

NRR-PMDAPEm Resource

From: Moser, Michelle
Sent: Tuesday, April 26, 2016 12:16 PM
To: brittnie.brauner@mdc.mo.gov
Subject: Environmental Review for the Proposed Northwest Medical Isotopes, LLC Facility
Attachments: MDC 2015. Natural Heritage Review for the Proposed NWMI Facility ML15355A246.pdf; State-Endangered Species for Northwest Medical Isotopes Project.docx

Brittnie,

It was a pleasure to talk with you the other day on the phone. As I mentioned during our conversation, I am a biologist with the U.S. Nuclear Regulatory Commission (NRC). Northwest Medical Isotopes, LLC (NWMI) submitted an application to the NRC to construct a radioisotope production facility that, if licensed, would produce medical radioisotopes. NWMI would construct a production facility building, a support facility, a waste staging and shipping building, diesel generator building, administration building, and security stations. The proposed Discovery Ridge site includes 7.4 acres (ac) (3.0 hectares (ha)) of land located about 3 mi (5 km) southeast of the City of Columbia. The proposed site has been used for agricultural purposes for several decades. In its application to the NRC, NWMI did not identify any forests, prairies, riparian zones, or streams on the proposed Discovery Ridge site.

Attached is a Natural Heritage Level 3 Report regarding the proposed NWMI project. In addition, I've attached a list of State-endangered species that have the potential to occur on or near the site. The attached list of species also includes Federally-listed species, which is based on information provided by the U.S. Fish and Wildlife Service. Per our conversation, the NRC requests any additional information you may have regarding State-protected species, Natural Communities of Conservation Concern, and any other important ecological resource on or near the proposed Discovery Ridge site.

Please feel free to contact me if I can provide any additional information. My phone number is 301-415-6509 and my email is Michelle.Moser@nrc.gov.

Regards,

Michelle Moser

Michelle Rome Moser
Biologist
U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of License Renewal
Phone: 301-415-6509
Email: Michelle.Moser@nrc.gov

Hearing Identifier: NRR_PMDA
Email Number: 2801

Mail Envelope Properties (Michelle.Moser@nrc.gov20160426121600)

Subject: Environmental Review for the Proposed Northwest Medical Isotopes, LLC Facility
Sent Date: 4/26/2016 12:16:22 PM
Received Date: 4/26/2016 12:16:00 PM
From: Moser, Michelle

Created By: Michelle.Moser@nrc.gov

Recipients:
"brittnie.brauner@mdc.mo.gov" <brittnie.brauner@mdc.mo.gov>
Tracking Status: None

Post Office:

Files	Size	Date & Time
MESSAGE	2056	4/26/2016 12:16:00 PM
MDC 2015. Natural Heritage Review for the Proposed NWMI Facility ML15355A246.pdf		
809215		
State-Endangered Species for Northwest Medical Isotopes Project.docx		24449

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:



Missouri Department of Conservation

Missouri Department of Conservation's Mission is to protect and manage the forest, fish, and wildlife resources of the state and to facilitate and provide opportunities for all citizens to use, enjoy and learn about these resources.

Natural Heritage Review Level Three Report: Species Listed Under the Federal Endangered Species Act

There are records for species listed under the Federal Endangered Species Act, and possibly also records for species listed Endangered by the state, or Missouri Species and/or Natural Communities of Conservation Concern within or near the the defined Project Area. Please contact the U.S. Fish and Wildlife Service and the Missouri Department of Conservation for further coordination.

Foreword: Thank you for accessing the Missouri Natural Heritage Review Website developed by the Missouri Department of Conservation with assistance from the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, Missouri Department of Transportation and NatureServe. The purpose of this website is to provide information to federal, state and local agencies, organizations, municipalities, corporations and consultants regarding sensitive fish, wildlife, plants, natural communities and habitats to assist in planning, designing and permitting stages of projects.

PROJECT INFORMATION

Project Name and ID Number: NWMI Proposed Facility #155

Project Description: Northwest Medical Isotopes, LLC (NWMI) submitted an application to the U.S. Nuclear Regulatory Commission to construct a radioisotope production facility that, if licensed, would produce radioisotopes. The proposed site would cover approximately 7.4 acres (3.0 ha), which would include a production facility building, a support facility, a waste staging and shipping building, diesel generator building, administration building and security stations. The site has been used for agricultural purposes. In its application, NWMI did not identify any forests, prairies, riparian zones, or streams on the proposed site.

Project Type: Residential, Commercial and Governmental Building Development

Contact Person: Michelle Moser

Contact Information: Michelle.Moser@nrc.gov or 301-415-6509

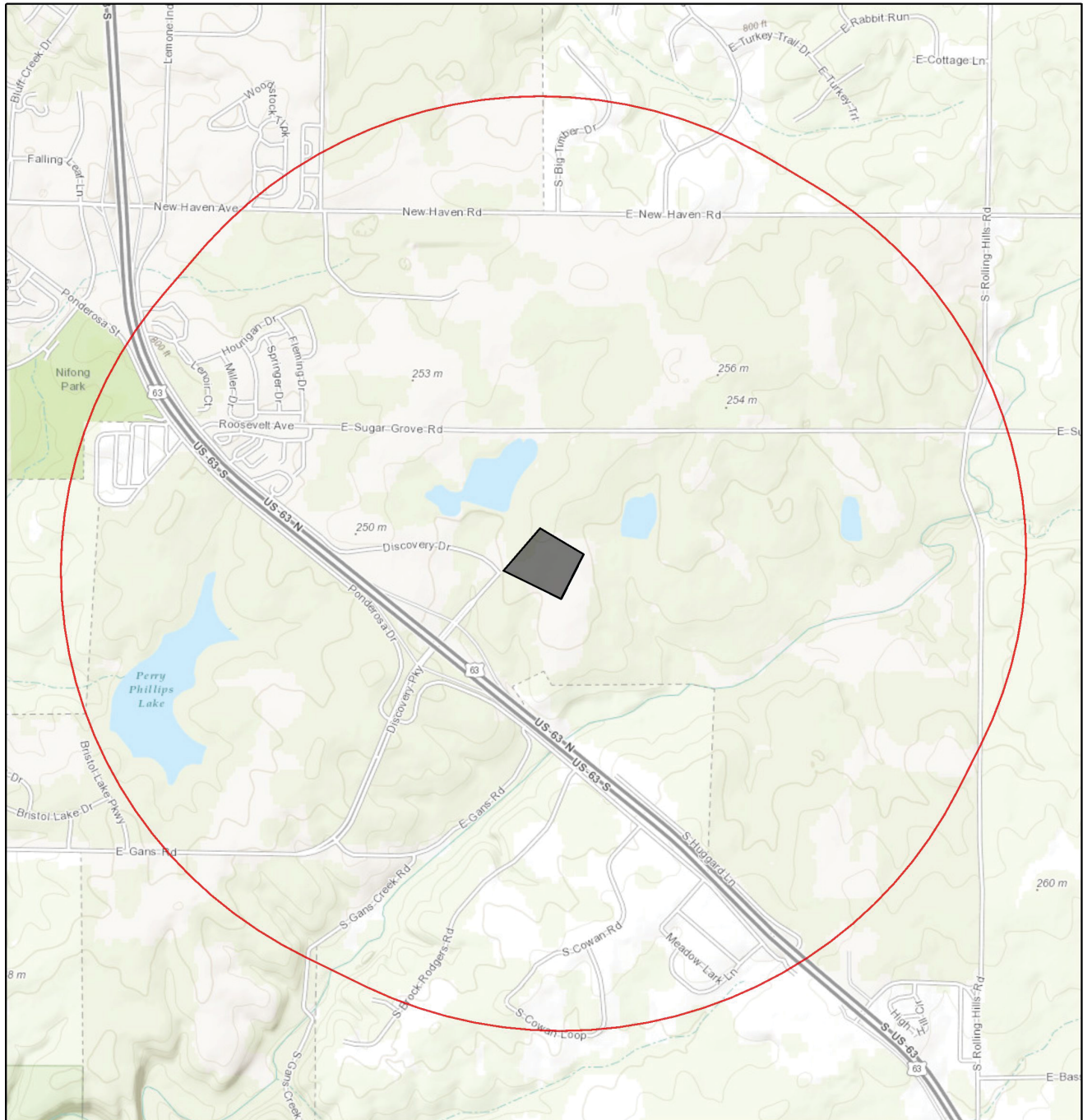
Disclaimer: The NATURAL HERITAGE REVIEW REPORT produced by this website identifies if a species tracked by the Natural Heritage Program is known to occur within or near the area submitted for your project, and shares suggested recommendations on ways to avoid or minimize project impacts to sensitive species or special habitats. If an occurrence record is present, or the proposed project might affect federally listed species, the user must contact the Department of Conservation or U.S. Fish and Wildlife Service for more information. The Natural Heritage Program tracks occurrences of sensitive species and natural communities where the species or natural community has been found. Lack of an occurrence record does not mean that a sensitive plant, animal or natural community is not present on or near the project area. Depending on the project, current habitat conditions, and geographic location in the state, surveys may be necessary. Additionally, because land use conditions change and animals move, the existence of an occurrence record does not mean the species/habitat is still present. Therefore, Reports include information about records near but not necessarily on the project site.

The Natural Heritage Report is not a site clearance letter for the project. It provides an indication of whether or not public lands and sensitive resources are known to be (or are likely to be) located close to the proposed project. Incorporating information from the Natural Heritage Program into project plans is an important step that can help reduce unnecessary impacts to Missouri's sensitive fish, forest and wildlife resources. However, the Natural Heritage Program is only one reference that should be used to evaluate potential adverse project impacts. Other types of information, such as wetland and soils maps and on-site inspections or surveys, should be considered. Reviewing current landscape and habitat information, and species' biological characteristics would additionally ensure that Missouri Species of Conservation Concern are appropriately identified and addressed in planning efforts.

U.S. Fish and Wildlife Service – Endangered Species Act (ESA) Coordination: Lack of a Natural Heritage Program occurrence record for federally listed species in your project area does not mean the species is not present, as the area may never have been surveyed. Presence of a Natural Heritage Program occurrence record does not mean the project will result in negative impacts. The information within this report is not intended to replace Endangered Species Act consultation with the U.S. Fish and Wildlife Service (USFWS) for listed species. Direct contact with the USFWS may be necessary to complete consultation and it is required for actions with a federal connection, such as federal funding or a federal permit; direct contact is also required if ESA concurrence is necessary. Visit the USFWS Information for Planning and Conservation (IPaC) website at <https://ecos.fws.gov/ipac/> for further information. This site was developed to help streamline the USFWS environmental review process and is a first step in ESA coordination. The Columbia Missouri Ecological Field Services Office may be reached at 573-234-2132, or by mail at 101 Park Deville Drive, Suite A, Columbia, MO 65203.

Transportation Projects: If the project involves the use of Federal Highway Administration transportation funds, these recommendations may not fulfill all contract requirements. Please contact the Missouri Department of Transportation at 573-526-4778 or www.modot.mo.gov/ehp/index.htm for additional information on recommendations.

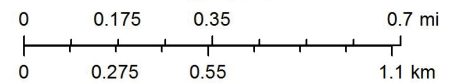
NWMI Proposed Facility



December 18, 2015

1:20,524

- Project Boundary
- Buffered Project Boundary



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Species or Communities of Conservation Concern within the Area:

There are records for species listed under the Federal Endangered Species Act, and possibly also records for species listed Endangered by the state, or Missouri Species and/or Natural Communities of Conservation Concern within or near the the defined Project Area. Please contact the U.S. Fish and Wildlife Service and the Missouri Department of Conservation for further coordination.

MDC Natural Heritage Review
Resource Science Division
P.O. Box 180
Jefferson City, MO
65102-0180
Phone: 573-522-4115 ext. 3182
NaturalHeritageReview@mdc.mo.gov

U.S. Fish and Wildlife Service
Ecological Service
101 Park Deville Drive
Suite A
Columbia, MO
65203-0007
Phone: 573-234-2132

Other Special Search Results:

The project occurs on public land, CENTRAL REGIONAL OFFICE, COLUMBIA (A PERRY PHILIPS PARK LAKE), UNIV OF MO (SOUTH FARM R-1 LAKE), please contact MDC.

Project Type Recommendations:

New construction, maintenance and remodeling, including government, commercial and residential buildings and other structures. Fish, forest, and wildlife impacts can be avoided by siting projects in locations that have already been disturbed or previously developed, where and when feasible, and by avoiding alteration of areas providing existing habitat, such as wetlands, streams, forest, native grassland, etc. The project should be managed to minimize erosion and sedimentation/runoff to nearby wetlands, streams and lakes, including adherence to any "Clean Water Act Permit" conditions. Project design should include stormwater management elements that assure storm discharge rates to streams for heavy rain events will not increase from present levels. Revegetate areas in which the natural cover is disturbed to minimize erosion using native plant species compatible with the local landscape and wildlife needs. Annual ryegrass may be combined with native perennials for quicker green-up. Avoid aggressive exotic perennials such as crownvetch and sericea lespedeza. Pollutants, including sediment, can have significant impacts far downstream. Use silt fences and/or vegetative filter strips to buffer streams and drainages, and monitor the site after rain events and until a well-rooted ground cover is reestablished.

Project Location and/or Species Recommendations:

Endangered Species Act Coordination - Indiana bats (*Myotis sodalis*, federal- and state-listed endangered) and **Northern long-eared bats** (*Myotis septentrionalis*, federal-listed threatened) hibernate during winter months in caves and mines. During the summer months, they roost and raise young under the bark of trees in wooded areas, often riparian forests and upland forests near perennial streams. During project activities, avoid degrading stream quality and where possible leave snags standing and preserve mature forest canopy. Do not enter caves known to harbor Indiana bats, especially from September to April. **If any trees need to be removed for your project, please contact the U.S. Fish and Wildlife Service (Ecological Services, 101 Park Deville Drive, Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132) for further coordination.**

The project site submitted and evaluated is on or near Fish Spawning Stream Reaches Gans River, one of 138 state-designated fish spawning stream segments. These stream reaches were so designated because they have highly diverse fish communities, fish Species of Conservation Concern present, and because they are important to maintaining, restoring, or avoiding future listing of Species of Conservation Concern. These stream reaches also are included as a Missouri Nationwide Permit Regional Condition (Number 2) that must be considered if working under a Clean Water Act Section 404 Permit issued by the U.S. Army Corps of Engineers (<http://www.nwk.usace.army.mil/Missions/RegulatoryBranch/NationWidePermit...>). A list of all stream reaches is available at <http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/nationwidepermi...>. Activities that alter or destabilize stream bottoms or banks should be avoided during the important fish spawning period for that stream, in order to not disrupt fish spawning (i.e., laying and fertilizing fish eggs.) The sensitive spawning period for this stream is March 15th to June 15th. At all times, avoid habitat destruction or introducing heavy sediment loads, chemical or organic pollutants.

Invasive exotic species are a significant issue for fish, wildlife and agriculture in Missouri. Seeds, eggs, and larvae may be moved to new sites on boats or construction equipment. Please inspect and clean equipment thoroughly before moving between project sites. See <http://mdc.mo.gov/9633> for more information.

- Remove any mud, soil, trash, plants or animals from equipment before leaving any water body or work area.
- Drain water from boats and machinery that have operated in water, checking motor cavities, live-well, bilge and transom wells, tracks, buckets, and any other water reservoirs.
- When possible, wash and rinse equipment thoroughly with hard spray or HOT water (?140° F, typically available at do-it-yourself car wash sites), and dry in the hot sun before using again.

Streams and Wetlands – Clean Water Act Permits: Streams and wetlands in the project area should be protected from activities that degrade habitat conditions. For example, soil erosion, water pollution, placement of fill, dredging, in-stream activities, and riparian corridor removal, can modify or diminish aquatic habitats. Streams and wetlands may be protected under the Clean Water Act and require a permit for any activities that result in fill or other modifications to the site. Conditions provided within the U.S. Army Corps of Engineers (USACE) Clean Water Act Section 404 permit (<http://www.nwk.usace.army.mil/Missions/RegulatoryBranch.aspx>) and the Missouri Department of Natural Resources (DNR) issued Clean Water Act Section 401 Water Quality Certification (<http://dnr.mo.gov/env/wpp/401/index.html>), if required, should help minimize impacts to the aquatic organisms and aquatic habitat within the area. Depending on your project type, additional permits may be required by the Missouri Department of Natural Resources, such as permits for stormwater, wastewater treatment facilities, and confined animal feeding operations. Visit <http://dnr.mo.gov/env/wpp/permits/index.html> for more information on DNR permits. Visit both the USACE and DNR for more information on Clean Water Act permitting.

For further coordination with the Missouri Department of Conservation and the U.S. Fish and Wildlife Services, please see the contact information below.

MDC Natural Heritage Review
Resource Science Division
P.O. Box 180
Jefferson City, MO
65102-0180
Phone: 573-522-4115 ext. 3182
NaturalHeritageReview@mdc.mo.gov

U.S. Fish and Wildlife Service
Ecological Service
101 Park Deville Drive
Suite A
Columbia, MO
65203-0007
Phone: 573-234-2132

Miscellaneous Information

FEDERAL Concerns are species/habitats protected under the Federal Endangered Species Act and that have been known near enough to the project site to warrant consideration. For these, project managers must contact the U.S. Fish and Wildlife Service Ecological Services (101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132; Fax 573-234-2181) for consultation.

STATE Concerns are species/habitats known to exist near enough to the project site to warrant concern and that are protected under the Wildlife Code of Missouri (RSMo 3 CSR 10). "State Endangered Status" is determined by the Missouri Conservation Commission under constitutional authority, with requirements expressed in the Missouri Wildlife Code, rule 3CSR 10-4.111. Species tracked by the Natural Heritage Program have a "State Rank" which is a numeric rank of relative rarity. Species tracked by this program and all native Missouri wildlife are protected under rule 3CSR 10-4.110 General Provisions of the Wildlife Code.

Additional information on Missouri's sensitive species may be found at <http://mdc.mo.gov/discover-nature/field-guide/endangered-species>. Detailed information about the animals and some plants mentioned may be accessed at http://mdc4.mdc.mo.gov/applications/mofwis/mofwis_search1.aspx. If you would like printed copies of best management practices cited as internet URLs, please contact the Missouri Department of Conservation.

**Table 1. Federally and State-Listed Species
that may occur on or near the Proposed Discovery Ridge Site for the Proposed
Northwest Medical Isotope, LLC Project**

Scientific Name	Common Name	Federal Status ^(a)	State Status ^(a)	Habitat
Fish				
<i>Anguilla rostrate</i>	Topeka shiner	E	E	Pools of small prairie streams with good water quality and gravel streambeds
<i>Scaphirhynchus albus</i>	pallid sturgeon	E	E	Missouri River and lower portions of the Mississippi River; Currently extirpated from Missouri
Mammals				
<i>Myotis grisescens</i>	gray bat	E	E	Caves year-long
<i>Myotis septentrionalis</i>	northern long-eared bat	T		Caves or mines during the winter and trees with loose bark or caves in the summer
<i>Myotis sodalist</i>	Indiana bat	E	E	Caves during the winter and large diameter trees with loose bark in summer
<i>Spilogale putorius interrupta</i>	plains spotted skunk		E	Tallgrass prairies, forests, brushy areas, and cultivated lands with brushy cover
Birds				
<i>Botaurus lentiginosus</i>	American bittern		E	Freshwater marshes with dense stands of reeds and cattails
<i>Calidris canutus rufa</i>	red knot	T		Migrate from the arctic to South America. Stopover habitat in Missouri most often includes muddy or sandy areas near the Missouri River
<i>Charadrius melodus</i>	pipin plover	T		Wide, flat, open, sandy beaches with very little vegetation; Nesting occurs near small creeks or wetlands
<i>Sterna antillarum</i>	least tern	E	E	Sand islands along the lower Mississippi River; Historically nested on sand islands along the Missouri River
Plants				

Scientific Name	Common Name	Federal Status ^(a)	State Status ^(a)	Habitat
<i>Trifolium stoloniferum</i>	running buffalo clover	E	E	Moist, partially shaded woodlands and to a lesser extent, along stream or river terraces

(a,b) T = threatened, E = endangered

Sources: NWMI 2015a; Niles et al. 2008; FWS 2015a, 2015b, 2015c; MDC 2000a, 2000b, 2016; NRC 2015

References:

[FWS] Fish and Wildlife Service. 2015a. Letter from Amy Salveter, FWS, to NRC, Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project. Consultation Code: 03E14000-2016-SLI-0314. November 20, 2015. ML15335A002.

[FWS] Fish and Wildlife Service. 2015b. Northern Long-Eared Bat, *Myotis septentrionalis*. Fort Snelling, Minnesota. April 2015. Available at: <http://www.fws.gov/Midwest/endangered/mammals/nleb/nlebFactSheet.html> (accessed 13 April 2016).

[FWS] Fish and Wildlife Service. 2015c. Endangered Species Fact Sheet: Piping Plover. Fort Snelling, Minnesota. Last updated 23 April 2015. Available at: <http://www.fws.gov/midwest/endangered/pipingplover/pipingpl.html> (accessed 13 April 2016).

[MDC] Missouri Department of Conservation. 2000a. Missouri Animals of Conservation Concern. Jefferson City, Missouri. Available at: http://mdc.mo.gov/sites/default/files/resources/2010/04/4068_1693.pdf (accessed 13 April 2016).

[MDC] Missouri Department of Conservation 2000b. Missouri Plants of Conservation Concern. Jefferson City, Missouri. Available at: http://mdc.mo.gov/sites/default/files/resources/2010/04/4069_1692.pdf (accessed 13 April 2016).

[MDC] Missouri Department of Conservation. 2016a. Missouri Species and Communities of Conservation Concern Checklist. January 2016. Available at: http://nature.mdc.mo.gov/sites/default/files/downloads/2016_SOCC.pdf (accessed 13 April 2016).

Niles LJ, Sitters HP, Dey AD, Atkinson PW, Baker AJ, Bennet KA, Carmoa R, Clark KE, Clark NA, Espoza C. 2008. Status of the red knot (*Calidris canutus rufa*) in the Western Hemisphere. *Studies in Avian Biology* 36:1–185.

[NWMI] Northwest Medical Isotopes, LLC. 2015. Preliminary Safety Analysis Report (PSAR), Chapter 19, "Environmental Report." Corvallis, OR: NWMI. January 2015. ADAMS No. ML15086A261.

[NRC] U.S. Nuclear Regulatory Commission. 2015. Teleconference Summary with Michelle Moser, NRC and Amy Salveter, FWS. Subject: Scoping Comments Regarding the Environmental Review for the Northwest Medical Isotopes, LLC (NWMI) Construction Permit Application. December 3, 2015. ADAMS No. ML15362A225.