Zones, preventing the establishment of undesignated campsites by repeated use in sensitive resource areas and will help maintain isolated shorelines with outstanding opportunities for solitude.

19. Docks/Buoys Closed to Camping and Overnight Docking/Mooring

Reason for Restriction

Docks located at Raspberry Island, Edisen Fishery, Passage Island, and the Hidden Lake are located in areas designated for day use only. These areas do not have necessary facilities for overnight use. Closure of the docks to overnight use provides ready access to the docks for transient vessels whose occupants desire to hike the day use trails or visit the interpretive exhibits at these locations. Further, the closures help protect sensitive natural and/or cultural resources at these locations. The north side of the Malone Bay dock, the Ranger III dock at Snug Harbor, the NPS and concession fuel docks, and the docks at Amygdaloid and Mott Islands are closed to provide for the docking needs of NPS vessels used for park administrative and emergency purposes. The America dock is closed to provide interpretation of the historic scene and to provide an inspirational and uninterrupted viewing platform for visitors of the Rock Harbor Channel and surrounding islands. Shipwreck mooring buoys were established solely to secure vessels actively diving or in the process of diving on the shipwreck sites and to protect historic resources.

20. Food Storage

Reason for Restriction

Each year squirrels chew into backpacks or tents in search of food, and causing property damage to camping gear. Foxes make off with a bag of trash or an unattended/unsecured food sack spreading trash about the backcountry. Each time they get a taste of human food they are rewarded and the behavior continues. In 2007, wolves were being seen more often near campsites though have yet to learn of human food. In an effort to prevent wolf habituation to humans, and decrease that of fox, squirrel, and others we must increase our efforts to keep our food and trash from being accessed by Isle Royale's wildlife.

21. Boating Operations - Flat Wake Speed

Reason for Restriction

In the interest of safety areas may be designated for flat wake speed. In the occasional circumstance that a vessel is beached restricting vessels in waters within 300' will help to minimize damage to the beached vessel and be less likely to upset the balance of a person boarding or exiting a beached vessel.