

NRC-14-0073

**Response to License Renewal Environmental Request for
Additional Information**

Enclosure 2

LUVR-5 - NANL-13-0091

Fermi 2
6400 North Dixie Hwy
Newport, MI 48166



October 29, 2013
NANL-13-0091

Mr. Chris Antieau
Environmental Quality Specialist
Department of Environmental Quality
Water Resources Division
Great Lakes Shoreland Unit
Constitution Hall
525 West Allegan Street
P.O. Box 30458
Lansing, MI 48909-7958

Subject: DTE Electric Company (DTE), Coastal Zone
Management Consistency Determination for the
Renewal of the Fermi 2 Nuclear Power Plant License

Dear Mr. Antieau:

DTE plans to submit a license renewal application for the Fermi 2 Nuclear Power Plant (Fermi 2), located in Newport, Michigan, to the Nuclear Regulatory Commission (NRC), in April of 2014. The NRC's environmental review of the Fermi 2 application will include, among other activities, Coastal Zone Management Act considerations (originally passed in 1972). During a telephone conversation on September 3, 2013, you discussed the process necessary to obtain MDEQ review of the Fermi 2 Coastal Zone Management Consistency Determination with Mr. Randall Westmoreland of DTE. Pursuant to that discussion, subsequent to submittal of the Fermi 2 license renewal application to the NRC, DTE will provide your office with the following:

- A written request for MDEQ Coastal Zone Management Consistency Determination for Fermi 2
- The Fermi 2 License Renewal Application Environmental Report

DTE will schedule a meeting with you to deliver the requested documents; we will also provide an overview of the Fermi 2 Environmental Report contents at that time. It is our understanding that a typical review will take approximately 60 calendar days.

NANL-13-0091

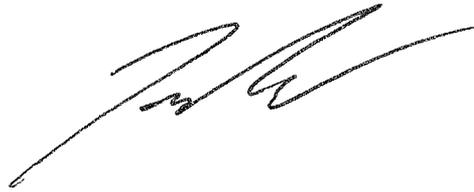
Page 2

Please inform us of any changes to the information provided herein, or if you have any questions or requests for additional documentation that DTE can provide your office regarding this matter.

Please address all correspondence or inquiries to:

Randall Westmoreland
6400 N. Dixie Hwy, 110NOC
Newport, MI 48166
westmorelandr@dteenergy.com
734-586-1445

Sincerely,

A handwritten signature in black ink, appearing to read 'Zackary W. Rad', with a long horizontal flourish extending to the right.

Zackary W. Rad
Manager, Nuclear Licensing

NRC-14-0073

**Response to License Renewal Environmental Request for
Additional Information**

Enclosure 2

LUVR-5 - MDEQ Consistency Determination Correspondence



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



DAN WYANT
DIRECTOR

July 28, 2014

Mr. Randall Westmoreland
DTE Energy Company
6400 North Dixie Highway 110NOC
Newport, Michigan 48166

Dear Mr. Westmoreland:

Subject: Federal Consistency Determination, Nuclear Regulatory Commission's
Relicensing of Fermi 2 Nuclear Facility, Frenchtown Township, Monroe County,
Michigan

Staff of the Department of Environmental Quality (DEQ), Water Resources Division has reviewed this phase of the project for consistency with Michigan's Coastal Management Program (MCMP), as required by Section 307 of the Coastal Zone Management Act, PL 92-583, as amended (CZMA). Thank you for providing the opportunity to review this proposed activity.

Our review indicates that portions of this project are located within Michigan's coastal management boundary and are subject to consistency requirements.

A determination of consistency with MCMP requires evaluation of a project to determine if it will have an adverse impact on coastal land or water uses or coastal resources. Projects are evaluated using the permitting criteria contained in the regulatory statutes administered by the DEQ. These statutes constitute the enforceable policies of the Coastal Management Program.

Provided all required permits are issued and complied with, no adverse impacts to coastal resources are anticipated from this phase of the project as described in the information you forwarded to our office. Issuance of all required permits will certify the activity for which the permits were issued as consistent with MCMP. Additionally, all conditions in the NRC license must be adhered to. If no permits are required, the license renewal shall be considered consistent with MCMP as of the date of this letter.

This consistency determination does not waive the need for permits that may be required under other federal, state or local statutes. If you have any questions regarding this review, please contact me at 517-290-5732, antieauc@michigan.gov; or DEQ, P.O. Box 30458; Lansing, Michigan 48909-7958.

Sincerely,

Chris Antieau
Great Lakes Shorelands Unit
Water Resources Division

NRC-14-0073

**Response to License Renewal Environmental Request for
Additional Information**

Enclosure 2

TE-1 - a_TE-5 2000 Wildlife Management Plan

Wildlife Management Plan

for

Fermi 2 Power Plant
The Detroit Edison Company

Prepared by:
Fermi 2 Power Plant Wildlife Habitat Team
in cooperation with
Wildlife Habitat Council

August 2000

Wildlife Management Plan for Fermi 2 Power Plant

TABLE OF CONTENTS

I.	Introduction	p. 3
II.	Site Description	p. 4
III.	Site Inventory	p. 5
IV.	Goals, Objectives and Prescriptions	p. 7
V.	Monitoring and Maintenance	p. 14
VI.	Implementation Schedule	p. 15
VII.	Community References	p. 17
VIII.	Media Material	p. 18
IX.	Appendices	
	Appendix A – Site map of Fermi 2 Nuclear Power Plant	p. 19
	Appendix B – Species List	p. 20
	Appendix C – Activities Journal	p. 42
	Appendix D – Christmas Bird Count	p. 45
	Appendix E – Pheasant Program	p. 50
	Appendix F – Photo Documentation	p. 51

Wildlife Management Plan for Fermi 2 Power Plant

I. INTRODUCTION

The Detroit Edison Company is the largest electric utility in Michigan, serving 1.9 million customers in the southeastern portion of the state. With ten operating power plants and numerous service centers, stations, substations, offices and transmission corridors, Detroit Edison is the second largest land owner in the state. The Fermi 2 Power Plant is Detroit Edison's only nuclear powered electrical generating station. It was licensed for full power nuclear operation in July 1985 and was the 93rd nuclear power plant to be licensed in the United States. Fermi's electrical generating capacity is 1154 megawatts at 22,000 volts. The reactor contains 185 control rods and 765 zirconium alloy fuel assemblies containing 15 million uranium oxide enriched pellets. The electricity produced by one fuel pellet, roughly the size of a pencil eraser, is equal to the amount produced by 4 ½ barrels of oil or one ton of coal.

The Detroit Edison Company is involved in many environmental stewardship initiatives from planting more than 14 million trees in Michigan since 1995 to participating in a peregrine falcon nesting program. The Company has been a member of the Wildlife Habitat Council since 1995 and has been helping support the St. Clair River Waterways for Wildlife Project. Detroit Edison has been expanding its involvement in WHC programs with several facilities certified as wildlife sites (the Belle River and Monroe Plants) and others now enrolled in the Wildlife at Work program.

To help further expand the Company's involvement, the WHC's Director of the Great Lakes Region, Bryan Knowles, visited the Fermi 2 Power Plant site in June 2000. During the site visit Bryan assessed the current and potential habitat to develop wildlife habitat enhancement recommendations and subsequently prepared a "Habitat Opportunities" report.

Wildlife Management Plan for Fermi 2 Power Plant

II. SITE DESCRIPTION

The Fermi 2 Power Plant is located at 6400 North Dixie Highway in Newport, Michigan north of Monroe and south of Detroit. The facility is a nuclear powered electrical generating plant located on the shore of Lake Erie and encompasses approximately 1,120 acres of land with about 680 acres of land available for wildlife. State endangered, threatened, or species of special concern can be found on the property, including the American lotus, Eastern fox snake and Blanding's turtle. Property is bounded by farm land and Lake Erie to the north, Lake Erie to the east, Pointe Aux Peaux Road to the south, and farm land to the west. See site map (Appendix A).

Fermi Drive serves as the main entrance to the plant and bisects the property into the north and south halves. The northern half of the property has two forested lowland wetlands referred to as Whitetail Haven and Heron Slough. A Lake Erie coastal wetland is also located in the northern half of the property and referred to as the North Lagoon. The remainder of the northern half is developed for plant operations including the Fermi 2 Power Plant, the Visitor's Center, office buildings and parking lots. The southern half of the property is relatively undeveloped and available for wildlife. A large coastal wetland, the South Lagoon, is located in the eastern portion of this area. The South Lagoon has adjacent forested wetlands and woodlots referred to as Wood Duck Hollow. The Nuclear Operations Center (NOC) is located in the southwest corner. The NOC is landscaped in the traditional corporate fashion using mowed lawn and isolated trees. There is an unmowed, open field to north of the parking lot and two quarry lakes to the east of the NOC. The quarry lakes' shorelines are mostly devoid of vegetation, steeply banked, and experiencing erosion. Fish species in the quarry lakes are presently unidentified.

Wildlife Management Plan for Fermi 2 Power Plant

III. SITE INVENTORY

Table 1 lists some of the wildlife species that are believed to be present on site. This list reflects some of the observations by WHC during the visit and sightings of Detroit Edison employees at the site. This list together, with a historical list of plant and animal species from Fermi's Environmental Report, EF-2-ER(OL) 1972, will be used as a starting point for developing a comprehensive inventory of plants and animals at the site. A complete list of all species mentioned in this report, provided alphabetically by scientific name, and the historical listing is in Appendix B of this report.

Table 1, Wildlife Noted During the WHC Visit

Species Type	Common name	Scientific Name
birds	American robin	<i>Turdus migratorius</i>
	killdeer	<i>Charadrius vociferus</i>
	chimney swift	<i>Chaetura pelagica</i>
	great blue heron	<i>Ardea herodias</i>
	American goldfinch	<i>Carduelis tristis</i>
	indigo bunting	<i>Passerina cyanea</i>
	red-winged blackbird	<i>Agelaius phoeniceus</i>
	turkey vulture	<i>Cathartes aura</i>
	great egret	<i>Casmerodius albus</i>
	trees, shrubs, & vines	staghorn sumac
cottonwood		<i>Populus deltoides</i>
sandbar willow		<i>Salix exigua</i>
willow sp.		<i>Salix sp.</i>
grey dogwood		<i>Cornus racemosa</i>
wild grape		<i>Vitis sp.</i>
bush honeysuckle		<i>Diervilla lonicera</i>
trumpet creeper		<i>Campsis radicans</i>
boxelder		<i>Acer negundo</i>
sycamore		<i>Platanus occidentalis</i>
herbaceous plants	multiflora rose	<i>Rosa multiflora</i>
	purple loosestrife	<i>Lythrum salicaria</i>
	giant reed grass	<i>Phragmites sp.</i>
	cattail sp.	<i>Typha sp</i>
	softstem bulrush	<i>Scirpus sp.</i>
	common milkweed	<i>Asclepias syriaca</i>
	goldenrod sp.	<i>Solidago sp.</i>
	common mullein	<i>Verbascum thapsis</i>
daisy fleabane	<i>Erigeron annuus</i>	
black-eyed Susan	<i>Rudbeckia hirta</i>	

Wildlife Management Plan for Fermi 2 Power Plant

Species Type	Common name	Scientific Name
	poppy	<i>Papavera sp.</i>
	coreopsis sp.	<i>Coriopsis sp.</i>
	teasel	<i>Dipsacus sp.</i>
	tiger lily	<i>Lilium lancifolium</i>
	jewelweed	<i>Impatiens capensis</i>
	may apple	<i>Potophyllum peltatum</i>
	raspberry sp.	<i>Rubus sp.</i>
reptiles & amphibians	American lotus*	<i>Nelumbo lutea</i>
	soft shell turtle*	<i>Trionix spiniferus</i>
	Blanding's turtle*	<i>Emydoidea blandingii</i>
insects	American toad	<i>Bufo americanus</i>
	spittle bug	<i>Philaenus spumarius</i>
	fishfly	<i>Corydalidae</i>
mammals	monarch butterfly	<i>Danaus plexippus</i>
	coyote*	<i>Canis latrans</i>
	white-tailed deer**	<i>Odocoileus virginiana</i>
	red fox*	<i>Vulpes fulva</i>
	raccoon*	<i>Procyon lotor</i>
	eastern cottontail rabbit	<i>Sylvilagus floridana</i>
	fox squirrel	<i>Sciurus niger</i>

*-- Reported by employees as occurring on site

**-- Identified by tracks

Wildlife Management Plan for Fermi 2 Power Plant

IV. GOALS, OBJECTIVES AND PRESCRIPTIONS

The Fermi 2 Nuclear Power Plant has a diversity of wildlife at its Newport Michigan site along the southeastern shores of Lake Erie. Over the years individuals and groups of employees, with the support of Detroit Edison, have enhanced the natural environment and educated the public. Programs such as the raising and release of Schezuan pheasants, planting of wildflowers, Christmas bird counts, environmental education for local elementary schools and the sponsoring of a 5K run and nature walk to benefit the Monroe County Project Read are a few of the projects supported by employee involvement. Fermi is organizing this past, present and the future efforts of its site employees into a Wildlife Habitat Team to benefit wildlife and to educate the public.

Existing Goals

- Goal 1** Continue and enhance the success of Fermi's wildflower meadow along Fermi Drive.
- Goal 2** Ensure the continued success of the National Audubon Society's Annual Christmas Bird count at the Fermi Power Plant.
- Goal 3** Continue to provide shelter and food source plantings for pheasants.

Goal 1 Continue and enhance the success of Fermi's wildflower meadow along Fermi Drive.

A wildflower meadow project was instituted on Fermi Drive between Critical Path and Quarry Lake Road. The area along the south side of the drive was cleared of brush and trees in 1995 due to close encounters between vehicles and wildlife. Perennial flower seeds were planted in the spring of 1996. Native wildflower species and some non-native species which were originally planted were: candytuft, siberian wallflower, wild sweet william, dame's rocket, perennial lupine, shasta daisy, blue flax, lance-leaf coreopsis, purple coneflower, mexican hat, gloriosa daisy, black-eyed susan, gaillardia, prairie coneflower, and evening primrose. The meadow has been maintained by cutting the area every fall and doing some reseeding every spring.

Wildlife Management Plan for Fermi 2 Power Plant

Objective: *Maintain the wildflower meadow along Fermi Drive.*

Prescriptions:

- 1) Evaluate alternate methods of maintaining the meadow (i.e. cutting versus burning methods). Implement in the spring of the year to allow for natural seed dispersal as well as to provide habitat for wildlife throughout the winter months.
- 2) Evaluate site (ground) preparation and seeding methods. Based on WHC recommendations perform plantings in the spring using only native wildflower and grass seed mix.
- 3) Monitor and document the progress of the Fermi Drive wildflower meadow. Post a sign identifying the meadow as a Wildlife Habitat Enhancement Project and list the native species planted.

Goal 2 Ensure the continued success of the National Audubon Society's Annual Christmas Bird count at the Fermi Power Plant.

Fermi has been part of the Rockwood, Michigan circle count for the National Audubon Society's Christmas Bird Count since 1990. Past activities have been to provide access to Fermi's owner controlled area (excluding the site's Protected Area) for the Christmas bird counting. See Appendix D.

Objective: *Cooperate with the National Audubon Society to assure access to the site and provide any assistance necessary to facilitate their program.*

Wildlife Management Plan for Fermi 2 Power Plant

- Prescriptions:
- 1) Schedule and provide site access for the Rockwood circle bird group for the annual Christmas Bird Count (mid Dec.- mid Jan.). Provide assistance from the Fermi Wildlife Habitat Team to observe/participate in the bird count.
 - 2) Arrange with the Rockwood bird group to receive a copy of the birds counted on Fermi property as part of the Christmas count.
 - 3) Include a copy of the birds counted on site as part of the Christmas Bird Count in the plant's newsletter to educate and inform personnel about the wildlife resources at Fermi.
-

Goal 3 Continue to provide shelter and food source plantings for pheasants.

Fermi volunteers have been involved with pheasants since 1990. The Fermi 2 Nuclear Power Plant, the Michigan Department of Natural Resources (DNR) and the Monroe County, MI, chapter of Pheasants Forever cooperated to protect, preserve, and develop Michigan's pheasant population. Nuclear Security Specialist, Lonny Seres, with permission from Detroit Edison, was allowed to use site property to raise pheasants and to plant two acres of sorghum to provide feed and cover beginning in 1990. In 1991 Detroit Edison entered into a five-year cooperative pheasant-rearing program with the DNR which involved raising about 3500 pheasants on site. Grants from Detroit Edison and the DNR made the project possible. Employee volunteers helped build a large pen and brooder house and helped to care for the birds. The pheasants, which were fully grown in about eight months, were released at the Fermi site (where no hunting is allowed) and at other locations in Monroe and other southeastern Michigan counties. Approximately 150 pheasants were released into the wild at Belle River and the Greenwood Energy Center in 1996 as part of the Wildlife Habitat Council's St. Clair River Project. The pheasant-rearing program was completed in 1997 and the pen and brooder house have been disassembled. In this area and the surrounding fields (~5 acres), wildlife plots, i.e. planting of rye, sorghum and switch grasses have been maintained to provide feed and cover for the pheasants and other area wildlife. See Pheasant Program (Appendix E).

Wildlife Management Plan for Fermi 2 Power Plant

Objective: Continue to protect, preserve and develop Michigan's pheasant population by providing shelter and food source plantings.

- Prescriptions:
- 1) Evaluate current plantings and location, and adjust existing methods as appropriate to ensure the success of pheasants on Fermi property.
 - 2) Monitor site pheasant population to determine effectiveness of the program.
 - 3) Inform and educate site employees of pheasant activities on site through company newsletters.

The Wildlife Habitat Team will focus on four new goals during the next two years of this program. Progress towards these goals will be documented in the Activities Journal (Appendix C).

New Goals

- New Goal 1** Conduct Site Inventory of native plant and animal species.
- New Goal 2** Provide nesting structures for select native bird species on site.
- New Goal 3** Enhance the wildflower meadow.
- New Goal 4** Monitor and begin removal of problem invasive species.

New Goal 1 **Conduct Site Inventory of native plant and animal species.**

Objective: To familiarize Fermi's Wildlife Habitat Team with local plant and animal species and to develop a baseline inventory for later comparison.

Wildlife Management Plan for Fermi 2 Power Plant

Prescriptions:

- 1) Consult the Wildlife at Work Team Kit and develop a comprehensive inventory plan for the site.
- 2) Identify local experts in flora and fauna to provide training and proper species identification for the inventory.
- 3) Conduct inventories on a seasonal basis. Include night surveys to record nocturnal species such as owls and singing frogs. Provide photo documentation where possible.
- 4) Publicize the survey results to inform site personnel of the wildlife resources identified on site.

New Goal 2

Provide nesting structures for select native bird species on site.

Objective: Increase native bird populations by providing artificial nesting boxes.

Prescriptions:

- 1) Consult with local ornithologists to determine the number of nesting boxes, the appropriate locations and the species to be provided for.
- 2) Work with employee volunteers / community organizations (e.g., 4H, Boy Scouts, Girl Scout) to build nesting boxes or purchase through local birding clubs.
- 3) Partner with local organizations to install boxes and monitor and log observations of nesting activities.

Wildlife Management Plan for Fermi 2 Power Plant

- 4) Perform necessary maintenance and evictions.
- 5) Send annual information on monitoring to WHC for inclusion in the nest box monitoring program.

New Goal 3 Enhance the wildflower meadow.

Objective: Expanding the wildflower meadow project.

Prescriptions:

- 1) Expand the wildflower meadow / garden to the NOC area. Evaluate using prairie native flowering plants to attract butterflies, hummingbirds and other wildlife. Identify potential planting location(s).
- 2) Evaluate site (ground) preparation and seeding methods. Based on WHC recommendations perform plantings in the spring using native wildflower and grass seed mix.
- 3) Evaluate alternate methods of maintaining the wildflower meadow / garden. Implement in the spring of the year to allow for natural seed dispersal as well as to provide habitat for wildlife throughout the winter months.
- 4) Document the progress of the wildflower meadow / garden. Post a sign identifying the wildflowers as a Wildlife Habitat Project. Place species identification tags next to the plants to foster learning opportunities for employees and visitors.

Wildlife Management Plan for Fermi 2 Power Plant

New Goal 4 Monitor and begin removal of problem invasive species.

Objective: To manage a healthy ecosystem to maintain a diversity of plant communities and animal species.

- Prescriptions:
- 1) Identify non-native plant species on site and evaluate the benefit / detriment to the wildlife community. Specific attention will be given to purple loosestrife and phragmites (giant reed grass).
 - 2) Develop a plan to control the invasive non-native species and seek the necessary approvals / permits required.
 - 3) Proceed with control measures based on permit requirements.
 - 4) Document project result in the Activities Journal (Appendix C).

Wildlife Management Plan for Fermi 2 Power Plant

V. MONITORING AND MAINTENANCE

Monitoring the status of each goal is crucial to the success of a wildlife management plan. It is the intent of the Fermi Wildlife Management Plan to provide documentation for all maintenance, surveys, bird counts etc. in a wildlife team journal. However, over the years individuals and/or groups of employees have made contributions to enhance the natural environment at Fermi and to educate the public with little or no documentation to their credit. The following is a time line for those wildlife enhancement programs currently active.

The wildflower meadow along Fermi drive was initiated in the spring of 1996. Native wildflower species and some non-native species which were originally planted were: candytuft, siberian wallflower, wild sweet william, dame's rocket, perennial lupine, shasta daisy, blue flax, lance-leaf coreopsis, purple coneflower, mexican hat, gloriosa daisy, black-eyed susan, gaillardia, prairie coneflower, and evening primrose. The meadow has been maintained by cutting the area every fall and doing some re-seeding every spring up to the present.

Fermi has been part of the Rockwood, Michigan circle count for the National Audubon Society's Christmas Bird Count since 1990. Typically the bird counting activities have been performed annually on one day during the last two weeks of the year. See Appendix D for a listing of birds counted on Fermi property on December 26, 1999. Other data represents the total birds counted in the Rockwood circle of which Fermi is a part.

Fermi volunteers have been involved with pheasants on site since 1990. Nuclear Security Specialist, Lonny Seres, with permission from Detroit Edison, was allowed to use site property to raise pheasants and to plant two acres of sorghum to provide feed and cover beginning in 1990. In 1991 Detroit Edison entered into a five-year cooperative pheasant-rearing program with the DNR. The DNR provided approximately 700 day old pheasant chicks in the spring of each year, which were then raised and cared for on site by Fermi volunteers. The pheasants, which reached maturity in about eight months, were released at the Fermi site (where no hunting is allowed) and at other locations in Monroe and other southeastern Michigan counties. Approximately 150 pheasants were released into the wild at Belle River and the Greenwood Energy Center in 1996 as part of the Wildlife Habitat Council's St Clair River Project. The pheasant-rearing program was completed in 1997 and the pen and brooder house were disassembled. In the pen area and the surrounding fields (~5 acres), wildlife plots, i.e. plantings of rye, sorghum and switch grasses have continued to be maintained to provide feed and cover for the pheasants and other area wildlife. The wildlife plots have been plowed under and re-seeded on a rotational basis from 1997 to the present. See Pheasant Program (Appendix E).

Wildlife Management Plan for Fermi 2 Power Plant

VI. IMPLEMENTATION SCHEDULE

The Fermi Wildlife Management Plan will focus on ensuring the success of its three current programs: 1) Fermi Drive wildflower meadow, 2) Christmas bird count and 3) Shelter/food sources for pheasants. We will also take on the challenge of four new goals to: 1) Conduct site inventories, 2) Provide nesting structures, 3) Enhance the wildflower meadow, and 4) Monitor and begin removal of invasive species.

The following schedule is subject to changes due to weather and other factors. Any changes to the schedule will be documented in the wildlife team journal. Monitoring and maintenance will be completed on an ongoing basis and will not be listed here.

June 2000	WHC biologist tour site and prepare recommendations.
August 2000	Fermi's Wildlife Habitat booth at Plant Human Performance / Safety Day activity. Solicit volunteers for wildlife Habitat Team membership.
August 2000	Apply for Wildlife Habitat Certification.
September 2000	Initiate team organizational meeting. Clean up Fermi's beach area.
Sept.-Oct. 2000	Initiate species inventory (fall survey).
December 2000	Participate in the Christmas bird count.
Winter 2000-01	Construct new nest boxes. Perform species inventory (winter survey).
February 2001	Install new nest boxes on site. Clean out any existing nest boxes and perform maintenance as required. Begin nest box monitoring.
March 2001	Maintain Fermi Drive wildflower meadow (by cutting/burning). Re-seed as required. Rotational maintenance of pheasant wildlife plots. Initiate wildflower meadow / garden at the NOC.
April-May 2001	Perform species inventory (spring survey).
July 2001	Perform species inventory (summer survey).

Wildlife Management Plan for Fermi 2 Power Plant

Summer 2001	Initiate a program to monitor problem invasive species and evaluate control methods / requirements.
Sept.-Oct. 2001	Perform species inventory (fall survey).
December 2001	Participate in the Christmas bird count.
January 2002	Perform species inventory (winter survey).
Winter 2001-02	Plan spring 2002 activities.
February 2002	Clean out existing nest boxes and perform maintenance as required. Begin nest box monitoring.
March 2002	Maintain Fermi Drive wildflower meadow (by cutting/burning). Reseed as required. Rotational maintenance of pheasant wildlife plots. Maintain the NOC wildflower meadow / garden. Reseed / plant as required.
April-May 2002	Perform species inventory (spring survey).
July 2002	Perform species inventory (summer survey). Reapply for Wildlife Habitat Certification.
Sept.-Oct. 2002	Perform species inventory (fall survey).
December 2002	Participate in the Christmas bird count.
Winter 2002-03	Plan spring 2003 activities.

Monitoring of existing programs will continue as previously described. New projects will be implemented as specific objectives and prescriptions are developed and human and financial resources are available.

Wildlife Management Plan for Fermi 2 Power Plant

VII. COMMUNITY REFERENCES

Bryan A. Knowles (Director, Great Lakes Region Wildlife Habitat Council)
2336 Cheyenne Trail
Ewart, MI 49631
(231) 734-3964
(231) 734-3968 (fax)

Floreine Mentel (Commissioner Monroe County Board of Commissioners)
1731 Roman
Monroe, Michigan 48162
(734) 242-2103 (home)
(734) 346-6480 (cell)

Mike Parker (Pheasants Forever, formerly with the Mich. Dept. of Natural Resources)
117 Wilson
Dewitt MI 48820
(517) 668-1033

Donna D. Schmidt, Ed. D. (Superintendent of Schools Jefferson School District)
2400 N. Dixie Highway
Monroe, MI 48162-5213
(734) 289-5599

Rob Sieb (Pheasants Forever)
2991 Hiawatha
Monroe, MI 48161
734-243-3522 (home)
734-241-8898 (work)

Bruce Warren (Mich. Dept. of Natural Resources)
(517) 641-6578

Wildlife Management Plan for Fermi 2 Power Plant

VIII. MEDIA MATERIAL

The Blade Bureau
12 E. 3rd Street
Monroe, MI 48161-2208
Phone 734-241-3610
Fax 734-241-3663

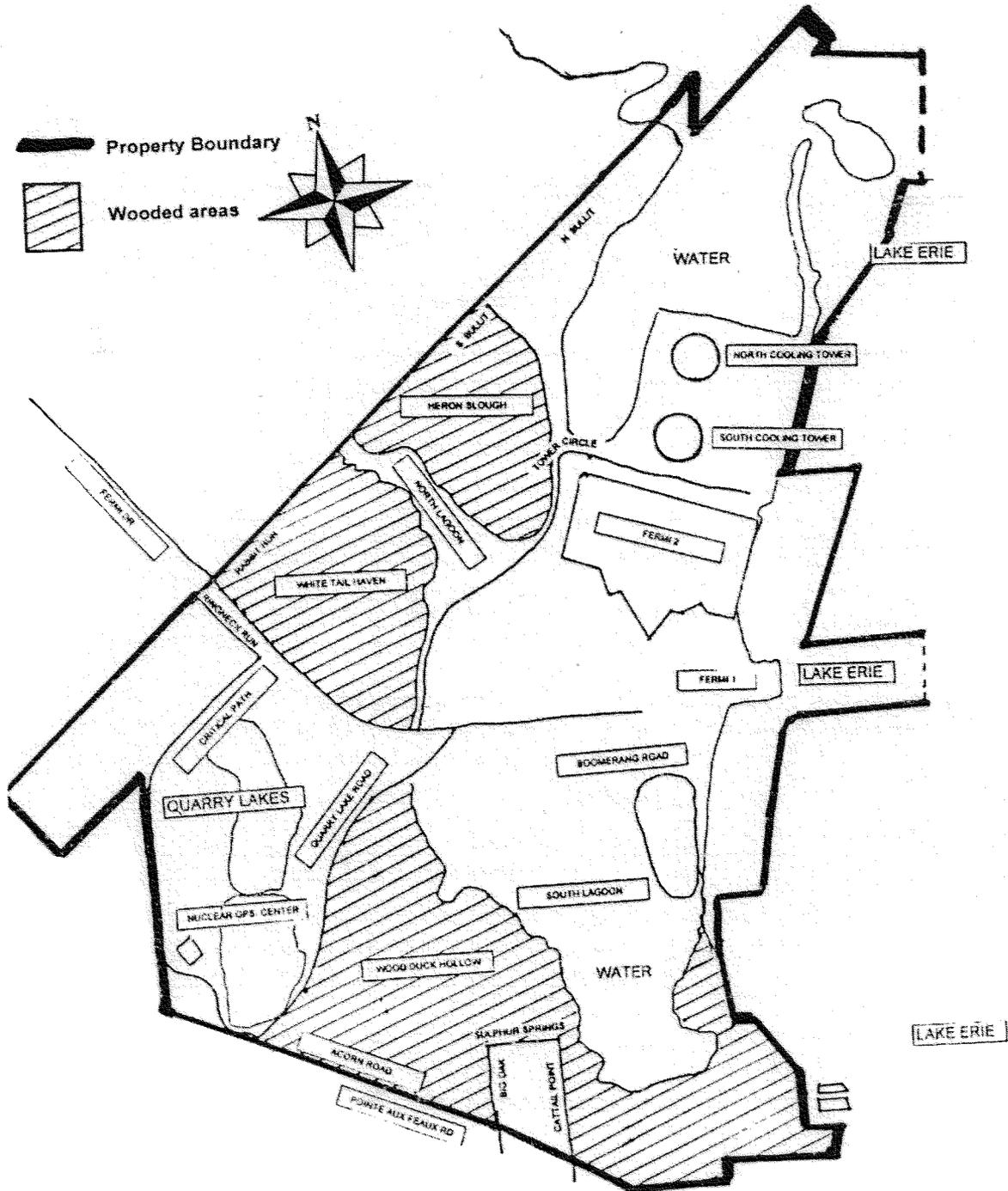
Detroit News & Detroit Free Press
615 W. Lafayette
Detroit MI 48226
Phone 313-222-6400

The Monroe Evening News
20 W. First St.
Monroe, MI 48161-2333
Phone 734-242-1100
Fax 734-242-3175

Nuclear News
555 N. Kensington Ave.
La Grange Park, IL 60526-5535
Phone 708-352-6611
Fax 708-352-6464

Nuclear Plant Journal
799 Roosevelt Road, Bldg. 6, #208
Glen Ellyn, IL 60137-5908
Phone 630-858-6161
Fax 630-858-8787

APPENDIX A - FERMI NUCLEAR POWER PLANT SITE MAP



APPENDIX B - WILDLIFE AND PLANTS IDENTIFIED AT THE FERMI NUCLEAR POWER PLANT

Type	Common name	Scientific Name
birds	American robin	<i>Turdus migratorius</i>
	killdeer	<i>Charadrius vociferus</i>
	chimney swift	<i>Chaetura pelagica</i>
	great blue heron	<i>Ardea herodias</i>
	American goldfinch	<i>Carduelis tristis</i>
	indigo bunting	<i>Passerina cyanea</i>
	red-winged blackbird	<i>Agelaius phoeniceus</i>
	turkey vulture	<i>Cathartes aura</i>
	great egret	<i>Casmerodius albus</i>
	reptiles & amphibians	soft shell turtle
Blanding's turtle		<i>Emydoidea blandingii</i>
American toad		<i>Bufo americanus</i>
Eastern fox snake		<i>Elaphe vulpina</i>
Massasauga rattle snake		<i>Sistrurus catenatus</i>
insects	Northern water snake	<i>Nerodia sipedon</i>
	spittle bug	<i>Philaenus spumarius</i>
	fishfly	<i>Corydalis sp.</i>
mammals	monarch butterfly	<i>Danaus plexippus</i>
	coyote	<i>Canis latrans</i>
	white-tailed deer	<i>Odocoileus virginiana</i>
	red fox	<i>Vulpes fulva</i>
	raccoon	<i>Procyon lotor</i>
	eastern cottontail rabbit	<i>Sylvilagus floridana</i>
	fox squirrel	<i>Sciurus niger</i>
	woodchuck	<i>Marmota monax</i>
	Feral cat	<i>Felis Catus</i>
	Striped skunk	<i>Mephitis mephitis</i>
trees, shrubs, & vines	boxelder	<i>Acer negundo</i>
	bearberry	<i>Arctostaphylos uva-ursi</i>
	trumpet creeper	<i>Campsis radicans</i>
	shagbark hickory	<i>Carya ovata</i>
	New Jersey tea	<i>Ceanothus americanus</i>
	hackberry	<i>Celtis occidentalis</i>
	common buttonbush	<i>Cephalanthus occidentalis</i>
	eastern redbud	<i>Cercis canadensis</i>
	silky dogwood	<i>Cornus amomum</i>
	flowering dogwood	<i>Cornus florida</i>
	grey dogwood	<i>Cornus racemosa</i>
	cockspur hawthorn	<i>Crataegus crusgalli</i>
	green ash	<i>Fraxinus pennsylvanica</i>

Wildlife Management Plan for Fermi 2 Power Plant

Type	Common name	Scientific Name
	black walnut	<i>Juglans nigra</i>
	eastern redcedar	<i>Juniperus virginiana</i>
	tulip poplar	<i>Liriodendron tulipifera</i>
	shrub lespedeza	<i>Llespedeza thunbergii</i>
	bush honeysuckle	<i>Diervilla lonicera</i>
	red mulberry	<i>Morus rubra</i>
	sycamore	<i>Platanus occidentalis</i>
	cottonwood	<i>Populus deltoides</i>
	wild plum	<i>Prunus americana</i>
	pin cherry	<i>Prunus pensylvanica</i>
	northern red oak	<i>Quercus alba</i>
	black oak	<i>Quercus velutina</i>
	pink azalea	<i>Rhododendron nudiflorum</i>
	fragrant sumac	<i>Rhus aromatica</i>
	aromatic sumac	<i>Rhus aromatica</i>
	shining sumac	<i>Rhus copallina</i>
	smooth sumac	<i>Rhus glabra</i>
	staghorn sumac	<i>Rhus typhina</i>
	multiflora rose	<i>Rosa multiflora</i>
	blackberry	<i>Rubus allegheniensis</i>
	raspberry	<i>Rubus occidentalis</i>
	willow sp.	<i>Salix sp.</i>
	pussy willow	<i>Salix discolor</i>
	sandbar willow	<i>Salix exigua</i>
	lowbush blueberry	<i>Vaccinium angustifolium</i>
	wild grape	<i>Vitis sp.</i>
herbaceous plants	big bluestem	<i>Andropogon gerardi</i>
	canada anemone	<i>Anemone canadensis</i>
	thimbleweed	<i>Anemone cyndrilica</i>
	ever-lasting	<i>Antennaria neglecta</i>
	columbine	<i>Aquilegia canadensis</i>
	dogbane	<i>Arocynum androcaemifolium</i>
	marsh milkweed	<i>Asclepias incarnata</i>
	common milkweed	<i>Asclepias syriaca</i>
	butterfly weed	<i>Asclepias tuberosa</i>
	whorled milkweed	<i>Asclepias verticiliata</i>
	heath aster	<i>Aster ericoides</i>
	smooth aster	<i>Aster laevis</i>
	New England aster	<i>Aster novae-angliae</i>
	white aster	<i>Aster ptarmicoides</i>
	red stem aster	<i>Aster puniceus</i>
	marsh aster	<i>Aster simplex</i>
	flat-topped aster	<i>Aster umbellatus</i>
	arrow aster	<i>Aster. sagittifolius</i>
	side-oats grama	<i>Boutoua certipendula</i>
	hare bell	<i>Campanula rotundifolia</i>
painted-cup	<i>Castilleja coccinea</i>	

Wildlife Management Plan for Fermi 2 Power Plant

Type	Common name	Scientific Name
	turtlehead	<i>Chelone glabra</i>
	lance-leaved coreopsis	<i>Coreopsis lanceolata</i>
	coreopsis sp.	<i>Coriopsis sp.</i>
	purple coneflower	<i>Echinacea purpurea</i>
	Canada wild rye	<i>Elymus canadensis</i>
	daisyflea bane	<i>Erigeron annuus</i>
	boneset	<i>Eupatorium maculatum</i>
	wild strawberry	<i>Frangerica virginiana</i>
	northern bedstraw	<i>Galium borealaa</i>
	closed gentian	<i>Gentiana andrewsii</i>
	common sneezeweed	<i>Helenium autumnale</i>
	woodland sunflower	<i>Helianthus divaricatus</i>
	giant sunflower	<i>Helianthus giganteus</i>
	Canada hawkweed	<i>Hieracium canadense</i>
	great St. John's wort	<i>Hypercium ascvron</i>
	jewelweed	<i>Impatiens capensis</i>
	blue flag	<i>Iris Versacolor</i>
	wild iris	<i>Iris virginica</i>
	junegrass	<i>Koelaria cristata</i>
	canada lily	<i>Lilium canadense</i>
	wood lily	<i>Lilium philadelphicum</i>
	hoary puccoon	<i>Lithospermum canascens</i>
	cardinal flower	<i>Lobelia cardinalis</i>
	great blue lobelia	<i>Lobelia siphilitica</i>
	pale lobelia	<i>Lobelia spicata</i>
	wild lupine	<i>Lupinus perennis</i>
	purple loosestrife	<i>Lythrum salicaria</i>
	monkey flower	<i>Mimulus ringens</i>
	bee balm	<i>Monarda didyma</i>
	wild bergamot	<i>Monarda fistulosa</i>
	purple bergamot	<i>Monarda media</i>
	evening primrose	<i>Oenothera biennis</i>
	switchgrass	<i>Panicum virgatum</i>
	wild sweet-william	<i>Phlox maculata</i>
	giant reed grass	<i>Phragmites sp.</i>
	false dragonhead	<i>Phystostegia virginiana</i>
	may apple	<i>Potophyllum peltatum</i>
	mountain mint	<i>Pycnanthemum virginianum</i>
	early buttercup	<i>Ranunculus fascicularis</i>
	swamp wild rose	<i>Rosa palustris</i>
	raspberry sp.	<i>Rubus sp.</i>
	black eyed susan	<i>Rudbeckia hirta</i>
	tiger lily	<i>Lilium lancifolium</i>
	gray goldenrod	<i>Solidago. nemoralis</i>
	little bluestem	<i>Schizachyrium scousrius</i>
	softstem bulrush	<i>Scirpus sp.</i>
	balsam ragwort	<i>Senecio pauperculus</i>

Wildlife Management Plan for Fermi 2 Power Plant

Type	Common name	Scientific Name
	grass leaved goldenrod	<i>Solidago graminifolia</i>
	goldenrod sp.	<i>Solidago sp.</i>
	showy goldenrod	<i>Solidago speciosa</i>
	indiangrass	<i>Sorghastrum nuttans</i>
	sand dropseed	<i>Sporobolus cryptandrus</i>
	needlegrass	<i>Stipa spartea</i>
	yellow pimpernel	<i>Taenidia itegerrima</i>
	tall meadow rue	<i>Thalictrum dasycarpum</i>
	spiderwort	<i>Tradescantia ohioensis</i>
	cattail sp.	<i>Typha sp.</i>
	common mullen	<i>Verbascum thapsis</i>
	blue verbena	<i>Verbena hastata</i>
	newyork ironweed	<i>Vernonia noveboracensis</i>
	poppy	<i>Papavera sp.</i>
	teasel	<i>Dipsacus sp.</i>
	American lotus	<i>Nelumbo lutea</i>

Wildlife Management Plan for Fermi 2 Power Plant

From Fermi's Environmental Report EF-2-ER(OL) data from 1972
Historical Information Appendix B

TABLE 2.7-10 RELATIVE ABUNDANCE OF THE VARIOUS COVER
TYPES ON THE FERMI SITE

<u>Cover Type</u>	<u>Acres</u>	<u>Percent of Site^(a)</u>
Water	238	21
Marsh	100	9
Cleared and Construction	319	28
Agriculture	-	-
Grassland	30	3
Transitional Stage	68	6
Deciduous Scrubland	68	6
Deciduous Forest	168	15
Lake Erie	130	12

(a) Percentages were based on a total acreage of 1120.

TABLE 2.7-11 IMPORTANCE VALUES OF TREES (OVER 3 INCHES DBH) IN WOODLOTS A, B, C, AND D OF THE FERMI SITE

<u>Species</u>	Woodlot			
	A	B	C	D
<u>Fraxinus</u> spp. - ash	118	144	130	190
<u>Tilia americana</u> - basswood	46	7	25	4
<u>Quercus borealis</u> - northern red oak	43	-	13	19
<u>Crataegus</u> spp. - hawthorn	25	3	29	16
<u>Quercus macrocarpa</u> - bur oak	26	37	28	9
<u>Quercus bicolor</u> - swamp white oak	11	4	-	17
<u>Carya laciniosa</u> - shellbark hickory	5	10	10	11
<u>Acer saccharinum</u> - silver maple	5	70	27	8
<u>Ulmus americana</u> - American elm	2	7	3	19
<u>Celtis occidentalis</u> - hackberry	3	4	-	7
<u>Carpinus caroliniana</u> - American hornbeam	7	-	12	-
<u>Cornus drummondii</u> - rough-leaved dogwood	-	-	-	-
<u>Platanus occidentalis</u> - sycamore	-	10	5	-
<u>Carya cordiformis</u> - bitternut hickory	-	-	4	-
<u>Acer negundo</u> - boxelder	-	-	9	-
<u>Ostrya virginiana</u> - hop-hornbeam	-	-	2	-

TABLE 2.7-12 IMPORTANCE VALUES OF LARGE WOODY PLANTS (1-3 INCHES DBH)
IN WOODLOTS A, B, C, AND D OF THE FERMI SITE

<u>Species</u>	Woodlot			
	A	B	C	D
<u>Tilia americana</u> - basswood	64	30	19	20
<u>Fraxinus pennsylvanica</u> - green ash	57	37	72	106
<u>Crataegus</u> spp. - hawthorn	51	12	15	9
<u>Cornus drummondii</u> - rough-leaved dogwood	29	6	12	37
<u>Fraxinus americana</u> - white ash	28	-	39	9
<u>Acer saccharinum</u> - silver maple	25	128	14	4
<u>Vitis</u> spp. - grape	17	-	-	-
<u>Carya laciniosa</u> - shellbark hickory	12	9	4	5
<u>Viburnum lentago</u> - nannyberry	9	-	-	-
<u>Acer negundo</u> - box elder	5	-	10	-
<u>Ulmus americana</u> - American elm	5	16	20	66
<u>Quercus macrocarpa</u> - bur oak	-	28	26	11
<u>Quercus borealis</u> - northern red oak	-	15	9	9
<u>Carpinus caroliniana</u> - American hornbeam	-	14	30	-
<u>Fraxinus nigra</u> - black ash	-	-	21	6
<u>Juglans nigra</u> - black walnut	-	-	5	-
<u>Celtis occidentalis</u> - hackberry	-	-	5	-
<u>Cornus amomum</u> - silky dogwood	-	-	-	9
<u>Quercus bicolor</u> - swamp white oak	-	-	-	16

TABLE 2.7-13 SEASONAL ABUNDANCE OF BIRDS OBSERVED ON THE OTTAWA, CEDAR POINT, AND WEST SISTER ISLAND NATIONAL WILDLIFE REFUGES (Sheet 1 of 10) (Reference 57)

(Asterisk in Left Column Indicates Species Observed at the Fermi (Site))

Common Name	Scientific Name ^a	Season ^b				Nest Locally
		Spring	Summer	Fall	Winter	
Common Loon	<u>Gavia immer</u>	o ^c		o	r	
Horned Grebe	<u>Podiceps auritus cornutus</u>	u		u	o	
Eared Grebe	<u>Colymbus nigricollis californicus</u>	r		r		
Pied-billed Grebe	<u>Podilymbus p. podiceps</u>	c	c	c	r	+
White Pelican	<u>Pelecanus erythrorhynchos</u>	r	r	r		
Double-crested Cormorant	<u>Phalacrocorax a. auritus</u>	o	o	o	r	
*Great Blue Heron	<u>Ardea h. herodias</u>	c	c	c	u	+
*Green Heron	<u>Butorides v. virescens</u>	c	c	c		+
Little Blue Heron	<u>Florida caerulea</u>	r	o	o		
Cattle Egret	<u>Bubulcus i. ibis</u>	u	u			
*Great Egret	<u>Casmerodius albus egretta</u>	c	c	c	x	+
Snowy Egret	<u>Leucophoyx t. thula</u>	x	r	r		

^aNames are according to A.O.U. Check-list of North American Birds (1957) and the thirty-second supplement to the A.O.U. Check-list (1973) (References 58 and 59)

^bSpring = March-May; Summer = June-August; Fall = September-November; Winter = December-February

^ca = abundant - a common species which is very numerous
 c = common - certain to be seen in suitable habitat
 u = uncommon - present, but not certain to be seen
 o = occasional - seen only a few times during a season
 r = rare - seen at intervals of 2 to 5 years
 x = accidental - has been seen only once or twice

TABLE 2.7-13 SEASONAL ABUNDANCE OF BIRDS OBSERVED ON THE OTTAWA, CEDAR POINT, AND WEST SISTER ISLAND NATIONAL WILDLIFE REFUGES (Sheet 2 of 10)
(Asterisk in Left Column Indicates Species Observed at the Fermi Site)

Common Name	Scientific Name	Season				Nest Locally
		Spring	Summer	Fall	Winter	
*Black-capped Chickadee	<u>Parus a. atricapillus</u>	u		u	u	
*Tufted Titmouse	<u>Parus bicolor</u>	u	u	u	u	+
White-breasted Nuthatch	<u>Sitta carolinensis cookei</u>	o	o	o	o	+
Red-breasted Nuthatch	<u>Sitta canadensis</u>	u		u	u	
*Brown Creeper	<u>Certhia familiaris americana</u>	u		u	u	
*House Wren	<u>Troglodytes aedon baldwini</u>	c	c	c	x	+
Winter Wren	<u>Troglodytes troglodytes hiemalis</u>	u		u	u	
Bewick's Wren	<u>Thryomanes bewickii</u>	x	x	x	x	
*Carolina Wren	<u>Thryothorus l. ludovicianus</u>	r	r	r	r	+
*Long-billed Marsh Wren	<u>Telmatorhynchus palustris dissaepius</u>	c	c	c	r	+
Short-billed Marsh Wren	<u>Cistothorus platensis stellaris</u>	r	r	r	x	+
*Mockingbird	<u>Mimus p. polyglottos</u>	r	r	r	r	+
*Gray Catbird	<u>Dumetella carolinensis</u>	c	c	c	r	+
*Brown Thrasher	<u>Toxostoma r. rufum</u>	c	c	c	r	+
*American Robin	<u>Turdus m. migratorius</u>	c	a	c	u	+
*Wood Thrush	<u>Hylocichla mustelina</u>	u	u	o		+
*Hermit Thrush	<u>Catharus guttata faxoni</u>	c		c	r	
*Swainson's Thrush	<u>Catharus ustulata swainsoni</u>	c		c		
*Gray-cheeked Thrush	<u>Catharus m. minima</u>	u		u		
*Veery	<u>Catharus fuscescens</u>	u	u	o		+
Eastern Bluebird	<u>Sialia s. sialis</u>	u	u	u	r	+
Blue-gray Gnatcatcher	<u>Polioptila c. caerulea</u>	c	u	c		+
*Golden-crowned Kinglet	<u>Regulus s. satrapa</u>	c		c	u	
*Ruby-crowned Kinglet	<u>Regulus c. calendula</u>	c		c	r	
*Water Pipit	<u>Anthus spinoletta rubescens</u>	u		u	r	
Bohemian Waxwing	<u>Bombycilla garrulus pallidiceps</u>				x	
*Cedar Waxwing	<u>Bombycilla cedrorum</u>	c	u	c	u	+
Northern Shrike	<u>Lanius excubitor</u>	r		r	r	
Loggerhead Shrike	<u>Lanius ludovicianus</u>	o	o	o	r	+
*Starling	<u>Sturnus v. vulgaris</u>	a	a	a	a	+
White-eyed Vireo	<u>Vireo griseus noveboracensis</u>	o		o		
Yellow-throated Vireo	<u>Vireo flavifrons</u>	u	u	u		+

TABLE 2.7-13 SEASONAL ABUNDANCE OF BIRDS OBSERVED ON THE OTTAWA, CEDAR POINT, AND WEST SISTER ISLAND NATIONAL WILDLIFE REFUGES (Sheet 3 of 10)
(Asterisk in Left Column Indicates Species Observed at the Fermi Site)

Common Name	Scientific Name	Season				Nest Locally
		Spring	Summer	Fall	Winter	
*Oldsquaw	<u>Clangula hyemalis</u>	r		r	r	
King Eider	<u>Somateria spectabilis</u>			x		
White-winged Scoter	<u>Scoter melanitta d. deglandi</u>	o		o	o	
*Surf Scoter	<u>Melanitta perspicillata</u>	o		o	o	
Black Scoter	<u>Melanitta nigra</u>			o	r	
Ruddy Duck	<u>Oxyura jamaicensis rubida</u>	a	u	c	u	+
Hooded Merganser	<u>Lophodytes cucullatus</u>	c	u	c	u	+
Common Merganser	<u>Mergus merganser americanus</u>	a	r	a	a	
*Red-breasted Merganser	<u>Mergus s. serrator</u>	u		u	r	
*Turkey Vulture	<u>Cathartes aura septentrionalis</u>	c	u	u		+
Goshawk	<u>Accipiter gentilis atricapillus</u>	r		r	r	
*Sharp-shinned Hawk	<u>Accipiter striatus velox</u>	c		u	r	
*Coopers Hawk	<u>Accipiter cooperii</u>	u	u	u	u	+
*Red-tailed Hawk	<u>Buteo jamaicensis borealis</u>	c	c	c	c	+
Red-shouldered Hawk	<u>Buteo lineatus</u>	u	u	u	o	+
Broad-winged Hawk	<u>Buteo p. platypterus</u>	c		c		
Rough-legged Hawk	<u>Buteo lagopus</u>	u		u	c	
Golden Eagle	<u>Aquila chrysaetos canadensis</u>	r		r	r	
Bald Eagle	<u>Haliaeetus leucocephalus</u>	u	u	u	u	+
*Marsh Hawk	<u>Circus cyaneus hudsonius</u>	u	u	u	u	+
*Osprey	<u>Pandion haliaetus carolinensis</u>	u	r	u		
Gyr Falcon	<u>Falco rusticolus obsoletus</u>	x		x	x	
*Peregrine Falcon	<u>Falco peregrinus anatum</u>	r		r	r	
Pigeon Hawk	<u>Falco c. columbarus</u>	r		r	r	
*American Kestrel	<u>Falco s. sparverius</u>	c	c	c	c	+
Bobwhite	<u>Colinus v. virginianus</u>	u	u	u	u	+
*Ring-necked Pheasant	<u>Phasianus colchicus</u>	c	c	c	c	+
Sandhill Crane	<u>Grus canadensis tabida</u>	r		x		
King Rail	<u>Rallus e. elegans</u>	o	o	o	r	+
Virginia Rail	<u>Rallus l. limicola</u>	o	o	o	r	+
*Sora	<u>Porzana carolina</u>	c	u	c	r	+
Yellow Rail	<u>Coturnicops n. noveboracensis</u>	x		x		
Black Rail	<u>Laterallus j. jamaicensis</u>	x		x		

TABLE 2.7-13 SEASONAL ABUNDANCE OF BIRDS OBSERVED ON THE OTTAWA, CEDAR POINT, AND WEST SISTER ISLAND NATIONAL WILDLIFE REFUGES (Sheet 4 of 10)
(Asterisk in Left Column Indicates Species Observed at the Fermi Site)

Common Name	Scientific Name	Season				Nest Locally
		Spring	Summer	Fall	Winter	
*Common Gallinule	<u>Gallinula chloropus cachinnans</u>	c	c	c	x	+
*American Coot	<u>Fulica americana</u>	a	c	a	u	+
*Semipalmated Plover	<u>Charadrius semipalmatus</u>	c	x	c		+
Piping Plover	<u>Charadrius m. melodus</u>	r	r	r		
Wilson's Plover	<u>Charadrius w. wilsonia</u>		x			+
*Killdeer	<u>Charadrius v. vociferus</u>					
*American Golden Plover	<u>Pluvialis d. dominica</u>	c	c	c	r	+
*Black-bellied Plover	<u>Pluvialis squatarola</u>	c	u	u		
*Ruddy Turnstone	<u>Arenaris interpres morinella</u>	c	u	u		
*American Woodcock	<u>Philohela minor</u>	c	u	c		
*Common Snipe	<u>Capella gallingo delicata</u>	u	u	u		+
Whimbrel	<u>Numenius p. phaeopus</u>	c	c	c	r	+
Upland Sandpiper	<u>Bartrima longicauda</u>	r	r	r		
*Spotted Sandpiper	<u>Actitis macularia</u>	u	u	u		+
*Solitary Sandpiper	<u>Tringa s. solitaria</u>	c	c	c		+
Willet	<u>Catoptrophorus semipalmatus</u>	c	c	c		
*Greater Yellowlegs	<u>Tringa melanoleucus</u>	r	x	r		
*Lesser Yellowlegs	<u>Tringa flavipes</u>	c	c	c		
*Red Knot	<u>Calidris canutus rufa</u>	c	c	c		
*Pectoral Sandpiper	<u>Calidris melanotos</u>	u	o	o		
White-rumped Sandpiper	<u>Calidris fuscicollis</u>	c	c	c		
Baird's Sandpiper	<u>Calidris bairdii</u>	r	r	r		
*Least Sandpiper	<u>Calidris minutilla</u>	r	r	r	x	
*Dunlin	<u>Calidris alpina pacifica</u>	c	c	c		
*Short-billed Dowitcher	<u>Limnodromus griseus hendersoni</u>	a	c	a	r	
Long-billed Dowitcher	<u>Limnodromus scopaceus</u>	c	c	c		
Stilt Sandpiper	<u>Micropalama himantopus</u>	u	u	u		
*Semipalmated Sandpiper	<u>Calidris pusillus</u>	x	u	u		
Western Sandpiper	<u>Calidris mauri</u>	a	c	c		
Buff-breasted Sandpiper	<u>Tryngites subruficollis</u>	r	r	r		
Marbled Godwit	<u>Limosa fedoa</u>	r	r	r		
Hudsonian Godwit	<u>Limosa haemastica</u>	r	r	r		
		x	r	r		

TABLE 2.7-13 SEASONAL ABUNDANCE OF BIRDS OBSERVED ON THE OTTAWA, CEDAR POINT, AND WEST SISTER ISLAND NATIONAL WILDLIFE REFUGES (Sheet 5 of 10)

(Asterisk in Left Column Indicates Species Observed at the Fermi Site)

Common Name	Scientific Name	Season				Nest Locally
		Spring	Summer	Fall	Winter	
Sanderling	<u>Crocethia alba</u>	o	c	c	x	
American Avocet	<u>Recurvirostra americana</u>	r		r		
Red Phalarope	<u>Phalaropus fulicarius</u>			r	x	
Wilson's Phalarope	<u>Stegenopus tricolor</u>	o	o	o		
Northern Phalarope	<u>Lobipes lobatus</u>	o	o	o	x	
Parasitic Jaeger	<u>Stercorarius parasiticus</u>		x	r		
Skua	<u>Catharacta s. skua</u>			x		
Glaucous Gull	<u>Larus h. hyperboreus</u>	r	x	r	r	
Iceland Gull	<u>Larus g. glaucoides</u>			r	r	
*Great Black-backed Gull	<u>Larus marinus</u>	c	u	c	c	
*Herring Gull	<u>Larus argentatus smithsonianus</u>	a	c	a	a	+
*Ring-billed Gull	<u>Larus delewarensis</u>	a	c	a	a	+
Franklin's Gull	<u>Larus pipixcan</u>	x	r	r	x	
*Bonaparte's Gull	<u>Larus philadelphia</u>	c	o	a	a	
Forster's Tern	<u>Sterna forsteri</u>	r	o	u		
*Common Tern	<u>Sterna h. hirundo</u>	c	c	c	x	+
Least Tern	<u>Sterna albifrons</u>		x	x		
*Caspian Tern	<u>Hydroprogne caspia</u>	u	c	c		
Black Tern	<u>Chlidonias niger surinamensis</u>	c	c	c		+
*Mourning Dove	<u>Zenaida macroura carolinensis</u>	c	c	c	c	+
*Yellow-billed Cuckoo	<u>Coccyzus a. americanus</u>	u	u	u		+
*Black-billed Cuckoo	<u>Coccyzus erythrophthalmus</u>	o	o	o		+
Groove-billed Ani	<u>Crotophaga s. sulcirostris</u>			x		
Barn Owl	<u>Tyto alba pratincola</u>	u	u	u	u	+
Screech Owl	<u>Otus osio naevius</u>	c	c	c	c	+
*Great Horned Owl	<u>Bubo v. virginianus</u>	c	c	c	c	+
Snowy Owl	<u>Nyctea scandiaca</u>	o		o	o	
Barred Owl	<u>Strix v. varia</u>	r	r	r	r	+
Long-eared Owl	<u>Asio otus wilsonianus</u>	o	o	o	o	+
Short-eared Owl	<u>Asio f. flammeus</u>	o		o	o	
Saw-whet Owl	<u>Aegolius a. acadicus</u>	o	x	o	r	+

TABLE 2.7-13 SEASONAL ABUNDANCE OF BIRDS OBSERVED ON THE OTTAWA, CEDAR POINT, AND WEST SISTER ISLAND NATIONAL WILDLIFE REFUGES (Sheet 6 of 10)

(Asterisk in Left Column Indicates Species Observed at the Ferri Site)

Common Name	Scientific Name	Season				Nest Locally
		Spring	Summer	Fall	Winter	
Whip-poor-will	<u>Caprimulgus v. vociferus</u>	u		r		
Common Nighthawk	<u>Chordeiles m. minor</u>	c	a	c		+
*Chimney Swift	<u>Chaetura pelagica</u>	c	u	a		+
*Ruby-throated Hummingbird	<u>Archilochus colubris</u>	u	u	u		+
*Belted Kingfisher	<u>Megaceryle a. alcyon</u>	c	c	c	o	+
*Yellow-shafted Flicker	<u>Colaptes a. auratus</u>	c	c	c	u	+
Red-bellied Woodpecker	<u>Centurus carolinus zebra</u>	u	u	u	u	+
*Red-headed Woodpecker	<u>Melanerpes e. erythrocephalus</u>	c	c	c	u	+
*Yellow-bellied Sapsucker	<u>Sphyrapicus v. varius</u>	c		c	r	
*Hairy Woodpecker	<u>Dendrocopos villosus</u>	u	u	u	u	+
*Downy Woodpecker	<u>Dendrocopos p. pubescens</u>	c	c	c	c	+
*Eastern Kingbird	<u>Tyrannus tyrannus</u>	c	c	c		+
Western Kingbird	<u>Tyrannus verticalis</u>		x	x		
*Great Crested Flycatcher	<u>Myiarchus crinitus boreus</u>	c	c	c		+
*Eastern Phoebe	<u>Sayornis phoebe</u>	u	u	u		+
Yellow-bellied Flycatcher	<u>Empidonax flaviventris</u>	u		u		
Acadian Flycatcher	<u>Empidonax virescens</u>	r	r	r		+
*Traill's Flycatcher	<u>Empidonax trailli</u>	c	c	c		+
*Least Flycatcher	<u>Empidonax minimus</u>	c	c	c		+
*Eastern Wood Pewee	<u>Contopus virens</u>	c	c	c		+
Olive-sided Flycatcher	<u>Nuttallornis borealis</u>	u	u	u		
*Horned Lark	<u>Ermophila alpestris</u>	c	u	c	c	+
*Tree Swallow	<u>Iradoprocne bicolor</u>	c	a	a	x	+
*Bank Swallow	<u>Riparia r. riparia</u>	c	a	c		+
*Rough-winged Swallow	<u>Stelgidopteryx ruficollis</u> <u>serripennis</u>	c	c	c		+
*Barn Swallow	<u>Hirundo rustica erythrogaster</u>	c	c	c		+
*Cliff Swallow	<u>Petrachelidon pyrrhonata</u>	u	r	u		+
*Purple Martin	<u>Progne s. subis</u>	c	c	c		+
*Blue Jay	<u>Cyanocitta cristata bromia</u>	a	c	c	c	+
Black-billed Magpie	<u>Pica pica</u>	x			x	
*Common Crow	<u>Corvus b. brachyrhynchus</u>	c	u	c	u	+

TABLE 2.7-13 SEASONAL ABUNDANCE OF BIRDS OBSERVED ON THE OTTAWA, CEDAR POINT, AND WEST SISTER ISLAND NATIONAL WILDLIFE REFUGES (Sheet 7 of 10)
(Asterisk in Left Column Indicates Species Observed at the Fermi Site)

Common Name	Scientific Name	Season				Nest Locally
		Spring	Summer	Fall	Winter	
*Black-crowned Night Heron	<u>Nycticorax nycticorax hoactli</u>	c	c	c	o	+
Yellow-crowned Night Heron	<u>Nyctanassa v. violacea</u>	r	r			
Least Bittern	<u>Ixobrychus e. exilis</u>	u	u	u	x	+
American Bittern	<u>Botaurus lentiginosus</u>	u	u	u	r	+
Glossy Ibis	<u>Plegadis f. falcinellus</u>	o	o			
Mute Swan	<u>Cygnus olor</u>	r	r	r	r	
Whistling Swan	<u>Olor columbianus</u>	a	x	c	o	
*Canada Goose	<u>Branta canadensis</u>	a	c	a	a	
Brant	<u>Branta bernicla</u>	x		r		
Barnacle Goose	<u>Branta leucopsis</u>		x	x	x	
White-fronted Goose	<u>Anser albifrons frontalis</u>			x	x	
Snow Goose	<u>Chen c. caerulescens</u>	o		c	u	
Blue Goose	<u>Chen c. caerulescens</u>	o		c	u	
Fulvous Tree Duck	<u>Dendrocygna bicolor helva</u>			x		
*Mallard	<u>Anas p. platyrhynchos</u>	a	a	a	a	+
*Black Duck	<u>Anas rubripes</u>	a	c	a	a	+
*Gadwall	<u>Anas strepera</u>	c	u	c	r	+
*Pintail	<u>Anas acuta</u>	a	u	a	c	+
*American Green-winged Teal	<u>Anas crecca carolinensis</u>	c	u	c	o	+
*Blue-winged Teal	<u>Anas d. discors</u>	c	c	a	x	+
European Wigeon	<u>Anas penelope</u>	r		r	x	
*American Wigeon	<u>Anas americana</u>	a	u	a	o	+
Northern Shoveler	<u>Anas clypeata</u>	c	u	c	r	+
*Wood Duck	<u>Aix sponsa</u>	c	c	a	r	+
*Redhead	<u>Aythya americana</u>	c	u	c	o	+
Ring-necked Duck	<u>Aythya collaris</u>	c	x	c	r	
Canvasback	<u>Aythya valisineria</u>	a	x	a	c	
Greater Scaup	<u>Aythya marila</u>	a		u	r	
*Lesser Scaup	<u>Aythya affinis</u>	a	u	c	u	+
*Common Goldeneye	<u>Bucephala clangula americana</u>	c		c	c	
Bufflehead	<u>Bucephala albeola</u>	c		c	u	

TABLE 2.7-13 SEASONAL ABUNDANCE OF BIRDS OBSERVED ON THE OTTAWA, CEDAR POINT, AND WEST SISTER ISLAND NATIONAL WILDLIFE REFUGES (Sheet 8 of 10)
(Asterisk in Left Column Indicates Species Observed at the Fermi Site)

Common Name	Scientific Name	Season				Nest Locally
		Spring	Summer	Fall	Winter	
Solitary Vireo	<u>Vireo s. solitarius</u>	u		u		
*Red-eyed Vireo	<u>Vireo olivaceus</u>	c	c	c		+
*Philadelphia Vireo	<u>Vireo philadelphicus</u>	u		u		
*Warbling Vireo	<u>Vireo g. gilvus</u>	c	c	c		+
Black and White Warbler	<u>Mniotilta varia</u>	c		c		
Prothonotary Warbler	<u>Protonotaria citrea</u>	u	u	u		+
Worm-eating Warbler	<u>Helmitheros vermivorus</u>	r		x		
Golden-winged Warbler	<u>Vermivora chrysoptera</u>	u		u		
Blue-winged Warbler	<u>Vermivora pinus</u>	u	r	u		+
Tennessee Warbler	<u>Vermivora peregrina</u>	c		c		
*Orange-crowned Warbler	<u>Vermivora celata</u>	o		o	x	
*Nashville Warbler	<u>Vermivora r. ruficapilla</u>	c		c		
Northern Parula	<u>Parula americana</u>	o		o		
*Yellow Warbler	<u>Dendroica petechia aestiva</u>	c	c	c		+
*Magnolia Warbler	<u>Dendroica magnolia</u>	c	x	c		
*Cape May Warbler	<u>Dendroica tigrina</u>	c		c		
*Black-throated Blue Warbler	<u>Dendroica c. caerulescens</u>	c		c		
*Myrtle Warbler	<u>Dendroica c. coronata</u>	a		a		
*Black-throated Green Warbler	<u>Dendroica v. virens</u>	c		c	o	
Cerulean Warbler	<u>Dendroica cerulea</u>	u	x	o		+
*Blackburnian Warbler	<u>Dendroica fusca</u>	c		c		
Yellow-throated Warbler	<u>Dendroica dominica albilora</u>	x				
*Chestnut-sided Warbler	<u>Dendroica pennsylvanica</u>	c	o	c		+
*Bay-breasted Warbler	<u>Dendroica castanea</u>	c		c		
*Blackpoll Warbler	<u>Dendroica striata</u>	c		c		
Pine Warbler	<u>Dendroica p. pinus</u>	o		o		
Prairie Warbler	<u>Dendroica d. discolor</u>	o		o	x	
*Palm Warbler	<u>Dendroica p. palmarum</u>	c		c		
*Ovenbird	<u>Seiurus a. aurocapillus</u>	c	c	c		+
*Northern Waterthrush	<u>Seiurus noveboracensis</u>	c		c		
Louisiana Waterthrush	<u>Seiurus motacilla</u>	r	x	x		
Kentucky Warbler	<u>Oporornis formosus</u>	r	r	r		+
Connecticut Warbler	<u>Oporornis agilis</u>	r		r		

TABLE 2.7-13 SEASONAL ABUNDANCE OF BIRDS OBSERVED ON THE OTTAWA, CEDAR POINT, AND WEST SISTER ISLAND NATIONAL WILDLIFE REFUGES (Sheet 9 of 10)
(Asterisk in Left Column Indicates Species Observed at the Fermi Site)

Common Name	Scientific Name	Season				Nest Locally
		Spring	Summer	Fall	Winter	
*Mourning Warbler	<u>Oporornis philadelphia</u>	u		u		
*Common Yellowthroat	<u>Geothlypis trichas brachidactylus</u>	c	c	c	r	+
*Yellow-breasted Chat	<u>Icteria v. virens</u>	u	u	u		
Hooded Warbler	<u>Wilsonia citrina</u>	r	r	r		+
*Wilson's Warbler	<u>Wilsonia p. pusilla</u>	c		c		
*Canada Warbler	<u>Wilsonia canadensis</u>	c		c		
*American Redstart	<u>Setophaga ruticilla</u>	c	r	c		+
*House Sparrow	<u>Passer domesticus</u>	a	a	a	a	+
*Bobolink	<u>Dolichonyx oryzivorus</u>	u	u	u		+
*Eastern Meadowlark	<u>Sturnella m. magna</u>	c	c	c	u	+
Western Meadowlark	<u>Sturnella neglecta</u>	u	u	u		+
Yellow-headed Blackbird	<u>Xanthocephalus xanthocephalus</u>	r	x	x		
*Red-winged Blackbird	<u>Agelaius phoeniceus</u>	a	a	a	a	+
Orchard Oriole	<u>Icterus spurius</u>	r	r	r		+
*Baltimore Oriole	<u>Icterus g. galbula</u>	c	u	u	x	+
Rusty Blackbird	<u>Euphagus c. carolinus</u>	c		c	u	
Brewer's Blackbird	<u>Euphagus cyanocephalus</u>	o		o	r	
*Common Grackle	<u>Quiscalus quiscula versicolor</u>	a	a	a	u	+
*Brown-headed Cowbird	<u>Molothrus a. ater</u>	c	c	c	u	+
*Scarlet Tanager	<u>Piranga olivacea</u>	c	u	c		+
Summer Tanager	<u>Piranga r. rubra</u>	r	x	x		
*Cardinal	<u>Cardinalis c. cardinalis</u>	c	c	c	c	+
Rose-breasted Grosbeak	<u>Pheucticus ludovicianus</u>	c	r	c		+
*Indigo Bunting	<u>Passerina cyanea</u>	c	c	c		+
*Dickcissel	<u>Spiza americana</u>	u	u	u		+
*Evening Grosbeak	<u>Hesperiphona v. vespertina</u>	o		o	o	
Purple Finch	<u>Carpodacus p. purpureus</u>	u	x	u	u	
Hoary Redpoll	<u>Acanthis hornemanni</u>	x		x		
Common Redpoll	<u>Acanthis flammea</u>	o		o	o	
Pine siskin	<u>Spinus p. pinus</u>	u		u	o	
*American Goldfinch	<u>Spinus t. tristis</u>	c	c	c	c	+
*Rufous-sided Towhee	<u>Pipilo e. erythrophthalmus</u>	c	c	c	u	+
*Savannah Sparrow	<u>Passerculus sandwichensis</u>	c	c	c	x	+
Grasshopper Sparrow	<u>Ammodramus savannarum pratensis</u>	o	o	o		+
Henslow's Sparrow	<u>Ammodramus henslowii</u>	x	x			

TABLE 2.7-13 SEASONAL ABUNDANCE OF BIRDS OBSERVED ON THE OTTAWA, CEDAR POINT, AND WEST SISTER ISLAND NATIONAL WILDLIFE REFUGES (Sheet 10 of 10)
(Asterisk in Left Column Indicates Species Observed at the Fermi Site)

Common Name	Scientific Name	Season				Nest Locally
		Spring	Summer	Fall	Winter	
Le Conte's Sparrow	<u>Ammodramos leconteii</u>	x		r		
Sharp-tailed Sparrow	<u>Ammodramos caudacuta</u>	r		r		
*Vesper Sparrow	<u>Pooecetes g. gramineus</u>	u	u	u	x	+
*Slate-colored Junco	<u>Junco h. hyemalis</u>	c		c	u	
Oregon Junco	<u>Junco hyemalis organus</u>	o		o	o	
*Tree Sparrow	<u>Spizella a. arborea</u>	c		c	c	
Chipping Sparrow	<u>Spizella p. passerina</u>	u	u	u		+
*Field Sparrow	<u>Spizella p. pusilla</u>	u	u	u	r	+
Harris' Sparrow	<u>Zonotrichia querula</u>	x		x		
*White-crowned Sparrow	<u>Zonotrichia leucophrys</u>	c	x	c	u	
*White-throated Sparrow	<u>Zonotrichia albicollis</u>	c	x	c	u	
Fox Sparrow	<u>Passerella i. iliaca</u>	c		c	r	
*Lincoln's Sparrow	<u>Melospiza lincolnii</u>	u		u	x	
*Swamp Sparrow	<u>Melospiza georgiana</u>	u	r	c	o	+
*Song Sparrow	<u>Melospiza melodia euphonia</u>	c	c	c	u	+
Lapland Longspur	<u>Calcarius l. lapponicus</u>	u		u	u	
*Snow Bunting	<u>Plectrophenax n. nivalis</u>	c		c	c	

Wildlife Management Plan for Fermi 2 Power Plant

TABLE 2.7-14 REPTILES WHOSE GEOGRAPHICAL RANGES
INCLUDE THE FERMI SITE^(a)

1.	Common Snapping Turtle ^(b)	<u>Chelydra serpentina serpentina</u>
2.	Stinkpot	<u>Sternotherus odoratus</u>
3.	Spotted Turtle	<u>Clemmys guttata</u>
4.	Eastern Box Turtle	<u>Terrapene carolina carolina</u>
5.	Map Turtle	<u>Graptemys geographica</u>
6.	Midland Map Turtle	<u>Chrysemys picta marginata</u>
7.	Blanding's Turtle	<u>Emydoidea blandingi</u>
8.	Eastern Spiny Softshell	<u>Trionyx spinifer spinifer</u>
9.	Five-lined Skink	<u>Eumeces fasciatus</u>
10.	Northern Water Snake ^(b)	<u>Natrix sipedon sipedon</u>
11.	Queen Snake	<u>Natrix septemvittata</u>
12.	Northern Brown Snake	<u>Storeria dekayi dekayi</u>
13.	Central Brown Snake	<u>Storeria dekayi wrightorum</u>
14.	Northern Red-bellied Snake	<u>Storeria occipitomaculata occipitomaculata</u>
15.	Butler's Garter Snake	<u>Thamnophis butleri</u>
16.	Eastern Ribbon Snake	<u>Thamnophis sauritus sauritus</u>
17.	Eastern Garter Snake ^(b)	<u>Thamnophis sirtalis sirtalis</u>
18.	Eastern Hognose Snake	<u>Heterodon platyrhinos</u>
19.	Northern Ringneck Snake	<u>Diadophis punctatus edwardsi</u>
20.	Blue Racer	<u>Coluber constrictor foxi</u>
21.	Eastern Smooth Green Snake	<u>Opheodrys vernalis vernalis</u>
22.	Eastern Milk Snake ^(b)	<u>Lampropeltis doliata triangulus</u>
23.	Eastern Massasauga	<u>Sistrurus catenatus catenatus</u>
24.	Eastern Fox Snake	<u>Elaphe vulpina gloydi</u>

(a) References 60, 61, and 62.

(b) Presence of the species on the site was verified.

Wildlife Management Plan for Fermi 2 Power Plant

**TABLE 2.7-15 AMPHIBIANS WHOSE GEOGRAPHICAL RANGES
INCLUDE THE FERMI SITE^(a)**

1. Mudpuppy	<u>Necturus maculosus maculosus</u>
2. Blue-spotted Salamander	<u>Ambystoma laterale</u>
3. Spotted Salamander	<u>Ambystoma maculatum</u>
4. Eastern Tiger Salamander	<u>Ambystoma tigrinum tigrinum</u>
5. Red-spotted Newt	<u>Diemictylus viridescens viridescens</u>
6. Red-backed Salamander	<u>Plethodon cinereus cinereus</u>
7. Four-toed Salamander	<u>Hemidactylium scutatum</u>
8. American Toad	<u>Bufo americanus americanus</u>
9. Fowlers Toad	<u>Bufo woodhousei fowleri</u>
10. Blanchard's Cricket Frog ^(b)	<u>Acris crepitans blanchardi</u>
11. Northern Spring Peeper	<u>Hyla crucifer crucifer</u>
12. Eastern Gray Treefrog	<u>Hyla versicolor versicolor</u>
13. Western Chorus Frog	<u>Pseudacris triseriata triseriata</u>
14. Bullfrog ^(b)	<u>Rana catesbiana</u>
15. Green Frog	<u>Rana clamitans melanota</u>
16. Northern Leopard Frog ^(b)	<u>Rana pipiens pipiens</u>
17. Pickerel Frog	<u>Rana palustris</u>
18. Wood Frog	<u>Rana sylvatica</u>

(a) References 60, 61, and 63.

(b) Presence of species on the site was verified.

TABLE 2.7-16 MAMMALS WHOSE GEOGRAPHIC RANGES INCLUDE THE FERMI SITE(a)
(Sheet 1 of 3)

1.	Opossum ^(b)	<u>Didelphis virginiana</u>	tracks, observed, road kill
2.	Eastern Mole	<u>Scalopus aquaticus</u>	
3.	Star-nosed Mole	<u>Condylura cristata</u>	
4.	Masked Shrew ^(b)	<u>Sorex cinereus</u>	captured
5.	Least Shrew	<u>Cryptotis parva</u>	
6.	Short-tailed Shrew ^(b)	<u>Blarina brevicauda</u>	captured
7.	Little Brown Myotis	<u>Myotis lucifugus</u>	
8.	Indiana Myotis	<u>Myotis sodalis</u>	endangered species
9.	Keen Myotis	<u>Myotis keeni</u>	
10.	Silver-haired Bat	<u>Lasiurus noctivagans</u>	
11.	Big Brown Bat	<u>Eptesicus fuscus</u>	
12.	Evening Bat	<u>Nycticeus humeralis</u>	
13.	Red Bat	<u>Lasiurus borealis</u>	
14.	Hoary Bat	<u>Lasiurus cinereus</u>	
15.	Raccoon ^(b)	<u>Procyon lotor</u>	tracks
16.	Long-tailed Weasel	<u>Mustela frenata</u>	
17.	Least Weasel	<u>Mustela rixosa</u>	
18.	Mink	<u>Mustela vison</u>	

(a) References 54, 64, and 65.

(b) Indicates that the presence of a species was verified.

TABLE 2.7-16 MAMMALS WHOSE GEOGRAPHIC RANGES INCLUDE THE FERMI SITE^(a)
(Sheet 2 of 3)

19.	Badger	<u>Taxidea taxus</u>	
20.	Striped Skunk ^(b)	<u>Mephitis mephitis</u>	tracks, dead specimen
21.	Red Fox ^(b)	<u>Vulpes vulpes</u>	tracks, observed
22.	Gray Fox	<u>Urocyon cinereoargenteus</u>	
23.	Coyote	<u>Canis latrans</u>	
24.	Woodchuck ^(b)	<u>Marmota monax</u>	observed
25.	Thirteen Lined Ground Squirrel	<u>Spermophilus tridecemlineatus</u>	
26.	Eastern Chipmunk	<u>Tamias stratus</u>	
27.	Red Squirrel ^(b)	<u>Tamiasciurus hudsonicus</u>	tracks, voice
28.	Eastern Gray Squirrel	<u>Sciurus carolinensis</u>	
29.	Eastern Fox squirrel ^(b)	<u>Sciurus niger</u>	tracks, observed, road kill
30.	Southern Flying Squirrel	<u>Glaucomys volans</u>	
31.	Prairie Deer Mouse ^(b)	<u>Peromyscus maniculatus bairdi</u>	captured
32.	White-footed Mouse ^(b)	<u>Peromyscus leucopus</u>	captured
33.	Southern Bog Lemming	<u>Synaptomys cooperi</u>	
34.	Meadow Vole ^(b)	<u>Microtus pennsylvanicus</u>	captured

TABLE 2.7-16 MAMMALS WHOSE GEOGRAPHIC RANGES INCLUDE THE FERMI SITE^(a)
 (Sheet 3 of 3)

35.	Pine Vole	<u>Microtus pinetorum</u>	
36.	Muskrat ^(b)	<u>Ondatra zibethica</u>	tracks, observed, houses
37.	Norway Rat ^(b)	<u>Rattus norvegicus</u>	captured
38.	House Mouse ^(b)	<u>Mus musculus</u>	captured
39.	Meadow Jumping Mouse	<u>Zapus hudsonicus</u>	hibernation
40.	Eastern Cottontail ^(b)	<u>Sylvilagus floridanus</u>	observed
41.	White-tailed Deer	<u>Odocoileus virginianus</u>	tracks absent

APPENDIX C - ACTIVITIES JOURNAL

Fermi Nuclear Power Plant Activities Journal

Spring 1990	Began pheasant-rearing program ~50 birds on site.
December 1990	Participated in the National Audubon Society's Annual Christmas Bird count.
Spring 1991	First release of site reared pheasants on site. Entered into a five-year cooperative pheasant-rearing program with the Wildlife Division of the DNR.
May 1991	700 pheasant chicks received from the DNR.
December 1991	Participated in the National Audubon Society's Annual Christmas Bird count
Spring 1992	Pheasants released on site and through out various counties.
May 1992	700 pheasant chicks received from the DNR.
December 1992	Participated in the National Audubon Society's Annual Christmas Bird count
Spring 1993	Pheasants released on site and through out various counties.
May 1993	700 pheasant chicks received from the DNR.
December 1993	Participated in the National Audubon Society's Annual Christmas Bird count
Spring 1994	Pheasants released on site and through out various counties.
May 1994	700 pheasant chicks received from the DNR.
December 1994	Participated in the National Audubon Society's Annual Christmas Bird count
Spring 1995	Pheasants released on site and through out various counties.
May 1995	700 pheasant chicks received from the DNR.

Wildlife Management Plan for Fermi 2 Power Plant

Fall 1995	Tree line along Fermi Drive is cleared back ~50 foot from the road way to minimize vehicle / wildlife encounters.
December 1995	Participated in the National Audubon Society's Annual Christmas Bird count
Spring 1996	Pheasants released on site and through-out various counties. 150 pheasants released at Belle River & Greenwood Energy Center and Fermi Drive wildflowers are planted.
May 1996	700 pheasant chicks received from the DNR.
Fall 1996	Fermi Drive wildflower meadow is mowed.
December 1996	Participated in the National Audubon Society's Annual Christmas Bird count.
Spring 1997	Pheasants released on site and through out various counties. Fermi Drive wildflower meadow is reseeded as required.
May 1997	Pheasant rearing program is completed. Pheasant pen and brooder are dismantled. Wildlife plots are planted for pheasants and other area wildlife.
Fall 1997	Wildlife plots for pheasants are maintained (some plowed under; others left standing through the winter). Fermi Drive wildflower meadow is mowed.
December 1997	Participated in the National Audubon Society's Annual Christmas Bird count
Spring 1998	Wildlife plots are planted for pheasants and other area wildlife or a rotational bases. Fermi Drive wildflower meadow is re-seeded as required.
Fall 1998	Wildlife plots are maintained (some plowed under; others left standing through the winter). Fermi Drive wildflower meadow is mowed.
December 1998	Participated in the National Audubon Society's Annual Christmas Bird count.

Wildlife Management Plan for Fermi 2 Power Plant

- Spring 1999 Wildlife plots are planted for pheasants and other area wildlife on a rotational basis.
Fermi Drive wildflower meadow is reseeded as required.
- Fall 1999 Wildlife plots are maintained (some plowed under; others left standing through the winter).
Fermi Drive wildflower meadow is mowed.
- December 1999 Participated in the National Audubon Society's Annual Christmas Bird count.
- Spring 2000 Wildlife plots are planted for pheasants and other area wildlife on a rotational basis.
Fermi Drive wildflower meadow is re-seeded as required.
- June 2000 Site visit from Wildlife Habitat Council biologist Bryan Knowles.
- August 2000 The Fermi Wildlife Habitat Team receives and reviews the WHC Opportunities Report for the site.
Fermi Wildlife Habitat booth introduces the program site-wide and solicits volunteers to join the team.
Fermi applies for Wildlife Habitat Council certification.

Subject: Re: Maintenance of the Wildflower Meadow along Fermi Drive

Date: Tue, 03 Oct 2000 09:15:29 -0400

From: Duane P Wilger <wilgerd@dteenergy.com>

To: Barbara H Lemieux <lemieuxb@dteenergy.com>

CC: Lynda J Craine <crainel@dteenergy.com>, Robert A Nearhoof <nearhoofr@dteenergy.com>

Barb,

if safety dictates that a fall maintenance of the wildflower meadow is required, I agree, safety is the priority. As far as cutting versus burning, Lynda Craine has indicated that burning is not feasible from an environmental stand point. So, regarding a fall cutting, can we rent the equipment required to remove the thatch once the wildflower meadow is cut? Or maybe we have employees who live on farms that own this type of equipment and would let us borrow it. The Wildlife Habitat Program on site is supported by employee involvement. I have a list of employees who have indicated their interest in volunteering their time to support this effort. If you would like me to contact these folks to inquire about thatch removal equipment I would be glad to contact them. Please let me know how I can help.

Thanks.

Duane Wilger

Barbara H Lemieux wrote:

We typically cut the area after the first frost. Waiting until spring poses a problem because I may not be able to get into the area with our equipment because of wet conditions. Leaving the area up throughout the fall and winter poses a safety problem for drivers (deer less visible.) I do not have the equipment to remove the cut material, and it's a safety hazard to remove it by hand (poison ivy.)

Duane P Wilger wrote:

Barb,

as I am sure that you are already planning your outdoor maintenance for the fall season, I would like to request that you do not cut the Fermi Drive Wildflower Meadow this fall. I have included an excerpt from our Opportunities Report from the Wildlife Habitat Council in which they are recommending performing maintenance of the meadow to take place in late winter / early spring. They are also recommending a burn rather than a cut but I'm sure the pros and cons of a burn would need to be fully evaluated by numerous groups on site (Environmental, Fire Protection, Building and Properties and Management) before we can discuss that method as an alternative. They also have some recommended seed mixes and planting, reseeding, methods which I would like to discuss with you in the near future.

I plan on sitting down with Bill O'Connor in the next week to update him on the site's Wildlife Habitat Program. I will keep you informed on those issues which might affect your group.

Thank you

-Duane Wilger

Excerpt from Fermi's Habitat Opportunities Report from WHC

IV. B. Wildflower Meadow

A wildflower meadow project was instituted about three years ago along the south side of Fermi Drive, between Critical Path and Quarry Lake Road. The area was planted with native wildflower species such as black-eyed Susan and coreopsis. In addition, non-native species were also planted such as cornflower, and cultivated varieties of black-eyed Susan. The area has been maintained by annual mowing in the fall. WHC commends this initial effort and recommends maintaining and expanding the wildflower meadow program.

1. Maintenance

While adequate for maintenance purposes, mowing in the fall may not be the most appropriate. *WHC highly recommends switching to a burning regime.* Wildflower meadow species have evolved over time in the presence of fire and research has shown that fire is the most effective tool at maintaining the health and diversity of a wildflower meadow. *Conduct burns in the early spring, late March or early April.* This will remove the thatch layer and allow the sun to warm the soil, stimulating the growth of warm season, native meadow species, while discouraging the growth of cool season, non-native weed species. Burning of the meadow can be used as a training exercise for the plant's fire response team, the local fire department, or both. Conduct burns on a yearly basis for the next three or four years, then on a one to three year rotation thereafter.

If fire is not an option, continued mowing of the area is the next best method. It is important to note that fire is a far superior maintenance tool and is well worth the extra effort required in planning and implementation. *Mowing should also be conducted in the late winter to early spring time period.* This timing will allow the flowers to produce and disperse seed, as well as provide habitat for wildlife throughout the winter months. It is important to remove the cut material, imitating fire removing the thatch layer. Therefore, the area should be hayed, more than mowed. Mowing should occur on an annual basis for the life of the project.

Bald Eagles

Subject: Bald Eagles

Date: Thu, 05 Oct 2000 08:20:48 -0400

From: "Michael L Himebauch" <himebauchm@dteenergy.com>

Organization: System Engineering

To: Duane P Wilger <wilgerd@dteenergy.com>

As I was leaving work on 10/3/2000 at around 4:30 pm, I saw 2 mature adult bald eagles flying to the south above the beach. I couldn't tell where they landed, but I must say I was very surprised to see them. I have seen bald eagles up north, but prior to this I had never seen them down here! Very cool!!!!

Thanks,
Mike

Mike Himebauch <himebauchm@dteenergy.com>
System Engineer
System Engineering-NSSS

Wildlife Management Plan for Fermi 2 Power Plant

APPENDIX D - CHRISTMAS BIRD COUNT

Fermi power plant

Dec. 26, 1999

Counters: Tim Smart, Jim Fowler

Starting Time 8:45 AM Finish Time 11:30 AM

Weather: Cloudy and cold
WATER: Pond - open, Lake - open
WINDS: Southwest winds 10-15 to gusty 20-25

SPECIES:

Great Blue Heron	21
Canada Goose	470
Mallard	779
Northern Pintail	2
Black Duck	15
Gadwall	3
Ring-necked Duck	33
Greater Scaup	6
Lesser Scaup	25
Common Goldeneye	75
Common Merganser	43
Red-breasted Merganser	2
American Kestrel	1
Great Black-back Gull	5
Herring Gull	124
Lesser Black-backed Gull	1
Glaucous Gull	1
Iceland Gull	1
Rock Dove	5
Mourning Dove	3
Downy Woodpecker	3
Blue Jay	1
Black-capped Chickadee	6
Tufted Titmouse	2
Brown Creeper	1
European Starling	2
N. Cardinal	12
American Goldfinch	10
Dark-eyed Junco	10
American Tree Sparrow	34
Swamp Sparrow	1
House Sparrow	5
Totals	1,702

Wildlife Management Plan for Fermi 2 Power Plant

Thank you for your help with the 24th Rockwood Christmas Bird Count. An impressive total of 87 species were counted, including a Least Bittern—probably the first winter record of this species for Michigan. Other unusual species included Snow Goose, N. Shoveler, Double-crested Cormorant and Little Gull. Record numbers of 6 species were counted: N. Shoveler, Gadwall, Canvasback, Bufflehead, American Robin and Golden-crowned Kinglet. Eight additional species were more abundant than usual (see list). No Purple Finches were detected. The only other year with no Purple Finches was 1974, the very first year of the count.

The onset of cold weather just prior to the count proved not to be too detrimental; there were good numbers of waterfowl and most passerines. Rusty Blackbirds were apparently pushed out by the cold and hence missed. The only other expected species that was missed was Field Sparrow. The high winds on the day of the count, which kept many marsh and field birds confined to cover, may have contributed to its absence. Despite sightings by Tim Smart at two locations prior to the count, N. Bobwhite was also missed.

Special thanks must go to Paul Cypher for hosting the tally at the Lake Erie Metropark Marshlands Museum, and for compiling the reports from feeder watchers. I am also grateful to Mike Trapp, who was instrumental in obtaining permission to count at the Enrico Fermi power plant. I am also indebted to Art Carpenter for computerizing the count data, which greatly reduced the time needed to compile the results.

Next year's count will be on **Sunday, December 26, 1999**. I look forward to seeing all of you again next year.

Tom Carpenter, compiler

Wildlife Management Plan for Fermi 2 Power Plant

3646 S. John Hix
Wayne, MI 48184
January 27, 1999

Mike Trapp
Nuclear Information Center
228 NOC
6400 N. Dixie Hwy.
Newport, MI 48166

Dear Mr. Trapp,

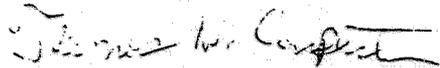
Enclosed are the results of the 1998 Rockwood Christmas Bird Count.

Like you anticipated, everything went extremely well this year; the counters had no trouble gaining access. Again I want to thank you for all of your efforts in this regard.

The plant properties often contain many good birds that aren't found in the other locations covered on the count. For example, on the 1998 count the sole Double-crested Cormorant was seen at the plant, as were several uncommon water birds—10 Great Blue Herons, 2 Hooded Mergansers, 2 Northern Pintails and a Pied-billed Grebe. A Great Horned Owl was also discovered on the plant property.

Next year's count is on **Sunday, December 26, 1999**. Tim Smart informed me that he will probably be contacting you to obtain access beginning next year, since he is one of the counters that covers the plant and he lives in the downriver area. I will continue to send you the count results.

Sincerely,



Thomas W. Carpenter, Ph.D.

chairperson, Rockwood Christmas Bird Count

Wildlife Management Plan for Fermi 2 Power Plant

unusual species and higher than normal numbers of usual species are bold typed.

* = record number counted

Pied-billed Grebe 3	American Kestrel 20	Golden-crowned Kinglet 33*
Double-crested Cormorant 1	Ring-necked Pheasant 6	Cedar Waxwing 88
Great Blue Heron 152	American Coot 494	N. Shrike 3
Black-crowned Night Heron 1	Killdeer 2	European Starling 2288
Least Bittern 1	Great Black-backed Gull 264	Yellow-rumped Warbler 11
Mute Swan 84	Herring Gull 1981	House Sparrow 1394
Tundra Swan 1049	Ring-billed Gull 1830	Red-winged Blackbird 13
Snow Goose 1	Bonaparte's Gull 529	Common Grackle 2
Canada Goose 6476	Little Gull 1	Brown-headed Cowbird 207
Mallard 5799	gull sp. 1845	blackbird sp. 15
Black Duck 199	Rock Dove 807	N. Cardinal 261
N. Shoveler 5*	Mourning Dove 1182	House Finch 394
Gadwall 460*	E. Screech Owl 13	Pine Siskin 2
N. Pintail 40	Great Horned Owl 7	American Goldfinch 216
American Wigeon 25	Short-eared Owl 2	Dark-eyed Junco 510
Wood Duck 3	Belted Kingfisher 4	American Tree Sparrow 754
Redhead 331	N. Flicker 44	White-throated Sparrow 32
Ring-necked Duck 9	Red-bellied Woodpecker 20	Swamp Sparrow 11
Canvasback 35,270*	Red-headed Woodpecker 2	Song Sparrow 59
Greater Scaup 1068	Hairy Woodpecker 4	Lapland Longspur 5
Lesser Scaup 19	Downy Woodpecker 144	Snow Bunting 11
Common Goldeneye 635	Horned Lark 22	
Bufflehead 451*	Blue Jay 155	Total Species: 87
Ruddy Duck 156	American Crow 103	
Hooded Merganser 8	Black-capped Chickadee 223	Total Individuals: 69,352
Common Merganser 598	Tufted Titmouse 84	
Red-breasted Merganser 92	White-breasted Nuthatch 59	
Sharp-shinned Hawk 5	Red-breasted Nuthatch 1	
Cooper's Hawk 12	Brown Creeper 15	
Red-tailed Hawk 50	Winter Wren 2	
Red-shouldered Hawk 1	Carolina Wren 9	
Rough-legged Hawk 1	American Robin 105*	
Bald Eagle 6	Hermit Thrush 7	
N. Harrier 6	E. Bluebird 40	

Wildlife Management Plan for Fermi 2 Power Plant

The plant has copies of the Rockwood Christmas Bird counts for 1990 through 1996. The 1997 data was unavailable. However, the birds listed are for the entire count area and do not list the birds counted on Fermi property separately. The year 1999 was the only count year that the birds counted on Fermi property is listed separately. The 1990 - 1996 data is not provided here but will be maintained in our journal logs or is available upon request.

APPENDIX E - PHEASANT PROGRAM

NRC-14-0073

**Response to License Renewal Environmental Request for
Additional Information**

Enclosure 2

TE-1 - DTE - Fermi 2 - WaW 2YrRecert 2014



October 6, 2014

Dear Mr. Muller:

Congratulations! The Wildlife Habitat Council (WHC) commends the wildlife team at DTE Energy's Fermi 2 Power Plant on achieving *Wildlife at Work* recertification.

You can remain certified until 2016 if you continue to maintain and document the program as you have so successfully done to date. We encourage you to contact Martha Gruelle (mgruelle@wildlifehc.org), WHC Huron to Erie Waterways Project Director, for recommendations on maintaining and expanding your program.

To further congratulate you on a job well done, we would like to invite you to take part in WHC's 26th [Annual Symposium](#) on November 10-11, where you will be presented with your certificate and recognized at an Awards Banquet. Please note that the outcome should not be shared outside of your company until November 11th.

In addition to the award ceremony, Fermi 2 Power Plant's efforts will be recognized through press releases and inclusion on the [Conservation Registry](#) and [LandScope](#), on-line resources through which various stakeholders can collaborate on conservation efforts. Drafts of the program description that will be used in the press release and included on these websites will be sent to your media contact for review and approval.

WHC is currently in the process of enhancing our certification program to make it more user-friendly and to better reflect contemporary thinking on conservation and education. This enhanced program will be launched at WHC's 2015 Symposium. Stay tuned for more details as we make this exciting change to our certification program.

Congratulations again and thank you for your participation in WHC's *Wildlife at Work* program.

Sincerely,

Margaret O'Gorman
President
Wildlife Habitat Council

/le

cc: Robert Richard, Kristen LeForce, Bill McDermott

NRC-14-0073

**Response to License Renewal Environmental Request for
Additional Information**

Enclosure 2

TE-2 - Lagoon Presentation Excerpts

**Lagoon Beach Unit:
Power for Preservation of
Natural Areas.**

Barry E. Muller

Coastal Prairie Project

■ Step Two-Point-Five

■ Pre-Treatment Vegetation Survey

- Performed by Emily Darany (FWS) and Ryan O'Connor (MSU/MDNR Extension Office) 2005
- Natives: 81% (55 species)
- Adventives: 19% (13 species)
- Coefficient of Conservatism, "Natives Only": 3.1
- Coefficient of Conservatism, "Natives & Adv": 2.5
- Native wetland indicator value indicative of slightly FacWet (-0.3)
- Adventive wetland indicator value indicative of slightly FacUp+ (2.2)

Coastal Prairie Project

- Step Two-Point-Five
 - Pre-Treatment Vegetation Survey (Adventives)

Genus	Species	COMMON NAME
LYTHRUM	SALICARIA	PURPLE LOOSESTRIFE
LYSIMACHIA	NUMMULARIA	MONEYWORT
RUMEX	CRISPUS	CURLY DOCK
SONCHUS	ARVENSIS	PERENNIAL SOW THISTLE
CIRSIUM	ARVENSE	CANADIAN THISTLE
ELAEAGNUS	UMBELLATA	AUTUMN-OLIVE
RHAMNUS	CATHARTICA	COMMON BUCKTHORN
ROSA	MULTIFLORA	MULTIFLORA ROSE
ARCTIUM	MINUS	COMMON BURDOCK
DAUCUS	CAROTA	QUEEN ANNE'S-LACE
DIPSACUS	FULLONUM	COMMON TEASEL
HYPERICUM	PERFORATUM	COMMON ST. JOHN'S WORT
VERBASCUM	THAPSUS	COMMON MULLEIN

Coastal Prairie Project

■ Step Two-Point-Five

■ Pre-Treatment Vegetation Survey (Natives - Wet)

Genus	Species	COMMON NAME
Lythrum	alatum	winged loosestrife
Geum	rivale	purple avens
Iris	virginica	southern blue flag
Carex	frankii	Frank's sedge
Glyceria	striata	fowl manna grass
Scirpus	atrovirens	bulrush
Scirpus	pendulus	bulrush
Carex	stipata	sedge
Carex	vulpinoidea	sedge
Carex	grayi	sedge
Pycnanthemum	virginianum	common mountain mint
Eupatorium	perfoliatum	common boneset
Verbena	hastata	blue vervain
Phalaris	arundinacea	reed canary grass
Phragmites	australis	reed
Ribes	americanum	wild black currant
Anemone	canadensis	Canada anemone
Lysimachia	ciliata	fringed loosestrife
Mentha	arvensis	wild mint
Fraxinus	pennsylvanica	red ash
Vitis	riparia	riverbank grape
Aster	lateriflorus	side-flowering aster
Zizia	aurea	golden alexanders
Vernonia	missurica	Missouri ironweed
Toxicodendron	radicans	poison ivy
Populus	deltoides	cottonwood
Cornus	drummondii	rough-leaved dogwood
Apocynum	cannabinum	indian hemp
Carex	blanda	sedge
Geum	canadense	white avens
Juncus	dudleyi	Dudley's rush
PRUNELLA	VULGARIS	lawn prunella

Coastal Prairie Project

■ Step Two-Point-Five

■ Pre-Treatment Vegetation Survey (Natives - Upl)

Genus	Species	COMMON NAME
Parthenocissus	quinquefolia	Virginia creeper
Fragaria	virginiana	wild strawberry
Erigeron	annuus	annual fleabane
Rubus	allegheniensis	common blackberry
Fraxinus	americana	white ash
Smilacina	racemosa	false spikenard
Geranium	maculatum	wild geranium
Sanicula	marilandica	black snakeroot
Podophyllum	peltatum	may-apple
Circaea	lutetiana	enchanter's-nightshade
Monarda	fistulosa	wild bergamot
Rudbeckia	hirta	black-eyed susan
Solidago	altissima	tall goldenrod
Oxalis	stricta	common yellow wood sorrel
Rosa	carolina	pasture rose
Potentilla	simplex	old field cinquefoil
Anemone	cylindrica	thimbleweed
Agrimonia	pubescens	soft agrimony
Carex	hirtifolia	sedge
Zanthoxylum	americanum	prickly-ash
Rhus	typhina	staghorn sumac
Asclepias	syriaca	common milkweed
Rubus	occidentalis	black raspberry

NRC-14-0073

**Response to License Renewal Environmental Request for
Additional Information**

Enclosure 2

TE-2 - 2007 Prairie Survey

MICHIGAN STATE
UNIVERSITY
EXTENSION

October 1, 2007

Barry Muller
Fermi 2 Power Plant, 100AIB
6400 N. Dixie Hwy
Newport, MI 48166

Mr. Muller,

It was a pleasure visiting the planted prairie beneath the transmission lines at the Detroit Edison Fermi 2 power plant on Wednesday, September 19, 2007 with Robert Peplowski and Greg Norwood.

Overall, the prairie planting seems to have been successful. Native warm-season grasses like big bluestem (*Andropogon gerardii*) and Indian grass (*Sorghastrum nutans*) have established quite well. Additionally, several wildflower species were observed that were also likely in the planting mix, including purple coneflower (*Echinacea purpurea*) and yellow coneflower (*Ratibida pinnata*). Numerous other prairie species are present, either from planting or naturally occurring in the seed bank on site.

However, numerous non-native species were also observed and present a management challenge to the site. These include common old-field weeds like foxtail grasses (*Setaria* spp.) as well as highly invasive species like Canadian thistle (*Cirsium arvense*) and Phragmites (*Phragmites australis*) that, if left untreated, could rapidly expand and take over portions of the prairie. Well-timed mowing may reduce foxtail grasses; however mowing may also eliminate many forbs.



**Michigan Natural
Features Inventory**

P.O. Box 30444
Lansing, MI
48909-7944

(517) 373-1552

FAX: (517) 373-9566

Prescribed burning is an alternative approach commonly used to control weeds and stimulate native species. With its location under the transmission lines, the site must be managed with special care, and burning may not be a viable option. However, from an ecological perspective it is the most effective and cost-efficient management too, and I would encourage Detroit Edison to consider a combination of management options that might allow burning to be conducted safely. These include mowing the prairie prior to burning to reduce standing biomass and thus reduce flame heights, conducting only backburns, which have substantially lower flame heights than headfires, and burning under weather conditions that minimize smoke to reduce the unlikely but possible potential for arcing.

Invasive species such as Canadian thistle and Phragmites can be best controlled by treating with different types of herbicides, spot-spraying the target species to minimize impacts to desirable species. I would also strongly recommend not limiting treatments strictly to the planted prairie area, since areas directly adjacent are a primary source of invasion either through seed dispersal or through the extension of rhizomes into the prairie edges. Plants such as Phragmites can spread up to 60 feet per year via rhizomes.

Areas outside the planted prairie are also important for other native species. In addition to providing habitat for other plant and animal species, they also serve as a seed source for species establishing in the prairie that likely were not planted. This was observed during the

Michigan State University
Extension programs and materials
are open to all without regard to
race, color, national origin, gender,
religion, age, disability, political
beliefs, sexual orientation, marital
status, or family status.

MSU is an affirmative-action,
equal-opportunity institution.

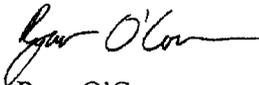
survey, with the edges of the prairie adjacent to unroot-raked areas exhibiting higher diversity. For the same reasons, I would also recommend expanding control of shrubs into adjacent, unplanted areas. To be most effective, shrubs should either be cut and the stumps treated with a concentrated herbicide in summer or fall, or mowed with a brush-hog in summer or fall and the resprouts treated with a foliar herbicide the following summer.

The final item I wanted to bring your attention to is the presence of a highly invasive aquatic plant in the tailings pond. European frog-bit (*Hydrocharis morus-ranae*) is a highly problematic species in aquatic habitats, and has the potential to spread rapidly and out-compete virtually every other plant species, choking waterways and eliminating fish and wildlife habitat. European frog-bit resembles a small water-lily, with leaves 1-2 cm across on long stems. In the tailings pond, the plant appears to be relatively sparse in distribution, being limited to the shoreline areas. However, it has the potential to spread rapidly, both within the pond and in adjacent marshy areas on the property. I would highly recommend establishing an aggressive monitoring and control program to eliminate this species before it spreads and compromises wildlife habitat both on the property and elsewhere in the region.

Thank you again for allowing me the opportunity to visit the property. I have enclosed the list of plants noted during the field survey and corresponding floristic quality assessment information. You will notice the list is quite different from the previous survey, with many species being added and many others present before but not being found in 2007. This is likely due to a combination of the soil disturbance related to root raking and some species being deliberately planted. In addition, the survey this year was conducted at a different time of year (mid September in 2007 versus early July in 2005), and some species that flower late were likely missed last time (such as asters) while species that flower and fruit early may have been missed this year (such as sedges). While it is not a complete, thorough inventory, it should serve as an informational tool to document management progress at the site.

If you have any questions regarding the species, habitat, or potential management options, please feel free to contact me at (517) 241-5438. The Michigan Natural Features Inventory also conducts surveys, research, and provides management recommendations for other species including invasive plants, fox snake, and eastern massasauga. If Detroit Edison is interested in having additional surveys conducted, don't hesitate to contact us. Thanks for your interest in the conservation and management of our natural heritage.

Sincerely,



Ryan O'Connor
Conservation Scientist, Michigan Natural Features Inventory

Cc: Robert Peplowski, Greg Norwood

Species List for Fermi II Transmission Line Prairie Planting
 Comparison of species in 2005 and 2007

Non-native species in CAPS

SCIENTIFIC NAME	COMMON NAME	C	W	WETNESS	PHYSIOGNOMY	2005	2007
<i>Agrimonia pubescens</i>	soft agrimony	5	5	UPL	Nt P-Forb	x	
<i>Andropogon gerardii</i>	big bluestem	5	1	FAC-	Nt P-Grass		x
<i>Anemone canadensis</i>	Canada anemone	4	-3	FACW	Nt P-Forb	x	
<i>Anemone cylindrica</i>	thimbleweed	6	5	UPL	Nt P-Forb	x	
<i>Apocynum cannabinum</i>	indian hemp	3	0	FAC	Nt P-Forb	x	x
ARCTIUM MINUS	COMMON BURDOCK	0	5	UPL	Ad B-Forb	x	x
<i>Asclepias incarnata</i>	swamp milkweed	6	-5	OBL	Nt P-Forb		x
<i>Asclepias syriaca</i>	common milkweed	1	5	UPL	Nt P-Forb	x	x
<i>Aster lateriflorus</i>	side-flowering aster	2	-2	FACW-	Nt P-Forb		x
<i>Aster pilosus</i>	hairy aster	1	2	FACU+	Nt P-Forb		x
<i>Carex blanda</i>	sedge	1	0	FAC	Nt P-Sedge	x	
<i>Carex frankii</i>	Frank's sedge	4	-5	OBL	Nt P-Sedge	x	
<i>Carex grayi</i>	sedge	6	-4	FACW+	Nt P-Sedge	x	
<i>Carex hirtifolia</i>	sedge	5	5	UPL	Nt P-Sedge	x	
<i>Carex stipata</i>	sedge	1	-5	OBL	Nt P-Sedge	x	
<i>Carex vulpinoidea</i>	sedge	1	-5	OBL	Nt P-Sedge	x	
CHENOPODIUM ALBUM	LAMB'S QUARTERS	0	1	FAC-	Ad A-Forb		x
CICORIUM INTYBUS	CHICORY	0	5	UPL	Ad P-Forb		x
<i>Circaea lutetiana</i>	enchanter's-nightshade	2	3	FACU	Nt P-Forb	x	
CIRSIUM ARVENSE	CANADIAN THISTLE	0	3	FACU	Ad P-Forb	x	x
<i>Cirsium muticum</i>	swamp thistle	6	-5	OBL	Nt B-Forb		x
CIRSIUM VULGARE	BULL THISTLE	0	4	FACU-	Ad B-Forb		x
<i>Coryza canadensis</i>	horseweed	0	1	FAC-	Nt A-Forb		x
<i>Coreopsis lanceolata</i>	sand coreopsis	8	3	FACU	Nt P-Forb		x
<i>Cornus drummondii</i>	rough-leaved dogwood	6	0	FAC	Nt Shrub	x	
DAUCUS CAROTA	QUEEN ANNE'S-LACE	0	5	UPL	Ad B-Forb	x	x
DIPSACUS FULLONUM	COMMON TEASEL	0	5	UPL	Ad P-Forb	x	x
ECHINACEA PURPUREA	PURPLE CONEFLOWER	0	5	UPL	Ad P-Forb		x
ECHINOCHLOA CRUSGALLI	BARNYARD GRASS	0	-3	FACW	Ad A-Grass		x
ELAEAGNUS UMBELLATA	AUTUMN-OLIVE	0	3	FACU	Ad Shrub	x	
<i>Elymus canadensis</i>	canada wild rye	7	1	FAC-	Nt P-Grass		x
<i>Eragrostis spectabilis</i>	purple love grass	3	5	UPL	Nt P-Grass		x
<i>Erigeron annuus</i>	annual fleabane	0	1	FAC-	Nt B-Forb	x	x
<i>Eupatorium perfoliatum</i>	common boneset	4	-4	FACW+	Nt P-Forb	x	
<i>Euthamia graminifolia</i>	grass leaved goldenrod	3	-2	FACW-	Nt P-Forb		x
<i>Fragaria virginiana</i>	wild strawberry	2	1	FAC-	Nt P-Forb	x	
<i>Fraxinus americana</i>	white ash	5	3	FACU	Nt Tree	x	
<i>Fraxinus pennsylvanica</i>	red ash	2	-3	FACW	Nt Tree	x	
<i>Geranium maculatum</i>	wild geranium	4	3	FACU	Nt P-Forb	x	
<i>Geum canadense</i>	white avens	1	0	FAC	Nt P-Forb	x	
<i>Geum rivale</i>	purple avens	7	-5	OBL	Nt P-Forb	x	x
<i>Glyceria striata</i>	fowl manna grass	4	-5	OBL	Nt P-Grass	x	x
<i>Helenium autumnale</i>	sneezeweed	5	-4	FACW+	Nt P-Forb		x
HYPERICUM PERFORATUM	COMMON ST. JOHN'S WORT	0	5	UPL	Ad P-Forb	x	
<i>Iris virginica</i>	southern blue flag	5	-5	OBL	Nt P-Forb	x	
<i>Juncus dudleyi</i>	dudley's rush	1	0	FAC	Nt P-Forb	x	x
<i>Liatris spicata</i>	marsh blazing star	8	0	FAC	Nt P-Forb		x
<i>Lobelia siphilitica</i>	great blue lobelia	4	-4	FACW+	Nt P-Forb		x
<i>Lycopus americanus</i>	common water horehound	2	-5	OBL	Nt P-Forb		x

Species List and Floristic Quality Assessment for Fermi II Transmission Line Prairie Planting
 Ryan O'Connor, Barry Muller, Robert Peplowski, and Greg Norwood
 Survey conducted on September 19, 2007

FLORISTIC QUALITY DATA				
		Native	35	63.60%
	35 NATIVE SPECIES	Tree	0	0.00%
	55 Total Species	Shrub	1	1.80%
	3.3 NATIVE MEAN C	W-Vine	1	1.80%
	2.1 W/Adventives	H-Vine	0	0.00%
	19.4 NATIVE FQI	P-Forb	23	41.80%
	15.5 W/Adventives	B-Forb	2	3.60%
	-0.4 NATIVE MEAN W	A-Forb	1	1.80%
	0.6 W/Adventives	P-Grass	7	12.70%
	AVG: Faculative	A-Grass	0	0.00%
		P-Sedge	0	0.00%
		A-Sedge	0	0.00%
		Fern	0	0.00%

Non-native species in CAPS

SCIENTIFIC NAME	COMMON NAME	C	W	WETNESS	PHYSIOGNOMY
<i>Andropogon gerardii</i>	big bluestem	5	1	FAC-	Nt P-Grass
<i>Apocynum cannabinum</i>	indian hemp	3	0	FAC	Nt P-Forb
ARCTIUM MINUS	COMMON BURDOCK	0	5	UPL	Ad B-Forb
<i>Asclepias incarnata</i>	swamp milkweed	6	-5	OBL	Nt P-Forb
<i>Asclepias syriaca</i>	common milkweed	1	5	UPL	Nt P-Forb
<i>Aster lateriflorus</i>	side flowering aster	2	-2	FACW-	Nt P-Forb
<i>Aster pilosus</i>	hairy aster	1	2	FACU+	Nt P-Forb
CHENOPODIUM ALBUM	LAMB'S QUARTERS	0	1	FAC-	Ad A-Forb
CICHORIUM INTYBUS	CHICORY	0	5	UPL	Ad P-Forb
CIRSIIUM ARVENSE	CANADIAN THISTLE	0	3	FACU	Ad P-Forb
<i>Cirsium muticum</i>	swamp thistle	6	-5	OBL	Nt B-Forb
CIRSIIUM VULGARE	BULL THISTLE	0	4	FACU-	Ad B-Forb
<i>Conyza canadensis</i>	horseweed	0	1	FAC-	Nt A-Forb
<i>Coreopsis lanceolata</i>	sand coreopsis	8	3	FACU	Nt P-Forb
DAUCUS CAROTA	QUEEN ANNE'S LACE	0	5	UPL	Ad B-Forb
DIPSACUS FULLONUM	COMMON TEASEL	0	5	UPL	Ad P-Forb
ECHINACEA PURPUREA	PURPLE CONEFLOWER	0	5	UPL	Ad P-Forb
ECHINOCHLOA CRUSGALLI	BARNYARD GRASS	0	-3	FACW	Ad A-Grass
<i>Elymus canadensis</i>	canada wild rye	7	1	FAC-	Nt P-Grass
<i>Eragrostis spectabilis</i>	purple love grass	3	5	UPL	Nt P-Grass
<i>Erigeron annuus</i>	annual fleabane	0	1	FAC-	Nt B-Forb
<i>Euthamia graminifolia</i>	grass leaved goldenrod	3	-2	FACW-	Nt P-Forb
<i>Geum rivale</i>	purple avens	7	-5	OBL	Nt P-Forb
<i>Glyceria striata</i>	fowl manna grass	4	-5	OBL	Nt P-Grass
<i>Helenium autumnale</i>	sneezeweed	5	-4	FACW+	Nt P-Forb
<i>Juncus dudleyi</i>	dudley's rush	1	0	FAC	Nt P-Forb
<i>Liatris spicata</i>	marsh blazing star	8	0	FAC	Nt P-Forb
<i>Lobelia siphilitica</i>	great blue lobelia	4	-4	FACW+	Nt P-Forb
<i>Lycopus americanus</i>	common water horehound	2	-5	OBL	Nt P-Forb
MELILOTUS ALBA	WHITE SWEET CLOVER	0	3	FACU	Ad B-Forb

Mentha arvensis	wild mint	3	-3	FACW	Nt P-Forb
Monarda fistulosa	wild bergamot	2	3	FACU	Nt P-Forb
NEPETA CATARIA	CATNIP	0	1	FAC-	Ad P-Forb
Oxalis stricta	common yellow wood sorrel	0	3	FACU	Nt P-Forb
Parthenocissus quinquefolia	virginia creeper	5	1	FAC-	Nt W-Vine
Penstemon digitalis	foxglove beard tongue	2	1	FAC-	Nt P-Forb
Phalaris arundinacea	reed canary grass	0	-4	FACW+	Nt P-Grass
Phragmites australis	reed	0	-4	FACW+	Nt P-Grass
PLANTAGO LANCEOLATA	ENGLISH PLANTAIN	0	0	FAC	Ad P-Forb
PLANTAGO MAJOR	COMMON PLANTAIN	0	-1	FAC+	Ad P-Forb
POA PRATENSIS	KENTUCKY BLUEGRASS	0	1	FAC-	Ad P-Grass
Polygonum amphibium	water smartweed	6	-5	OBL	Nt P-Forb
Ratibida pinnata	yellow coneflower	4	5	UPL	Nt P-Forb
Rudbeckia hirta	black eyed susan	1	3	FACU	Nt P-Forb
RUMEX CRISPUS	CURLY DOCK	0	-1	FAC+	Ad P-Forb
Salix exigua	sandbar willow	1	-5	OBL	Nt Shrub
SETARIA FABERI	GIANT FOXTAIL	0	2	FACU+	Ad A-Grass
SETARIA GLAUCA	YELLOW FOXTAIL	0	0	FAC	Ad A-Grass
Solidago altissima	tall goldenrod	1	3	FACU	Nt P-Forb
Sorghastrum nutans	indian grass	6	2	FACU+	Nt P-Grass
TARAXACUM OFFICINALE	COMMON DANDELION	0	3	FACU	Ad P-Forb
TRIFOLIUM PRATENSE	RED CLOVER	0	2	FACU+	Ad P-Forb
VERBASCUM THAPSUS	COMMON MULLEIN	0	5	UPL	Ad B-Forb
Verbena stricta	hoary vervain	4	5	UPL	Nt P-Forb
Vernonia missurica	missouri ironweed	4	-1	FAC+	Nt P-Forb

NRC-14-0073

**Response to License Renewal Environmental Request for
Additional Information**

Enclosure 2

TE-7 - No Permit Needed Letter USFWS December 2012



United States Department of the Interior



FISH AND WILDLIFE SERVICE

5600 American Boulevard West, Suite 990
Bloomington, Minnesota 55437-1458

IN REPLY REFER TO:
FWS/MBSP-MBPO

December 17, 2012

Mr. Matthew Shackelford
DTE Energy
One Energy Plaza
Detroit, Michigan 48226-1221

Dear Mr. Shackelford:

Our office has reviewed your application for an Eagle Disturbance permit and we have determined that you do not need a permit for disturbing eagles for the continued use of the Fermi 2 gun range.

You indicated in your application on Page 1 that "the pair of bald eagles did not seem to be disturbed by the shooting range during the 2012 season; the nest fledged three eaglets in 2012 which were checked and banded by USFWS personnel" and on Page 4 you indicated "the existing levels of gunfire did not deter the eagles from building the nest in this location. As such, it is likely that this pair of eagles has developed a relative tolerance for human activity at the shooting range."

This demonstrates that the eagles are not deterred and returned to the area to build a nest and successfully raised young. This would not trigger the issuance of a permit. We appreciate your concern and your record of environmental protection and your relationship with the nearby Refuge. This letter, the minimization you outlined in your application, as well as monitoring to make sure the eagles continue to tolerate the shooting range, will provide us assurance that if the eagles should abandon, you have put forth a good faith effort to protect them.

If in the future the eagles appear agitated and/or abandon, you may then apply for a permit. Your check #34802 is enclosed. No further action is taken. We have abandoned your federal permit application, EAIT MB 44984A-0.

If you have questions concerning this letter, please contact me at larry_harrison@fws.gov or 612-713-5489.

Sincerely,

Larry A. Harrison
Migratory Bird Permit Office
Permits Chief, Midwest Region

Enclosure

NRC-14-0073

**Response to License Renewal Environmental Request for
Additional Information**

Enclosure 2

TE-7 - Eagle Take Permit Application Signed



To: Migratory Bird Permit Office
U.S. Fish and Wildlife Service
5600 America Blvd. West, Ste. 990
Bloomington, MN 55437-1458

From: Matthew Shackelford
Senior Biologist
Environmental Management and Resources

Subject: Eagle Take Permit for DTE Energy Enrico Fermi Nuclear Power Plant

Please find attached an application form for an eagle take permit along with a check for \$1000.00 for payment of the programmatic fee. Please direct questions and/or comments to me at the contact information provided below.

Sincerely,

Matthew Shackelford
Senior Biologist
EM&R-Environmental Field Services
313-897-1021
shackelfordm@dteenergy.com

DTE Corporate Services LLC
Warren Service Center
7940 Livernois H-136
Detroit MI 48210



Department of the Interior
U.S. Fish and Wildlife Service
Federal Fish and Wildlife Permit Application Form

Expires 08/31/2012
OMB No. 1018-0136

Return to: Migratory Bird Permit Office
U.S. Fish and Wildlife Service

Type of Activity:
Eagle Take – Necessary to Protect Interests in a Particular Locality

5600 America Blvd. West, Ste. 990
Bloomington, MN 55437-1458

Complete section A or B, and sections C and D of this application. See attached Permit Application Instructions.

A. Complete if applying as an individual				
1.a. Last name:		1.b. First name:		1.c. Middle name or initial:
1.e. Doing business as (dba):		2.a. Mailing Address (line 1):		2.b. Mailing Address (line 2):
2.c. Mailing Address (line 3):		3.a. City:	3.b. County:	3.c. Province:
3.e. Zip code/postal code :	3.b. Country:	4. Date of birth (mm/dd/yyyy):		5. Social Security No:
6. Occupation:		7. List of any business, agency, organizational, or institutional affiliation associated with the wildlife or plants to be covered by this permit:		
8. Home telephone number:	9. Work telephone number:	10. Fax number:	11. E-mail address:	

B. Complete if applying as a business, corporation, public agency or institution				
1.a. Name of business, agency, or institution: DTE Energy - Fermi 2		1.b. Doing business as (dba): DTE Energy - Fermi 2		2. Tax identification no.: MI581605
3.a. Mailing address (line 1): 6400 North Dixie Highway		3.b. Mailing address (line 2):		3.c. Mailing address (line 3):
4.a. City: Newport	4.b. County Monroe		4.c. State: MI	4.d. Zip code: 48166
5.a. Principal officer - Last name: Scott		5.b. First name: Kent		5.c. Middle name or initial C.
5.e. Principal officer title: Director - Nuclear Production		6. Describe the type of business, agency, or institution and provide state of incorporation: Electrical Generation, Michigan		
7. Home telephone number:	8. Work telephone number: 734-586-5325	9. Fax number:	10. E-mail address: scottkc@dteenergy.com	

C. All applicants complete	
1. Do you currently have or have you had any federal fish and wildlife permits? (For simplification, all licenses, permits, registrations, and certificates will be referred to as a permit.) Yes <input type="checkbox"/> If yes, list the number(s) of the most current permit you have held: _____ No <input checked="" type="checkbox"/>	
2. Application fee: Enclose a check or money order payable to the U.S. Fish and Wildlife Service in the amount of \$500.00 (standard) or \$1,000 (programmatic) if you are applying for a new permit or \$150.00 (standard) or \$500 (programmatic) if you are requesting a substantive amendment of your existing valid permit. Federal, tribal, state, and local government agencies, and individuals and institutions acting on behalf of such agencies, are exempt from the application processing fee upon submission of a letter (on agency letterhead) certifying that the applicant is acting on behalf of the government agency (50 CFR 13.11(d)).	
3. Certification: I hereby certify that I have read and am familiar with the regulations contained in Title 50, Part 13, of the Code of Federal Regulations and the other applicable parts in subchapter B of Chapter I of Title 50. I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.	
Signature (in blue ink) of applicant/person responsible for permit. (No Photocopies or stamped signatures)	Date of signature (mm/dd/yyyy) 12/04/2012

D. EAGLE TAKE (Eagle Act, 50 CFR 22.26)

An eagle take permit authorizes the disturbance or other take of eagles where the take results from but is not the purpose of an otherwise lawful activity. Permits are available to individuals, agencies, businesses, and other organizations. This permit does not authorize possession of any eagle or eagle parts. Please read "What You Should Know About A Permit for Eagle Take Necessary to Protect Interests in a Particular Locality" and the pertinent regulations at 50 CFR 22.26 before you sign and submit your application.

Please be as specific as possible in your responses to the questions below. We strongly recommend that you submit your application at least 60 days prior to the date you need your permit, as required by 50 CFR 13.11(c).

Provide the following information on a separate sheet of paper. Please be as specific as possible in your responses to the questions. Please do not send pages that are over 8.5"X11", videotapes, or DVDs.

1. A description of your proposed activity that will likely take eagles, including:
 - (A) A detailed description of the activity that will likely cause the disturbance or other take of eagles;
 - (B) The species and number of eagles that are likely to be taken and the likely form of that take (e.g., disturbance, other take);
 - (C) Maps and digital photographs that depict the locations of the proposed activity, including the area where eagles are likely to be taken;
 - (D) For activities that are likely to disturb eagles (versus other take):
 1. Maps and digital photographs of the eagle nests, foraging areas, and concentration sites where eagles are likely to be disturbed by the proposed activity (including the geographic coordinates of the activity area and important eagle-use area(s) and the distance(s) between those areas);
 2. Whether or not the eagle use area is visible from the activity area, or if screening vegetation or topography blocks the view;
 3. The nature and extent of existing activities in the vicinity similar to that being proposed, and the distance between those activities and the important eagle use area(s);
 - (E) The date the activity will start and is projected to end;
 - (F) An explanation of what interests(s) in a particular locality will be protected by the take, including any anticipated benefits to the applicant or to the public;
 - (G) An explanation of why avoiding the take is not practicable, or for programmatic take, why it is unavoidable; and
 - (H) A description of measures proposed to offset the detrimental impact of the proposed activity on the regional eagle population.
2. You must retain records relating to the activities conducted under your permit for at least 5 years from the date of expiration of the permit. Please provide the address where these records will be kept.
3. Have you obtained all required state, federal or tribal government approval(s) to conduct the activity you propose?

If yes, provide a copy of the approval(s).	Have applied	Not required
--	--------------	--------------

PERMIT APPLICATION FORM INSTRUCTIONS

The following instructions pertain to the standard Permit Form 3-200 that must be completed as an application for a U.S. Fish and Wildlife Service permit. The General Permit Procedures in 50 CFR 13 address the permitting process. For simplification, all licenses, permits, registrations, and certificates will be referred to as a permit.

- Complete section A or B, and sections C and D of the application. Print clearly or type in the information. An incomplete or unclear application may cause delays in processing or may be returned to the applicant.
- Provide any required additional information or attachments outlined in section D of the application form. Be as complete and descriptive as possible. If there is any doubt as to the information's relevance, include it with the application.
- Sign the application in **blue ink** and send the original to the address at the top of the application. Faxes or copies of the original signature will not be accepted.
- Please plan ahead. Allow at least 60 days for your application to be processed (50 CFR 13.11). Some applications may take longer than 90 days to process. Applications are processed in the order they are received.
- Additional forms and instructions, as well as regulations, are available on the Internet at <http://permits.fws.gov/>.

Most of the application form is self-explanatory, but the following provides some assistance for completing the form.

COMPLETE EITHER SECTION A OR SECTION B:

- Section A. **"Complete if applying as an individual"** - Enter the complete name of the responsible individual who will be the permittee if a permit is issued. Enter personal information that identifies the applicant. All blocks must be completed. If you are applying as an individual but conducting permitted activities as a business, provide the name of the business. If you are applying on behalf of a client, the personal information must pertain to the client. A document evidencing power of attorney must be included with the application.
- Section B. **"Complete if applying as a business, corporation, public agency, or institution"** - Enter the complete name and address of the business, agency, institution, or other organization that will be the permittee if a permit is issued. Give a brief description of the type of business or activity the applicant is engaged in, the name and phone number of the person in charge (i.e., principal officer), and if the company is incorporated, the state in which it is incorporated.

ALL APPLICANTS COMPLETE SECTION C:

- Block C.1 **"Do you currently have or have you had any federal fish and wildlife permits?"** List the number(s) of your most current FWS or CITES permit or the number of the most recent permit if none are currently valid. (Do not list permits of others under which you acted as a subpermittee or agent.)
- Block C.2 **"Application fee:"** - You must enclose a permit processing fee unless you are fee exempt. Consult the Application Processing Fee section on the last page. Make your check or money order payable to the "U.S. Fish and Wildlife Service" and attach it to the application form. If you are fee exempt, write "EXEMPT" in the fee block and attach proof of exempt status with your application.
- Block C.3 **"CERTIFICATION"** The individual identified in Section A, the principal officer named in Section B, or person with a valid power of attorney (documentation must be included in the application) must sign and date the application in **blue ink**. This signature binds the applicant to the statement of certification. This means that you certify that you have read and understand the regulations that apply to the permit. You also certify that everything included in the application is true to the best of your knowledge. Be sure to read the statement and re-read the application before signing.

ALL APPLICANTS COMPLETE SECTION D:

Provide any required additional information outlined in Section D of the application form. Be as complete and descriptive as possible. If there is any doubt as to the information's relevance, include it with the application.

In response to **"Have you obtained all required state, federal or foreign government approval to conduct the activity you propose?"** please be aware that there may be other requirements necessary to conduct this activity, such as local zoning requirements. If "yes," list the state, federal or foreign countries involved and type of document required. Include a copy of these documents with the application. If "no," indicate what steps you have taken to secure approval (use attachment if necessary). If you have applied for the documents, check the "have applied" box and list the state, federal or foreign countries involved and type of documents required. If the proposed activity is not regulated check "not required."

APPLICATION FOR A FEDERAL FISH AND WILDLIFE PERMIT

Paperwork Reduction Act and the Privacy Act – Notices

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501, et seq.) and the Privacy Act of 1974 (5 U.S.C. 552a), please be advised that:

1. The gathering of information on fish and wildlife is authorized by:
 - (a) Bald and Golden Eagle Protection Act (16 U.S.C. 668), Title 50, Part 22, of the Code of Federal Regulations (CFR);
 - (b) Endangered Species Act of 1973 (16 U.S.C. 1531-1544), Title 50, CFR Part 17;
 - (c) Migratory Bird Treaty Act (16 U.S.C. 703-712), Title 50, CFR Part 21;
 - (d) Marine Mammal Protection Act of 1972 (16 U.S.C. 1361 *et seq.*), Title 50 CFR Part 18
 - (e) Wild Bird Conservation Act (16 U.S.C. 4901-4916), Title 50, CFR Part 15;
 - (f) Lacey Act (18 U.S.C. 42); Injurious Wildlife, Title 50 CFR Part 16;
 - (g) Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) (TIAS 8249); Title 50, CFR Part 23.
 - (h) General Provisions, Title 50 CFR Part 10;
 - (i) General Permit Procedures, Title 50 CFR Part 13; and
 - (j) Wildlife (Import/export/transport), Title 50 CFR Part 14.
2. Information requested in this form is purely voluntary. However, submission of requested information is required in order to process applications for permits authorized under the above laws. Failure to provide all requested information may be sufficient cause for the U.S. Fish and Wildlife Service to deny the request. Response is not required unless a currently valid Office of Management and Budget (OMB) control number is displayed on the form.
3. Certain applications for permits authorized under the Endangered Species Act of 1973 (16 U.S.C. 1539) and the Marine Mammal Protection Act of 1972 (16 U.S.C. 1371-1383) will be published in the Federal Register as required by the two laws.
4. Disclosures outside the Department of the Interior may be made without the consent of an individual if the disclosure is compatible with the purposes for which the record was collected. (Ref. 68 FR 52611, September 4, 2003)
 - (a) To subject matter experts, state, federal, local, and foreign agencies for the purpose of obtaining advice relevant to making a decision on an application for a permit or when necessary to accomplish a FWS function related to this system of records.
 - (b) To the public as a result of publishing Federal Register notices announcing the receipt of permit applications for public comment or notice of the decision on a permit application.
 - (c) To federal, state, local, or foreign wildlife and plant agencies for the exchange of information on permits granted or denied to assure compliance with all applicable permitting requirements.
 - (d) Captive-bred Wildlife registrants under the Endangered Species Act for the exchange of authorized species, and to share information on the captive breeding of these species.
 - (e) To federal, state, and local authorities who need to know who is permitted to receive and rehabilitate sick, orphaned, and injured birds under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act; federally permitted rehabilitators; individuals seeking a permitted rehabilitator with whom to place a bird in need of care; and licensed veterinarians who receive, treat, or diagnose sick, orphaned, and injured birds.
 - (f) To the Department of Justice, or a court, adjudicative, or other administrative body or to a party in litigation before a court or adjudicative or administrative body, under certain circumstances.
 - (g) To the appropriate federal, state, tribal, local, or foreign governmental agency responsible for investigating, prosecuting, enforcing, or implementing statutes, rules, or licenses, when we become aware of a violation or potential violation of such statutes, rules, or licenses, or when we need to monitor activities associated with a permit or regulated use.
 - (h) To a congressional office in response to an inquiry to the office by the individual to whom the record pertains.
 - (i) To the General Accounting Office or Congress when the information is required for the evaluation of the permit programs.
 - (j) To provide addresses obtained from the Internal Revenue Service to debt collection agencies for purposes of locating a debtor to collect or compromise a Federal claim against the debtor, or to consumer reporting agencies to prepare a commercial credit report for use by the FWS.
5. For individuals, personal information such as home address and telephone number, financial data, and personal identifiers (social security number, birth date, etc.) will be removed prior to any release of the application.
6. The public reporting burden on the applicant for information collection varies depending on the activity for which a permit is requested. The relevant burden for an eagle take application is 16 hours for the standard permit and 40 hours for the programmatic permit. This burden estimate includes time for reviewing instructions, gathering and maintaining data and completing and reviewing the form. You may direct comments regarding the burden estimate or any other aspect of the form to the Service Information Clearance Officer, U.S. Fish and Wildlife Service, Mail Stop 222, Arlington Square, U.S. Department of the Interior, 1849 C Street, NW, Washington D.C. 20240.

Freedom of Information Act – Notice

For organizations, businesses, or individuals operating as a business (i.e., permittees not covered by the Privacy Act), we request that you identify any information that should be considered privileged and confidential business information to allow the Service to meet its responsibilities under FOIA. Confidential business information must be clearly marked "Business Confidential" at the top of the letter or page and each succeeding page and must be accompanied by a non-confidential summary of the confidential information. The non-confidential summary and remaining documents may be made available to the public under FOIA [43 CFR 2.13(c)(4), 43 CFR 2.15(d)(1)(i)].

Application Processing Fee

The fee to process an eagle take permit application is \$500.00 for the standard permit application and \$1,000 for the programmatic permit application. This fee applies to new permit applications and permit renewals. The fee to process a substantive amendment to an existing valid standard permit is \$150.00. For an existing valid programmatic permit, the amendment processing fee is \$500. Substantive amendments are those that pertain to the purpose and conditions of the permit and are not purely administrative. Administrative changes, such as updating name and address information, are required under 50 CFR 13.23(c), and such amendments do not require a fee. Checks should be made payable to A.U.S. Fish and Wildlife Service.® The fee does not guarantee the issuance of a permit. It will not be refunded regardless of whether a permit is issued, abandoned, or denied. We will not refund any application fee under any circumstances if we have processed the application. However, we may return the application fee if you withdraw the application before we have significantly processed it. (50 CFR 13.11(d))

The application fee does not apply to any federal, tribal, state, or local government agency or to any individual or institution acting on behalf of such agency for the proposed activities.



U.S. Fish & Wildlife Service

Migratory Bird Regional Permit Offices

FWS REGION	AREA OF RESPONSIBILITY	MAILING ADDRESS	CONTACT INFORMATION
Region 1	Hawaii, Idaho, Oregon, Washington	911 N.E. 11th Avenue Portland, OR 97232-4181	Tel. (503) 872-2715 Fax (503) 231-2019 Email permitsR1MB@fws.gov
Region 2	Arizona, New Mexico, Oklahoma, Texas	P.O. Box 709 Albuquerque, NM 87103	Tel. (505) 248-7882 Fax (505) 248-7885 Email permitsR2MB@fws.gov
Region 3	Iowa, Illinois, Indiana, Minnesota, Missouri, Michigan, Ohio, Wisconsin	One Federal Drive Fort Snelling, MN 55111	Tel. (612) 713-5436 Fax (612) 713-5393 Email permitsR3MB@fws.gov
Region 4	Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virgin Islands, Puerto Rico	P.O. Box 49208 Atlanta, GA 30359	Tel. (404) 679-7070 Fax (404) 679-4180 Email permitsR4MB@fws.gov
Region 5	Connecticut, District of Columbia, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Virginia, Vermont, West Virginia	P.O. Box 779 Hadley, MA 01035-0779	Tel. (413) 253-8643 Fax (413) 253-8424 Email permitsR5MB@fws.gov
Region 6	Colorado, Kansas, Montana, North Dakota, Nebraska, South Dakota, Utah, Wyoming	P.O. Box 25486 DFC(60154) Denver, CO 80225-0486	Tel. (303) 236-8171 Fax (303) 236-8017 Email permitsR6MB@fws.gov
Region 7	Alaska	1011 E. Tudor Road (MS-201) Anchorage, AK 99503	Tel. (907) 786-3693 Fax (907) 786-3641 Email permitsR7MB@fws.gov
Region 8	California, Nevada	2800 Cottage Way Sacramento, CA 95825	Tel. (916) 414-6464 Fax (916) 414-6486 Email permitsR8MB@fws.gov



WHAT YOU SHOULD KNOW ABOUT A FEDERAL PERMIT FOR NON-PURPOSEFUL EAGLE TAKE

A Federal permit for non-purposeful take of eagles authorizes disturbance or other take of eagles where the take is not the purpose of the activity and is necessary to protect an interest in a particular locality. You should review Title 50 Parts 10, 13, and 22.26 of the Code of Federal Regulations (CFR). **You are responsible for reviewing and understanding these regulations before you request and accept a permit.** These regulations can be found on our website at <http://www.fws.gov/permits/ltr/ltr.shtml>. Below are questions and answers regarding some of the fundamentals of an eagle non-purposeful take permit.

1. What is meant by “take” of eagles?

Under the Bald and Golden Eagle Protection Act, “take” is defined as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest or disturb.” Most take authorized under this permit will be in the form of disturbance. “Disturb” is defined in regulations as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available: (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior” (50 CFR 22.3)

2. Can this permit be used for intentional take of eagles for any purposes?

No. This permit authorizes take only where the take cannot practicably be avoided in the course of an otherwise lawful activity.

3. What species of eagles can be disturbed or otherwise taken under this permit?

This permit may authorize take of either species of eagles protected by the Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. 668-668d): the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*).

4. Under what circumstances can eagles be taken under this type of permit?

The Eagle Act authorizes the Secretary to permit take of eagles “necessary for the protection of... other interests in any particular locality.” This statutory language accommodates a broad spectrum of public and private interests (such as utility infrastructure development and maintenance, road construction, operation of airports, commercial or residential construction, resource recovery, recreational use, etc.) that might “take” eagles as defined under the Eagle Act. However, in all cases, the take must be *necessary* to protect the interest, meaning that the interest cannot be protected without taking eagles despite implementation of all practicable measures to avoid and minimize the impact to eagles. Also, take will not be permitted unless it is consistent with the goal of maintaining stable or increasing eagle populations.

5. Is a person who follows the National Bald Eagle Management Guidelines exempt from the requirement to obtain this permit?

No. The Guidelines are basic recommendations the Service has provided to help minimize the potential for disturbing bald eagles. However, those recommendations are fairly generalized and do not address every type of activity. Furthermore, variable on-site conditions, the temperament of individual eagles, and other factors, make it impossible to predict outcomes with certainty. Each situation is different. An activity that is generally assessed as likely to disturb eagles will not always disturb them, and the presence of a number of variables may affect the likelihood that take will occur. Because the Eagle Act requires

that a permit be issued in order for any bald eagle take to be authorized, the Service cannot “exempt” any activity that meets the definition of a “take.” In addition, because the Management Guidelines were developed primarily to reduce disturbance, they contain few measures for avoiding or reducing injury or mortality.

6. Is post-activity monitoring required?

For permits for disturbance, depending on the magnitude of the anticipated disturbance, permittees may be required to provide basic post-activity monitoring by determining whether the nest site, communal roost, or important foraging area continues to be used by eagles for up to 3 years following completion of the activity for which the permit was issued. For permits for non-purposeful take other than disturbance, monitoring may be required to ascertain the level of take,

7. Do permittees have to file a report?

Unless the activity is covered by a management plan that contains separate, adequate monitoring protocols, permittees must submit an annual report containing all the information required by the Service Eagle Take Report Form (Form 3-202-15), which can be found at: <http://www.fws.gov/forms/3-202-15.pdf>.

8. What will the Service do with information gathered from the permittee monitoring?

The Service can use the information to help assess whether future activities may result in loss of one or more eagles, a decrease in productivity of bald or golden eagles, and/or the permanent abandonment or loss of a nest site, communal roost site, or important foraging area. This information will allow the Service to refine recommendations in future versions of eagle management guidelines regarding buffer distances, timing of activities, and other practices that minimize take of eagles. The data also may enable the Service to adjust the number of annual permits available in a Service region.

9. What is a programmatic permit and when is it required?

Programmatic take is generally defined as take that is recurring and not in a specific, identifiable timeframe and/or location. The specific regulatory definition is “take that (1) is recurring, but not caused solely by indirect effects, and (2) occurs over the long-term and/or in a location or locations that cannot be specifically identified.”

Programmatic take permits may be issued to entities, such as electric utilities or transportation providers, that may currently take eagles in the course of otherwise lawful activities but who can work with the Service to develop and implement additional, exceptionally comprehensive measures (“advanced conservation practices” or “ACPs”) to reduce take to the level where any remaining take is essentially unavoidable. A programmatic take permit may also be issued to State and Federal agencies that take eagles in the course of their routine operations if they adopt such advanced conservation measures. There is no requirement that a permit be programmatic; it is an option that is available in some circumstances. A programmatic permit can, and often will, cover other take in addition to programmatic take.

10. Will mitigation measures be required?

All permittees will be required to avoid and minimize the potential for take to the degree practicable, and for programmatic permits, to the point where take is unavoidable. Additional compensatory mitigation may be required for: (a) programmatic take and other multiple take authorizations; (b) disturbance associated with the permanent loss of a breeding territory or important traditional communal roost site; or (c) as necessary to off-set impacts to the local area population.

11. Does this permit authorize possession of eagles for any purpose?

No. This permit does not authorize collection of live or dead eagles. You must promptly notify the Service of any eagle(s) found injured or dead at the activity site, regardless of whether the injury or death resulted from your activity. The Service will determine the disposition of such eagles.

12. Do I need additional authorization from my State or tribal government to take eagles?

State, tribal and local governments may have their own regulations protecting eagles. Your federal permit is not valid unless you obtain and comply with all permits, licenses, or other authorizations required by these jurisdictions that apply to your activity with respect to eagles.

13. How long does it take to get a permit for non-purposeful take of eagles?

The time needed by the Service to process a complete permit application depends on the complexity and scope of the activity and associated take, whether tribal consultation is warranted, what other environmental analyses may be required, and other factors. An application is not complete unless the information requested in all its sections has been provided by the applicant, including all required attachments. In general, applicants may expect the following approximate permit processing times from the time we receive a complete application:

Standard permit	60	days
Standard or programmatic permit requiring an environmental assessment		4 to 6 months
Standard or programmatic permit with EIS	18	to 24 months

14. How do I renew my permit?

Except for programmatic permits, this type of permit is not typically subject to renewal considerations, because, in general, standard permits issued under these regulations authorize a limited amount of take, resulting from a specific activity that occurs within an identifiable time-frame. For that reason, permittees will not receive a renewal letter or form. If you wish to renew your permit, you must return the completed renewal to your Regional Migratory Bird Permit Office at least 30 days prior to the expiration of your permit and include copies of any other permits required by your State, tribe, or other jurisdiction. If we receive your renewal request at least 30 days prior to the expiration of your permit, your permit will remain valid beyond the expiration date for the activity authorized on your permit until a decision on your renewal is made. (50 CFR 13.22). Applicants for renewal must satisfy all the issuance criteria of 50 CFR 22.26, including a demonstration that the take is still necessary to protect an interest in a particular locality.

Response to Questions Contained in Eagle Take Permit Application (Eagle Act, 50 CFR 22.26) Form 3-200-71

1. A description of your proposed activity that will likely take eagles, including:

(A) A detailed description of the activity that will likely cause the disturbance or other take of eagles;

Take will be in the form of disturbance to the nesting pair. Nuclear Security Officers will be using the gun range year round for training activities. There will be an average of 8-14 persons firing on the range during training activities. These activities will take place approximately four times a week. Each activity is approximately 8-12 hours, depending on the courses of fire. Officers shoot at stationary targets located at the elevated backstop of the range. They are firing towards the backstop from varying distances throughout the range, including the tower. Human movement within the range varies depending on the type of activity, which can include setting up the targets near the backstop and getting into position at each firing distance. Shooting from the tower to the backstop is conducted during specific training activities. The range is used almost exclusively by Nuclear Security Officers. There are infrequent outside entities, such as Michigan State Troopers or Monroe County Sheriff Deputies, which use the range and would be in conjunction with ongoing Nuclear Security training activities.

(B) The species and number of eagles that are likely to be taken and the likely form of that take (e.g., disturbance, and other take);

Take will be in the form of disturbance to the nesting pair, with the possibility of nest abandonment or loss of productivity. The eagles had previously built a nest along Lake Erie, south of the current location; however a tornado that came through the site in June of 2010 destroyed the previous nest and the trees in the area. The nest in question, at the shooting range, was built due to the original nest being destroyed. The pair of bald eagles did not seem to be disturbed by the shooting range during the 2012 season; the nest fledged three eaglets in 2012 which were checked and banded by USFWS personnel.

(C) Maps and digital photographs that depict the locations of the proposed activity, including the area where eagles are likely to be taken;

See the Figure 2 map of Fermi 2 and the insert map showing the range, tower and eagle nest locations. The closest gunfire is 115 feet from the inside of the elevated berm to the nest location. The furthest gunfire is 765 feet from the tower to the nest location. The firing area shaded within the berm is the most active shooting area for training exercises. The eagle nest is approximately 800 feet from Swan Creek.

(D) For activities that are likely to disturb eagles (versus other take):

1. Maps and digital photographs of the eagle nests, foraging areas, and concentration sites where eagles are likely to be disturbed by the proposed activity (including the geographic coordinates of the activity area and important eagle-use area(s) and the distance(s) between those areas);



Figure 1 Shooting range facing northeast with bald eagle nest in background

This digital photograph shows the location of the eagle nest relative to the elevated backstop. The area where the photograph was taken is within the active shooting area of the range. As shown in the Figure 2 map referenced in item (C), the closest gunfire is 115 feet from the nest location and the furthest location (tower) is 765 feet from the nest location. The GPS coordinates of the nest are 41.97102, -83.26089.

2. Whether or not the eagle use area is visible from the activity area, or if screening vegetation or topography blocks the view;

The eagle nest is located at the end of the gun range, behind the elevated backstop. The nest is visible from the shooting areas during the winter months, however may be partially blocked from view during the growing season with leaves on the trees and shrubs.

3. The nature and extent of existing activities in the vicinity similar to that being proposed, and the distance between those activities and the important eagle use area(s);

The closest gunfire is 115 feet from the inside of the elevated berm to the nest location. The furthest gunfire is 765 feet from the tower to the nest location. The firing area shaded within the berm is the most active shooting area for training exercises. The targets for shooting exercises are set up just inside the elevated backstop, 115 feet away from the nest. There are no other similar activities in the vicinity of the eagle nest in question.

(E) The date the activity will start and is projected to end;

The gun range is used by security personnel on an annual basis as described above. These activities will take place approximately four times a week. Each activity is approximately 8-12 hours, depending on the courses of fire. The training is divided into activities to accommodate all shifts and to allow adequate security coverage at the plant. Shooting will continue at approximately the same frequency into the foreseeable future based on training needs and qualifications.

(F) An explanation of what interests(s) in a particular locality will be protected by the take, including any anticipated benefits to the applicant or to the public;

The local interest that is protected by this disturbance is maintaining a secure nuclear facility. The continued use of the range ensures qualifications are maintained by security personnel in a site specific training scenario.

(G) An explanation of why avoiding the take is not practicable, or for programmatic take, why it is unavoidable;

Take will be in the form of disturbance to the nesting pair. Avoiding the take is not practicable, as the Nuclear Regulatory Commission (NRC) requires specific training qualifications be maintained by security personnel. Failure to maintain these qualifications is in violation of NRC requirements. This type of training facility is not available in the area. Training has been conducted on site on a regular basis for many years with the bald eagles becoming acclimated to the activity.

(H) A description of measures proposed to offset the detrimental impact of the proposed activity on the regional eagle population:

The eagles began building the nest in this location while shooting activities were being conducted at the range. The entire shooting area was being utilized by security personnel prior to the eagles nesting. The existing levels of gunfire did not deter the eagles from building the nest in this location. As such, it is likely that this pair of eagles has developed a relative tolerance for human activity at the shooting range. Human presence at the east end of the range closest to the nest will be minimized and will include only those activities pertaining to training qualifications on an as-needed basis. Loud intermittent noise at levels higher than the eagles have become accustomed to will not be allowed during the breeding season. Maintenance of the range will be coordinated along with the training activities to minimize the noise levels and human presence at the range.

Additionally, Fermi has been recognized by the State of Michigan as a Clean Corporate Citizen and certified as a wildlife site by the Wildlife Habitat Council since 2000. The Fermi 2 grounds are currently the largest parcel enrolled in the Detroit River International Wildlife Refuge, a cooperative agreement with the U.S. Fish and Wildlife Service that will protect and manage the wildlife and fish populations on Fermi 2 grounds. In 2003 the Refuge signed its first cooperative management agreement with DTE Energy to add the Lagoon Beach Unit (656 acres) at Fermi Power Plant. As the electricity provider of choice, a provider of a clean source of energy, and as residents of this community, we, the employees of Fermi 2, take our role in protecting and enhancing the environment very seriously. We are proud of our environmental performance. We will continue to operate in compliance with federal, state and local regulations, corporate policies, facility procedures and other requirements to which we subscribe and continually strive to control, reduce and prevent pollution and thus our impact to the environment and wildlife

2. You must retain records relating to the activities conducted under your permit for at least 5 years from the date of expiration of the permit. Please provide the address where these records will be kept.

The records and annual reports will be kept on file with the permit in the Environmental office which is currently located in 200 TAC (Technical Assistance Center). Any security-related records will be kept on file in the Security office currently in the GTOC (General Training and Orientation Center) building. Both are located at the address:

*Enrico Fermi Energy Center
6400 Dixie Highway
Frenchtown Township
Newport, Michigan 48166-9726*

3. Have you obtained all required state, federal or tribal government approval(s) to conduct the activity you propose?

Eagles are not listed in Michigan; therefore a state permit is not required for this activity. The tribal consultation will be handled through the Eagle Take permit process.

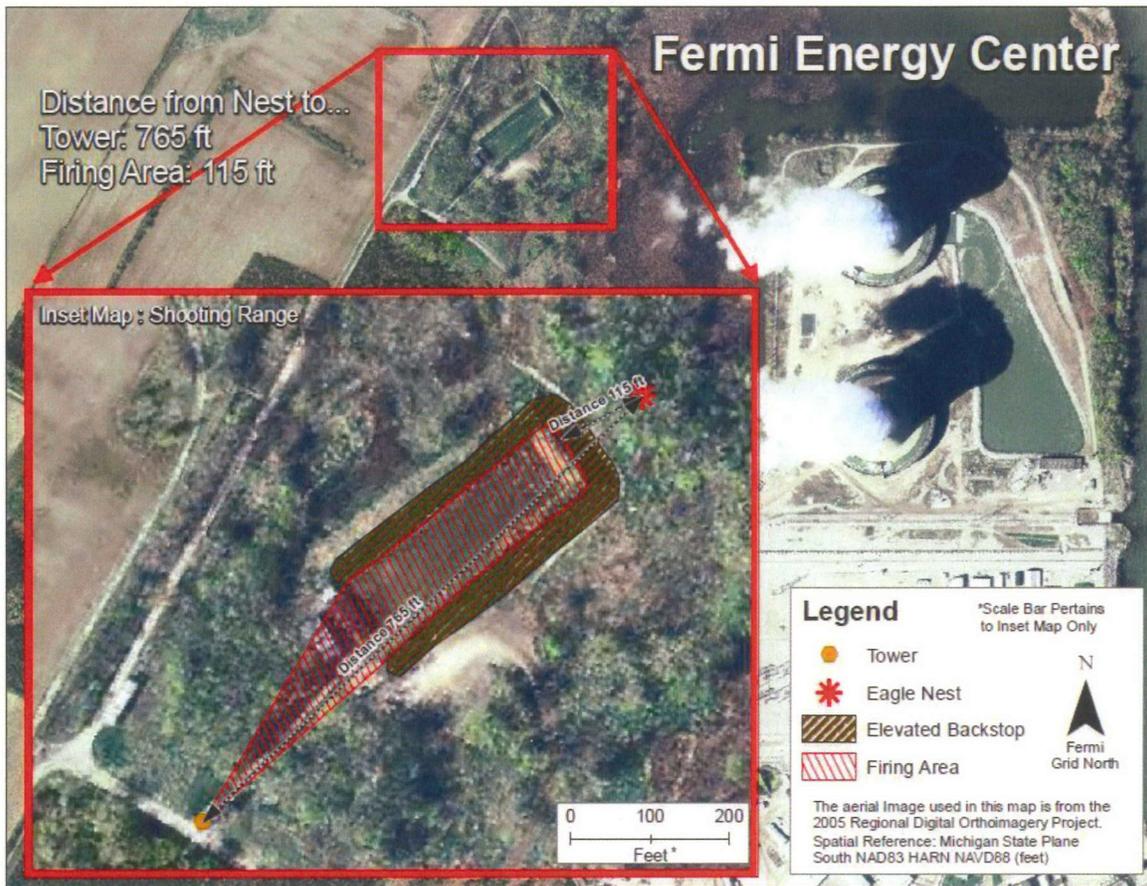


Figure 2 Aerial map showing shooting range and bald eagle nest

NRC-14-0073

**Response to License Renewal Environmental Request for
Additional Information**

Enclosure 2

TE-7 - Vimer Pathology Report



IN REPLY REFER TO:

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Office of Law Enforcement
Clark R. Bavin
National Fish and Wildlife Forensics Laboratory
1490 East Main Street
Ashland, Oregon 97520

FWS/LE LAB CASE #12-000097

17 April 2012

Kenneth Adams, SA/LE
U.S. Fish and Wildlife Service
Office of Law Enforcement
317 Metty Drive Suite #1
Ann Arbor, MI 48103

Dear Agent Adams:

Enclosed is the final examination report regarding the evidence submitted to the Laboratory under Agency Case No. 2011302058.

Radiographs and photographic enlargements are available upon request for courtroom proceedings. The evidence is being returned to you under separate cover.

The Laboratory policy states that we provide reports only to the investigating agent/officer. Please distribute copies of this report to the appropriate persons.

If I can be of further assistance, please give me a call at 541-482-4191 or 541-488-6505 (voice mail).

Sincerely,

Tabitha C. Viner, DVM DACVP
Supervisory Veterinary Pathologist
E-mail Address: Tabitha_Viner@fws.gov



IN REPLY REFER TO:

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Office of Law Enforcement
Clark R. Bavin
National Fish and Wildlife Forensics Laboratory
1490 East Main Street
Ashland, Oregon 97520

April 17, 2012

VETERINARY PATHOLOGY EXAMINATION FINAL REPORT

Lab Case #: 12-000097
Agency Case #: 2011302058
Pathologist: Tabitha C. Viner
Case Title: DTE Energy

Submitting Agency:
USFWS/LE, Ann Arbor
317 Metty Drive Suite #1
Ann Arbor, MI 48103
Investigator: Kenneth Adams
Suspect(s): DTE Energy

EVIDENCE RECEIVED

The following evidence was received in the Evidence Unit of the Laboratory on March 21, 2012, and was transferred to the undersigned examiner on March 22, 2012:

LAB-1: "One (1) dead Bald Eagle" [ST#049095; Item#1]

HISTORY

"Eagle found dead and decomposed." Per evidence submittal form.

EXAMINATION/S CONDUCTED

LAB- 1: The carcass was radiographed (x-rayed), dissected, and examined visually (necropsy examination) for gross pathological lesions. Photographs were taken to document any significant gross pathological findings.

LAB-1 was itemized and the following sub-item was generated:

LAB-1A Formalin-fixed toe from LAB-1

CASE SUMMARY

In my opinion, this eagle died due to an electric current that affected the foot, causing coagulation of the skin and likely conduction disturbances in the heart. Alternate light characteristics and histologic evaluation of the affected digits supported a diagnosis of electrocution. It was not clear whether the keel fracture occurred before death or postmortem. If the eagle had fallen to the ground after electrocution, a keel fracture and soft tissue damage may have occurred. Alternatively, the fracture could have occurred

Pathologist Initials TV

during postmortem scavenging.

EVIDENCE DETAILS -- LAB- 1:

Common name:	Bald Eagle	Weight:	
Scientific name:	<i>Haliaeetus leucocephalus</i>	Carcass composition:	Skeletonized carcass
Sex:	Undetermined	Nutritional condition:	Indeterminate
Lifestage:	Sub-adult	Post mortem preservation:	Poor
Date(s) examined:	23 March 2012		

POST MORTEM FINDINGS

RADIOGRAPHIC EXAMINATION: Present within the bag is a jumble of bones and feathers. There is a fracture of the left side of the keel. All other bones appear to be intact. No soft tissues are evident.

EXAMINATION: Very little soft tissue remains attached to the bones, and that which remains is desiccated and highly decomposed. Bones present include the skull with intact mandible and right scleral ossicles; the disarticulated right humerus, radius/ulna, carpometacarpus and alula, and digits; the left humerus; the articulated left radius/ulna and distal portion of the wing with all assembled primary flight feathers; the keel and sternal plate with the distal four ribs attached to the right side of the sternum; the synsacrum with two attached thoracic vertebrae and one attached caudal vertebra, three attached right ribs, and one attached left rib; four unattached right vertebral ribs and six unattached left vertebral ribs; nine detached sternal ribs; five detached cervical and five detached thoracic vertebrae; the pygostyle; two separate caudal vertebrae; both scapulas, coracoids, and clavicles; the right femur, tibiotarsus, and tarsometatarsus, articulated by desiccated soft tissues; the separate left humerus and tibiotarsus; the left foot with attached tarsometatarsus; and a single phalanx from the right foot. Except as noted, all bones are intact.

There is a fracture of the left side of the sternal plate that begins at the cranial border, 11 mm to the left of ventral midline, and courses in an irregular line caudally for 5 cm. Closely stuck to the inside of the keel on the right side is 2 g of dark brown material and up to 10 fish vertebrae. Fragments of chitinous exoskeleton and dirt are frequently attached to the bones. At the dorsal border of the caudal extent of the left clavicle there is mild gouging of the edge of the bone.

There is multifocal, black discoloration of the skin on the left foot. The medial surfaces of the second and third digits are yellow to pink. When viewed under the dissecting microscope there is fluffy, white fungus multifocally on the keratin. On the medial surface of the medial digit, the keratin papillae are flattened and discolored tan to pink. This area and the adjacent keratin plate on the dorsal surface of the digit fluoresce when viewed under an alternate light source at 570 nm wearing red glasses. On the lateral digit, the distal two dorsal keratin plates also fluoresce. Areas of black discoloration and fungus do not fluoresce.

MICROSCOPIC EXAMINATION:

DIGIT: There is diffuse loss of nuclei in all layers of soft tissue and bone lacunae. Fungal hyphae and spores are present multifocally in the stratum corneum, epidermis and superficial dermis. Ventrally and extending around one side of the digit, the dermal collagen is coagulated, smudged, and discolored gray-blue. Collagen bundles in other areas of the digit are artifactually

separated, but of normal color (pink). Multifocally, overlying areas of normal and abnormal collagen, the epidermis is separated from the underlying dermis.

SUMMARY OF GROSS FINDINGS

Keel fracture
Fluorescent change to digits on left foot

PROXIMATE CAUSE OF DEATH

ELECTROCUTION

DISPOSITION OF EVIDENCE:

All evidence item(s) were transferred to the Evidence Unit pending return to the submitting agency.



Tabitha C. Viner, DVM DACVP
Supervisory Veterinary Pathologist

17 Apr 2012
Date

NRC-14-0073

**Response to License Renewal Environmental Request for
Additional Information**

Enclosure 2

TE-8 - Fermi 2 Site Map - Eagles Nests



**Figure 3.0-1
 Fermi 2 Site Map**

NRC-14-0073

**Response to License Renewal Environmental Request for
Additional Information**

Enclosure 2

TE-9 - Updated Fox Snake Sighting Map

Update Fox Snake Sighting Map



Legend

- PEM - Palustrine Emergent Wetland
- PFO - Palustrine Forested Wetland
- PSS - Palustrine Scrub Shrub Wetland

* The dredge basin is a water treatment pond exempt from Michigan wetland regulations per Michigan Compiled Law 324.30305(4)(b).



- ★ Eastern Fox Snake(s) Observed by Detroit Edison Employees
- ▲ Eastern Fox Snake(s) Observed by Ducks Unlimited
- ✪ Eastern Fox Snake(s) Observed by JF New

(DTE 2011, ESRI 2012)

NRC-14-0073

**Response to License Renewal Environmental Request for
Additional Information**

Enclosure 2

TE-11 - MCE06 Enclosure L

**LIST OF FEDERAL AND STATE THREATENED OR ENDANGERED SPECIES OR
 SPECIES OF SPECIAL CONCERN**

Species Name	Species Believed to be Living or Nesting Onsite	Species Observed Onsite-Believed to be Migrant or Feeding	Federal Threatened (T) or Endangered (E)	State Threatened (T) or Endangered (E)	State Species of Special Concern
Piping Plover <i>Charadrius melodus</i>		X	E	E	
Eastern Fox Snake <i>Elaphe gloydi</i>	X			T	
Common Tern <i>Sterna hirundo</i>		X		T	
Peregrine Falcon <i>Falco peregrinus</i>		X		E	
Caspian Tern <i>Sterna caspia</i>		X		T	
Common Moorhen <i>Gallinula chloropus</i>		X		T	
American Lotus <i>Nelumbo lutea</i>	X			T	
Purple Coneflower ^a <i>Echinacea purpurea</i>	X				
Bald Eagle <i>Haliaeetus leucocephalus</i>	X				X
Queen Snake <i>Regina septemvitta</i>	X				X
Blanding's Turtle <i>Emydoidea blandingii</i>	X				X
Eastern Box Turtle <i>Terrapene carolina Carolina</i>	X				X
Osprey <i>Pandion haliaetus</i>		X			X
Marsh Wren <i>Cistothorus palustris</i>	X				X
Black-Crowned Night Heron <i>Nycticorax nycticorax</i>		X			X
Northern Harrier <i>Circus cyaneus</i>		X			X
Purple Sand Grass <i>Triplasis purpurea</i>	X				X

Footnotes:

- a. This species was part of a seed mix that was previously planted in the site prairie in 2005. This population does not represent a natural, remnant population that is tracked by the State or required to be protected.

END

NRC-14-0073

**Response to License Renewal Environmental Request for
Additional Information**

Enclosure 2

**TE-11 - March 3, 2014, Protected Species Protection Plan
for Project ECC-14-001**

Protected Species Protection Plan Form

Project Number: ECC-14-001

Proposed Start Date: March 15, 2014

Project Description: Excavate the built up dredge material out of the dredge basin. Place the around the site shooting range to build up the range berms. Stabilize the sediment with grass seed mix. Expected quantity of dredge spoils to be placed is 1,000 cubic yards. See attached drawing.

A Protected Species Protection Plan may be required when a project is being performed in an undeveloped location on-site and there is the potential to disturb State Threatened and Endangered Species and Species of Special Concern.

Note: A plan also may be required for jobs that could impact a protected species within the developed area of the site. For example, it is discovered that there is an eastern fox snake nest under a building. Disturbing an active nesting area would require a Take Permit and may not be allowed.

Potential Protected Species of Concern:

- Eastern fox snake
- American lotus
- Bald Eagle

Species of Special Concern:

- Eastern box turtle
- Blandings Turtle
- Queen snake
- Purple sand grass
- Other _____

Migratory Bird Act:

- Potential Migratory Bird Act Issue

Comments: American lotus has been seen growing in the basin. Eagles have nested in the trees east of the basin and near the shooting range in previous years, however, they seem well adapted to site activities. Some small trees have grown up in the dredge basin that will need to be inspected for bird nests, prior to removal.

Applicable Protection Methods:

- Provide pre-job brief information on protected species of concern to Planner/Project Manager.
- Walk down the work area each morning and after each break to ensure no protected species are in harm's way. If the specie is mobile, allow it to clear the area before starting

work or contact the Environmental Engineer to relocate the specie from the area. Treat all snakes and turtles encountered as protected and allow them to clear the area before proceeding.

- ☒ If a protected species is observed, notify the Environmental Engineer for tracking purposes.
- ☒ Eastern fox snakes may hibernate underground in winter. Land clearing and cut and fill activities in undeveloped areas containing potential fox snake habitat should be scheduled, if possible, during the fox snake's active periods so they have a chance to leave the area unharmed. Fox snakes are typically active from **the third week of April to the fourth week of October.**
- ☒ The **Blanding's turtle** hibernates completely underwater from late October or early November until the early spring burrowed in the muddy bottoms of ponds, wetlands and lakes to stay warm. **Eastern box turtles** hibernate in winter under dead leaves or in in tree stumps. **Land, wetland, dredge basin clearing activities should be limited to when these species are active from the third week of April to the fourth week of October.**
- ☒ Vehicles and equipment working on the roads in the area should not exceed speeds of 15 mph and should stop for all snakes and other reptiles such as turtles in the road, if they can do so safely.
- ☒ Write a tracking CARD if a protected species is accidentally killed or harmed. Immediately report it to the site Environmental Engineer.

Migratory Bird Act Protective Actions:

- ☒ Bird nests in trees and on the ground in the job area to be impacted must be evaluated by the Environmental Engineer or a Corporate Subject Matter Expert (SME) prior to starting work. All nests and birds should be considered protected unless otherwise determined by an SME.
- ☒ Check the trees and ground in the area for nesting birds prior to starting work (April to September). Birds may have moved into the job area since the original job walk down. If new nests are observed, have them evaluated by the environmental engineer prior to starting the job.
- ☐ Trees, buildings, equipment with sparrow, pigeon and/or starling nests are not protected under the Migratory Bird Act and may be removed.
- ☐ Large scale poisoning/removal of pest species such as the sparrow, pigeon or starling will likely require a depredation permit from the Michigan Department of Natural Resources. Evaluate with Environmental Engineer.

Eagle Protective Actions:

- Work involving land disturbance, such as construction, excavation, or tree cutting is generally prohibited within a radius of 660 feet of active or inactive eagle nests. Evaluate the need for a Federal Take Permit with the Environmental Engineer for work within 660 feet of an active nest.

Note: Eagles are unlikely to be disturbed by routine use of roads or other facilities where such use was present before an eagle pair successfully nested in a given area. This guidance is specifically for new or intermittent activities.

Additional Potential Protection Methods for Large or Potential High Impact Projects:

- If American lotus is potentially impacted, a take permit will likely be required. American lotus occurs in wetlands, lagoons and waterways onsite. Consult with corporate SME. Alternatively, consult with the Michigan DNR, Wildlife Division (Ms. Lori Sargent; sargentl@michigan.gov; https://www.michigan.gov/dnr/0,1607,7-153-10370_12141_12168-30522--,00.html; 517-284-6216).
- Eastern fox snake Take Permit: Consult with the EM& R and the Michigan DNR regarding a Take Permit for large projects (>5 acres) in undeveloped areas of the site containing good potential habitat for the fox snake. Or on projects (<5 acres) proposed for undeveloped areas of the site that are believed to contain fox snake hibernacula and/or a population of fox snakes.
- Drift fence and trap: For areas with a high potential for impact to eastern fox snake population, the following method can be used. Several weeks to months before the job is to start, during the snake's active season, surround the job area with sediment fence (which may be required anyway for the soil erosion permit) to keep any fox snakes from escaping, or entering, the area of concern. Within this area, or incorporated into the sediment fence perimeter, place a snake funnel trap (Figure 1). The snakes will be funneled into the trap. These traps must be checked frequently under the supervision of the Environmental Engineer or a Corporate or contract SME. Relocate the snakes to an undisturbed area of the site such as at the end of Fox Road. After a week goes by with no fox snakes being caught, the area is likely cleared of snakes.
- Barrier fence: Sediment fence can be installed along the edges of roads in high traffic areas where there is a concern that fox snakes may be, or have been run over (Figure 2). The barrier fence will redirect the snakes from crossing the road in these areas.

- Artificial cover objects: Place artificial cover objects within the construction area of concern during the fox snakes active season several weeks to months before the work is to begin. Cover objects that work best attract heat which attracts snakes such as corrugated metal sheets. Other materials may work also. The Environmental Engineer, SME or designated technician will check the cover objects daily for fox snakes or other reptiles. The reptiles shall be relocated to undisturbed areas of the site such as at the end of Fox Road.

Additional Comments/Requirements: [Potential wetland impacts regarding placement of dredge spoils around the shooting range berm should be evaluated. Consider impacts in the drive path of the vehicles placing the material.](#)

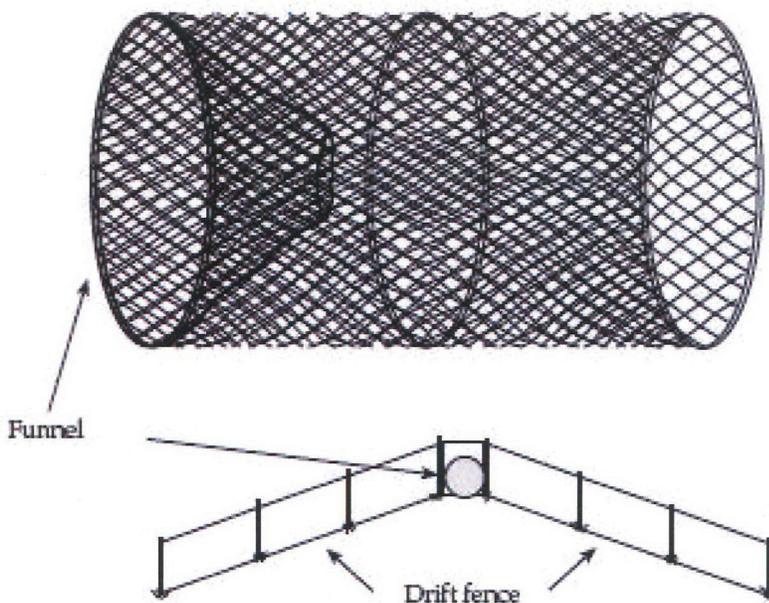


Figure 1: Drift fence system to trap snakes.



Figure 2: Barrier fence.



Figure 3: Artificial cover objects used to attract snakes for collection.

NRC-14-0073

**Response to License Renewal Environmental Request for
Additional Information**

Enclosure 2

TE-16 - Appendix A and B of Work Instruction 11801

Appendix A: Reporting Thresholds for Bird Mortality Events Causally Related to Plant Operations (List Established by U.S. Fish and Wildlife Service, Detroit International Wildlife Refuge)

Reporting Threshold	Status	Common Name
1	Rare	Acadian Flycatcher
1	Special Concern	American Kestrel
1	Rare	Baird's Sandpiper
1	Threatened	Bald Eagle
1	Endangered	Barn Owl
1	Rare	Barred Owl
1	Special Concern	Black Tern
1	Special Concern	Black-crowned Night Heron
1	Rare	Brewer's Blackbird
1	Special Concern	Broad-winged Hawk
1	Special Concern	Cerulean Warbler
1	Threatened	Common Loon
1	Special Concern	Common Moorhen
1	Threatened	Common Tern
1	Special Concern	Cooper's Hawk
1	Special Concern	Dickcissel
1	Special Concern	Forster's Tern
1	Rare	Glaucous Gull
1	Rare	Golden Eagle
1	Special Concern	Golden-winged Warbler/hybrids
1	Rare	Greater White-fronted Goose
1	Special Concern	Hooded Warbler
1	Special Concern	Horned Grebe
1	Rare	Kentucky Warbler
1	Endangered	King Rail
1	Endangered	Kirtlands' Warbler
1	Rare	Lapland Longspur
1	Threatened	Least Bittern
1	Endangered	Loggerhead Shrike
1	Rare	Long-eared Owl
1	Special Concern	Louisiana Waterthrush
1	Special Concern	Marsh Wren
1	Rare	Northern Bobwhite
1	Rare	Northern Goshawk
1	Special Concern	Northern Harrier
1	Rare	Northern Mockingbird
1	Rare	Northern Shrike
1	Threatened	Osprey
1	Endangered	Peregrine Falcon
1	Endangered	Piping Plover
1	Endangered	Prairie Warbler
1	Special Concern	Prothonotary Warbler

1	Rare	Red-headed Woodpecker
1	Special Concern	Red-shouldered Hawk
1	Special Concern	Red-tailed Hawk
1	Special Concern	Sharp-shinned Hawk
1	Rare	Short-eared Owl
1	Rare	Snow Goose
1	Rare	Snowy Egret
1	Rare	Snowy Owl
1	Rare	Summer Tanager
1	Rare	Trumpeter Swan
1	Rare	Upland Sandpiper
1	Rare	Whip-poor-will
1	Rare	White-eyed Vireo
1	Special Concern	Wilson's Phalarope
1	Rare	Worm-eating Warbler
1	Rare	Yellow-breasted Chat
1	Rare	Yellow-crowned Night-Heron
10	Uncommon	American Bittern
10	Uncommon	American Crow
10	Uncommon	American Golden-Plover
10	Uncommon	American Pipit
10	Uncommon	Bank Swallow
10	Uncommon	Black-bellied Plover
10	Uncommon	Black-billed Cuckoo
10	Uncommon	Blue-winged Warbler
10	Uncommon	Bobolink
10	Uncommon	Canada Warbler
10	Uncommon	Clay-colored Sparrow
10	Uncommon	Connecticut Warbler
10	Uncommon	Eastern Meadowlark
10	Uncommon	Eastern Screech Owl
10	Uncommon	Eastern Towhee
10	Uncommon	Great Blue Heron
10	Uncommon	Great Egret
10	Uncommon	Great Horned Owl
10	Uncommon	Green Heron
10	Uncommon	Merlin
10	Uncommon	Northern Saw-whet Owl
10	Uncommon	Olive-sided Flycatcher
10	Uncommon	Orchard Oriole
10	Uncommon	Philadelphia Vireo
10	Uncommon	Pied-billed Grebe
10	Uncommon	Pine Warbler
10	Uncommon	Purple Martin
10	Uncommon	Rough-legged Hawk
10	Uncommon	Sandhill Crane
10	Uncommon	Semipalmated Plover
10	Uncommon	Solitary Sandpiper
10	Uncommon	Tundra Swan

10	Uncommon	Wood Thrush
10	Uncommon	Yellow-billed Cuckoo
10	Uncommon	Yellow-throated Vireo
25	Common	American Black Duck
25	Common	American Redstart
25	Common	American Wigeon
25	Common	American Woodcock
25	Common	Baltimore Oriole
25	Common	Bay-breasted Warbler
25	Common	Belted Kingfisher
25	Common	Black-and-white Warbler
25	Common	Blackburnian Warbler
25	Common	Black-capped Chickadee
25	Common	Blackpoll Warbler
25	Common	Black-throated Blue Warbler
25	Common	Black-throated Green Warbler
25	Common	Blue-gray Gnatcatcher
25	Common	Blue-winged Teal
25	Common	Bonaparte's Gull
25	Common	Brown Creeper
25	Common	Brown Thrasher
25	Common	Bufflehead
25	Common	Canvasback
25	Common	Cape May Warbler
25	Common	Carolina Wren
25	Common	Cedar Waxwing
25	Common	Chestnut-sided Warbler
25	Common	Cliff Swallow
25	Common	Common Goldeneye
25	Common	Common Merganser
25	Common	Common Nighthawk
25	Common	Common Redpoll
25	Common	Common Snipe
25	Common	Dunlin
25	Common	Eastern Bluebird
25	Common	Eastern Kingbird
25	Common	Eastern Phoebe
25	Common	Eastern Wood Pewee
25	Common	Field Sparrow
25	Common	Fox Sparrow
25	Common	Gadwall
25	Common	Gray Catbird
25	Common	Gray-cheeked Thrush
25	Common	Great Black-backed Gull
25	Common	Great Crested Flycatcher
25	Common	Greater Scaup
25	Common	Greater Yellowlegs
25	Common	Green-winged Teal
25	Common	Hermit Thrush

25	Common	Hooded Merganser
25	Common	House Wren
25	Common	Indigo Bunting
25	Common	Least Flycatcher
25	Common	Least Sandpiper
25	Common	Lesser Scaup
25	Common	Lesser Yellowlegs
25	Common	Lincoln's Sparrow
25	Common	Magnolia Warbler
25	Common	Mallard
25	Common	Mourning Warbler
25	Common	Nashville Warbler
25	Common	Northern Parula
25	Common	Northern Pintail
25	Common	Northern Rough-winged Swallow
25	Common	Northern Shoveler
25	Common	Northern Waterthrush
25	Common	Orange-crowned Warbler
25	Common	Ovenbird
25	Common	Palm Warbler
25	Common	Pectoral Sandpiper
25	Common	Pine Siskin
25	Common	Purple Finch
25	Common	Red-bellied Woodpecker
25	Common	Red-breasted Merganser
25	Common	Red-breasted Nuthatch
25	Common	Redhead
25	Common	Ring-necked Pheasant
25	Common	Rose-breasted Grosbeak
25	Common	Ruby-throated Hummingbird
25	Common	Ruddy Duck
25	Common	Rusty Blackbird
25	Common	Savannah Sparrow
25	Common	Scarlet Tanager
25	Common	Semipalmated Sandpiper
25	Common	Snow Bunting
25	Common	Solitary Vireo
25	Common	Sora
25	Common	Swainson's Thrush
25	Common	Swamp Sparrow
25	Common	Tennessee Warbler
25	Common	Traill's Flycatcher
25	Common	Tufted Titmouse
25	Common	Veery
25	Common	Vesper Sparrow
25	Common	Virginia Rail
25	Common	White-crowned Sparrow
25	Common	Wilson's Warbler
25	Common	Winter Wren

25	Common	Wood Duck
25	Common	Yellow-bellied Flycatcher
25	Common	Yellow-bellied Sapsucker
100	Abundant	American Coot
100	Abundant	American Goldfinch
100	Abundant	American Robin
100	Abundant	American Tree Sparrow
100	Abundant	Barn Swallow
100	Abundant	Blue Jay
100	Abundant	Brown-headed Cowbird
100	Abundant	Canada Goose
100	Abundant	Chimney Swift
100	Abundant	Chipping Sparrow
100	Abundant	Common Grackle
100	Abundant	Common Yellowthroat
100	Abundant	Dark-eyed Junco
100	Abundant	Double-crested Cormorant
100	Abundant	Downy Woodpecker
100	Abundant	Golden-crowned Kinglet
100	Abundant	Hairy Woodpecker
100	Abundant	Herring Gull
100	Abundant	Horned Lark
100	Abundant	Killdeer
100	Abundant	Mourning Dove
100	Abundant	Northern Cardinal
100	Abundant	Northern Flicker
100	Abundant	Red-eyed Vireo
100	Abundant	Red-winged Blackbird
100	Abundant	Ring-billed Gull
100	Abundant	Ruby-crowned Kinglet
100	Abundant	Song Sparrow
100	Abundant	Spotted Sandpiper
100	Abundant	Tree Swallow
100	Abundant	Turkey Vulture
100	Abundant	Warbling Vireo
100	Abundant	White-breasted Nuthatch
100	Abundant	White-throated Sparrow
100	Abundant	Yellow Warbler
100	Abundant	Yellow-rumped Warbler
None	Invasive	European Starling
None	Invasive	House Finch
None	Invasive	House Sparrow
None	Invasive	Mute Swan
None	Invasive	Rock Dove (Pigeon)

Appendix B: List of Current Species Protected Under the Endangered Species Act
(Current October 2014)

<u>Status</u>	<u>Species listed in this state and that occur in this state</u>
E	Bat, Indiana (<i>Myotis sodalis</i>)
E	Beetle, American burying (<i>Nicrophorus americanus</i>)
E	Beetle, Hungerford's crawling water (<i>Brychius hungerfordi</i>)
E	Butterfly, Karner blue (<i>Lycaeides melissa samuelis</i>)
E	Butterfly, Mitchell's satyr (<i>Neonympha mitchellii mitchellii</i>)
E	Clubshell (<i>Pleurobema clava</i>)
T	Lynx, Canada lower 48 States DPS (<i>Lynx canadensis</i>)
E	Plover, piping Great Lakes watershed (<i>Charadrius melodus</i>)
E	Puma, eastern (<i>Puma (=Felis) concolor cougar</i>)
E	Riffleshell, northern (<i>Epioblasma torulosa rangiana</i>)
E	Rayed bean (<i>Villosa fabalis</i>)
LE	Scaleshell (<i>Leptodea leptodon</i>)
E	Snuffbox (<i>Epioblasma triquetra</i>)
T	Snake, copperbelly water MI, OH, IN N of 400 N. Lat. (<i>Nerodia erythrogaster neglecta</i>)
E	Warbler, Kirtland's (<i>Dendroica kirtlandii</i>)
T	Daisy, lakeside (<i>Hymenoxys herbacea</i>)
T	Fern, American hart's-tongue (<i>Asplenium scolopendrium var. americanum</i>)
T	Goldenrod, Houghton's (<i>Solidago houghtonii</i>)
T	Iris, dwarf lake (<i>Iris lacustris</i>)
E	Monkey-flower, Michigan (<i>Mimulus glabratus var. michiganensis</i>)
T	Orchid, eastern prairie fringed (<i>Platanthera leucophaea</i>)
T	Pogonia, small whorled (<i>Isotria medeoloides</i>)
T	Thistle, Pitcher's (<i>Cirsium pitcheri</i>)