

United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE Green Bay Fish and Wildlife Conservation Office 6644 Turner Road Elmira, Michigan 49730

August 2, 2016

The Honorable John Warren, Tribal Chairman Pokagon Band of Potawatomi 58620 Sink Road Box 180 Dowagiac, Michigan 49047

Re: Request for Information, Environmental Assessment of the Removal of Pucker Street Dam on the Dowagiac River

Dear Mr. Warren:

In accordance with the requirements of the National Environmental Policy Act of 1969 (NEPA), the U.S. Fish and Wildlife Service (USFWS) as lead agency is preparing an Environmental Assessment (EA) to evaluate the effects of the proposed removal of the Pucker Street Dam on the Dowagiac River in Berrien County, Michigan. As part of the planning and evaluation process, the USFWS is requesting information and input from the Berrien Conservation District in order to evaluate potential impacts of the proposed action.

The Pucker Street Dam is located on the Dowagiac River, tributary to the St. Joseph River (third largest to Lake Michigan). The dam is located 3 miles from the confluence with the St. Joseph River at approximate coordinates: Latitude 41.865001 N and Longitude -86.241828 W. A project location map is provided as an attachment. The dam was built to supply electricity to the City of Niles, but has not produced power since 1992. In 1999, the City of Niles in cooperation with the Michigan Department of Natural Resources conducted a drawdown of the dam, eliminating the impoundment. Recent studies and investigations indicate that restoring the dam for hydro-electric power generation is not feasible. In 2013, Michigan Department of Environmental Quality (MDEQ) rated the dam as a significant hazard and is willing to hold off on requiring repairs if the City moves forward with removal efforts. In 2013, the City of Niles decided to remove Pucker Street Dam and restore the river.

The Pucker Street Dam not only presents a significant public safety hazard, but is also the only main stem barrier blocking all fish and aquatic species passage on the Dowagiac River. The dam disconnects about 84% of the Dowagiac Rive system (159 miles) from the St. Joseph River. It also inhibits downstream transport of sediment, nutrients, large wood, and host of other natural riverine functions. This project proposes to remove the Pucker Street Dam reconnecting over

159 miles of the Dowagiac River system and 11,000 acres of wetlands to the St. Joseph River. The project will also result in improved and safer access for fishing and paddling.

In order that potential environmental effects of the project may be fully evaluated and considered, the USFWS is hereby requesting that you provide input regarding issues or concerns relevant to your agency. We request that you respond in writing concerning any beneficial or adverse impacts relative to the interests of your agency. Please send your comments to me by September 12, 2016.

Thank you for your attention to this matter. If you have any questions, please do not hesitate to contact me at (231) 584-3553 or at <u>rick_westerhof@fws.gov</u>.

Sincerely,

Red What

Rick Westerhof Fish Biologist

Attachments: Project Location Map

cc:

Jennifer Kanine, Pokagon Band of Potawatomi Mark Holey, United States Fish and Wildlife Service





GOVERNOR

STATE OF MICHIGAN DEPARTMENT OF NATURAL RESOURCES Lansing



August 29, 2016

Mr. Rick Westerhof United States Fish and Wildlife Service Green Bay Fish and Wildlife Conservation Office 6644 Turner Road Elmira, Michigan 49730

Dear Mr. Westerhof:

SUBJECT: Pucker Street Dam, Dowagiac River, Berrien County

Thank you for your letter regarding the proposed removal of the Pucker Street Dam on the Dowagiac River. This removal would provide several environmental and recreational benefits. One benefit would be upstream fish passage. Dam removal would reconnect the lower river with 28 miles of the main stem and 131 miles of tributary streams, including major coldwater tributaries such as McKinzie, Pokagon, and Peavine creeks. Forty-two fish species have been collected during Michigan Department of Natural Resources (MDNR) surveys on the Dowagiac River downstream of the Pucker Street Dam. This list includes 37 native species, four salmonid species, and one exotic species (common carp). The primary native species to benefit from the Pucker Street Dam removal would be smallmouth bass, walleyes, and suckers (white sucker, northern hog sucker, shorthead redhorse, and golden redhorse). Four salmonid species (rainbow trout [steelhead], Chinook salmon, coho salmon, and brown trout [mixture of resident and potamodromous fish]) also would be able to move upstream after the dam removal.

Steelhead, Chinook salmon, and coho salmon currently are restricted to the portion of the Dowagiac River that is downstream of the Pucker Street Dam. Dam removal would allow these popular game species to greatly expand their distribution within the river system, thus creating new fishing opportunities. Most native fish species are present upstream and downstream of the dam. However, the removal of the dam will allow these fish to move freely within the river system to access important spawning, nursery, foraging, and refuge areas.

Another environmental benefit of dam removal would be the rehabilitation of approximately two miles of high gradient stream habitat immediately upstream of the Pucker Street Dam. High gradient stream reaches typically have high habitat diversity (due to the diversity of water depths and current velocities with the stream channel) and coarse substrates (such as gravel and cobble). Such stream reaches provide suitable spawning habitat for many fish species and produce abundant and diverse macroinvertebrate communities.

The Pucker Street Dam creates a low gradient stream reach immediately upstream of the dam where sediment is deposited. Sediment-free water released below the dam has high erosive power, causing increased scour of the stream bed and banks downstream of the structure. The removal of the dam would restore natural transport of sediment, nutrients, and logs.

Canoeists and kayakers currently have to exit the stream and portage around the dam. Attempts to kayak over the dam could lead to serious injury or death. If the dam is removed, recreational users will be able to paddle through this stream reach without portaging.

CONSTITUTION HALL • 525 WEST ALLEGAN STREET • P.O. BOX 30028 • LANSING, MICHIGAN 48909-7528 www.michigan.gov/dnr • (517) 284-MDNR(6367) Mr. Rick Westerhof

Removal of the Pucker Street Dam would address several management options identified in MDNR's St. Joseph River Assessment (Wesley and Duffy 1999).

- Restore natural channel morphology in streams with high resource potential to enhance existing habitat diversity (e.g., Dowagiac River – meander restoration).
- Protect biological communities of the river by providing upstream and downstream
 passage at dams to mitigate for habitat fragmentation.
- Survey and develop an inventory of barriers to fish passage, such as culverts, and explore options to correct the problem.
- Rehabilitate free-flowing river conditions by removing dams, requiring dam owners to
 operate at run-of-the-river (e.g., Three Rivers Dam), modifying all possible dams to
 fixed-crest structures, or modifying the largest dams to incorporate a bottom draw
 system to mitigate warming effects on impoundments.
- Rehabilitate river navigability by constructing canoe portages and upstream and downstream access sites at dam locations on the mainstem and major tributaries.
- Rehabilitate rare, high-gradient areas and fragmented habitats by removal of unnecessary dams (e.g., Randall, Portage Plant, Pollack, Fox and Bears, Upper Constantine, and Niles (Pucker Street) dams).
- Rehabilitate populations of potamodromous fish by removal of unnecessary dams and installing upstream and downstream passage at other dams and barriers in the watershed. Passage facilities should allow the migration of salmonids as well as warm water species (smallmouth bass, walleye, flathead catfish, lake sturgeon, and redhorse suckers).
- Rehabilitate habitat continuity by removing unnecessary dams (e.g., Jonesville Dam on St. Joseph River, Upper Constantine on Fawn River, and Niles Dam on Dowagiac River). Require upstream and downstream fish passage as well as bottom draw release on those dams that remain (e.g., Sturgis, Three Rivers, Constantine, and Mottville dams).

Wesley (2008) reiterated MDNR's support for removal in his summary of the Pucker Street Dam drawdown.

 Develop a long-term strategy to address Pucker Street Dam removal as stated in the Management Options of the St. Joseph River Assessment (Wesley and Duffy 1999). The strategy should use a public process to consider the benefits and costs of full fish passage into the upper Dowagiac River and should consider the best option for sediment management. There is still 15 feet of head on the dam that is preventing fish passage and containing sediment.

Potential adverse effects of dam removal include colonization of upstream reaches by aquatic invasive fish species, competition of potamodromous species with resident fish species in upstream reaches, and sedimentation downstream of the dam. Colonization of upstream reaches by aquatic invasive fish species is not expected to occur as a result of the Pucker Street Dam removal. There are two dams on the St. Joseph River between Lake Michigan and Dowagiac River confluence. Fish ladders have been installed at both of these dams. Steelhead, salmon, and brown trout compose approximately 99% of the fish that move upstream through these ladders. Sea lampreys cannot move upstream past the first dam (Berrien Spring Dam) and do not have access to the Dowagiac River. Thus, removal of the Pucker Street Dam would not expand the distribution of sea lampreys. Common carp already are present upstream and downstream of the dam.

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Dam removal will allow potamodromous steelhead, Chinook salmon, and coho salmon to move farther upstream on the main stem and into several tributary streams. Substantial natural reproduction of steelhead is expected to occur in coldwater tributaries to the Dowagiac River. Some of these tributaries (e.g., Pokagon and Peavine creeks) support naturalized populations of brown trout. Few studies however have examined the effects of steelhead introduction on resident brown trout populations. The most intensive study was completed by Nuhfer et al. (2014) on a small coldwater stream (Hunt Creek) in the northern Lower Peninsula of Michigan.

Our case study clearly showed that interactions between juvenile steelhead and Brown Trout reduced the survival of young Brown Trout and lowered the abundance of older and larger Brown Trout in Hunt Creek. It is challenging to determine how these findings apply to individual streams within the diverse suite of trout streams found in the Great Lakes region; given our familiarity with data from other Michigan waters, we believe that our findings best represent the interactions among salmonid species in smaller trout streams where densities of age-0 trout are relatively high. During the years in which adult steelhead spawned in Hunt Creek, the late-summer density of all age-0 salmonids averaged about 4,000 fish/ha, resulting in lower survival rates for juvenile Brown Trout. We believe that lower survival of juvenile Brown Trout due to interactions with juvenile steelhead is less likely to occur in streams where densities of age-0 Brown Trout are lower. In addition, some larger Michigan streams, such as the Pere Marquette and Little Manistee rivers, have the capacity to produce and sustain some of the highest densities of large resident Brown Trout observed in the state, despite the presence of dense populations of juvenile steelhead (MDNR Fisheries Division, unpublished data). [Nuhfer et al. 2014]

The MDNR has conducted numerous surveys on Pokagon Creek during 2002-2015 as part of the Status and Trends Stream Monitoring Program. The estimated population density for age-0 brown trout in Pokagon Creek varied from 108 fish/ha in 2014 to 1,081 fish/ha in 2004. By comparison, the mean population density for age-0 brown trout in Hunt Creek prior to the introduction of steelhead was 1,252 fish/ha. Thus, densities of age-0 brown trout in Pokagon Creek are considerably lower than in Hunt Creek, and the potential for the introduction of steelhead to reduce brown trout survival likely is lower in Pokagon Creek. The existing brown trout fishery in the main stem Dowagiac River is supported primarily by annual stocking and is not likely to be affected by the introduction of steelhead.

Pokagon and Peavine creeks are surrounded by private land. No creel data are available for these streams. Anecdotal observations suggest that fishing pressure for brown trout is low. Fisheries Division has not received many complaints from anglers regarding conflicts with landowners, but public access is tenuous. Like most streams in Michigan, these creeks have never officially been declared navigable or non-navigable. The main stem Dowagiac River has multiple public access points. Removal of the Pucker Street Dam is expected to yield a net increase in fishing opportunities along the main stem through the expanded upstream movement of steelhead and salmon. However, fishing effort immediately downstream of the existing dam likely will decrease as potamodromous salmonids will no longer be concentrated in this stream reach by the presence of an impassible barrier.

One of the MNDR's chief concerns regarding the proposed dam removal is the potential downstream movement of sediment. The 1999 drawdown of the Pucker Street Dam impoundment resulted in the downstream release of large volumes of sediment. Sand released from the impoundment covered spawning gravel and filled in pools downstream of the dam. It took several years and major flood events to evacuate this sand from the river. Recent depth-

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Mr. Rick Westerhof

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of-refusal sampling upstream of the dam has revealed sediment deposits of up to 18 feet which could be mobilized by the dam removal.

In conclusion, the MDNR is supportive of the proposed removal of the Pucker Street Dam. However, the City of Niles and their consultants must develop a strategy for minimizing the downstream release of sediments during and after the dam removal.

Sincerely, lelly Keith Creagh

Keith Creagh Director 517-284-6367

cc: Mr. Mark Holey, United States Fish and Wildlife Service Dr. William E. Moritz, Natural Resources Deputy, DNR Mr. Jim Dexter, DNR Mr. Jay Wesley, DNR Mr. Brian Gunderman, DNR



GOVERNOR

STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY LANSING



C. HEIDI GRETHER DIRECTOR

September 6, 2016

Mr. Rick Westerhof United States Department of the Interior United States Fish and Wildlife Service Green Bay Fish and Wildlife Conservation Office 6644 Turner Road Elmira, Michigan 49730

Dear Mr. Westerhof:

Thank you for your letter of August 2, 2016, to Director C. Heidi Grether, Department of Environmental Quality (DEQ), concerning your request for information regarding the Environmental Assessment of the removal of the Pucker Street Dam on the Dowagiac River. Director Grether has referred your letter to the DEQ's Water Resources Division (WRD) for response.

As you might be aware, WRD staff was engaged by the city of Niles and their project design team early in the planning phase of this project. The proposed dam removal and river restoration project will require a permit to be issued by the WRD prior to commencement of construction. Staff of the WRD will continue to provide input on state permitting requirements, but will not become involved in an official capacity until we receive a Joint Permit Application (JPA) from the project applicant.

Once we receive a JPA, we will begin our official review of the proposed project based on its merits, impacts, and compliance with several state statues that regulate construction activities within floodplains and below the Ordinary High Water Mark of regulated waterbodies, in regulated wetland areas, and on regulated dams. At the end of the application review period, the WRD will make a decision on whether or not to issue a permit for the proposed activities.

We are happy to coordinate our permitting process with the United States Fish and Wildlife Service's (USFWS) Environmental Assessment process and provide comments on any areas where the two overlap.

If you have any further questions regarding this matter, please contact Mr. Lucas Trumble, P.E., Environmental Engineer, Hydrologic Studies and Dam Safety Unit, WRD, at 517-420-8923; trumblel@michigan.gov; or DEQ, P.O. Box 30458, Lansing, Michigan 48909-7958; or you may contact me.

Sinderely

Byron Lane, Chief Hydrologic Studies and Dam Safety Unit Water Resources Division 517-281-6821

CONSTITUTION HALL • 525 WEST ALLEGAN STREET • P.O. BOX 30473 • LANSING, MICHIGAN 48909-7973 www.michigan.gov/deg • (800) 662-9278 Mr. Rick Westerhof Page 2 September 6, 2016

cc: Mr. Mark Holey, USFWS
Ms. C. Heidi Grether, Director, DEQ
Mr. Robert Wagner, Program Deputy Director, DEQ
Ms. Teresa Seidel, DEQ
Ms. Kim Fish, DEQ
Mr. John Bayha, DEQ
Mr. Joe Rathbun, DEQ
Mr. Ben Zimont, DEQ
Mr. Luke Trumble, DEQ



Pokégnek Bodéwadmik • Pokagon Band of Potawatomi Tribal Council

P.O. Box 180 • 58620 Sink Road • Dowagiac, MI 49047 • www.PokagonBand-nsn.gov (269) 782-6323 • (888) 376-9988 toll free • (269) 782-9625 fax

September 12, 2016

Rick Westerhof, Fish Biologist U.S. Fish and Wildlife Service Green bay Fish and Wildlife Conservation Office 6644 Turner Road Elmira, Michigan 49730

Re: Information re Environmental Assessment of the Removal of Pucker Street Dam on the Dowagiac River

Dear Mr. Westenhof:

The U.S. Fish and Wildlife Services ("USFWS") is preparing an Environmental Assessment to evaluate the effects of the proposed removal of the Pucker Street Dam on the Dowagiac River in Berrien County, Michigan. Through a letter dated August 2, 2016, you requested information and input from interested parties in order to evaluate potential impacts of the proposed action.

I am writing on behalf of the Pokagon Band of Potawatomi Indians ("Pokagon Band") to express support for removal of the Pucker Street Dam. The Pokagon Band continues to occupy its ancestral homeland in the St. Joseph River Valley in southwestern Michigan and northern Indiana, including near Dowagiac, Michigan.

The Pokagon Band is dedicated to reestablishing its land base. Consistent with this goal, the Pokagon Band currently has 1640 acres of trust and fee land in the vicinity of its Rodgers Lake land consolidation site ("Rodgers lake Site"). Importantly, the Rodgers, Lake Site is located just 5 miles north of the Pucker Street Dam, and four miles of the Dowagiac River are located within or adjacent to the Rodgers Lake Site.

Beginning in 2011, the Pokagon band launched an initiative to restore the meanders to the four-mile portion of the Dowagiac River located within or adjacent to the Rodgers lake Site. To date, progress on this initiative includes, completing a feasibility study, meeting with neighboring land owners, substantially completing engineering studies to locate the historic meanders, and restoring the Rodgers Lake outlet to the Dowagiac River from a pod to a meandering stream.

Removal of the Pucker Street Dam is consistent the Pokagon Band's restoration efforts and its overall goal of improving the aquatic wildlife habitat, hydrologic conditions and water quality of the Dowagiac River. Additionally, restoration of the Dowagiac River ecosystem will allow for connectivity throughout the Dowagiac River, thereby allowing fish passage to historic areas of the system, including the Rodgers Lake Site.

Thank you in advance for your work on this important project and consideration of the Pokagon Band's comments.

Sincerely,

Wanen

John P. Warren Tribal Council Chairperson



BERRIEN CONSERVATION DISTRICT 3334 Edgewood Road, Berrien Springs, MI 49103 (269) 471-9111 www.berriencd.org

Helping You Manage Your Natural Resources

October 20, 2016

Rick Westerhof, Fish Biologist U.S. Fish and Wildlife Service Green Bay Fish and Wildlife Conservation Office 6644 Turner Road Elmira, MI 49730

Dear Mr. Westerhof,

Re: Request for Information, Environmental Assessment of the Removal of Pucker Street Dam on the Dowagiac River.

Berrien Conservation District supports the efforts to remove the Pucker Street Dam on the Dowagiac River in Berrien County, Michigan. It has been reported that the dam is potentially blocking fish and other aquatic species passage on the Dowagiac River.

The Dowagiac River Watershed lies within the St. Joseph River Basin in Berrien County. Berrien Conservation District's Resource Needs Assessment of 2012-2017 for the county lists loss of habitat and natural systems as a resource concern.

It is the Berrien Conservation Districts goal to support efforts to benefit native fish and their habitat, particularly projects that remove in-stream migration barriers and to restore natural systems resulting in habitat improvement. Dam removal will provide beneficial impacts to restoration of a natural stream system.

As part of your planning and evaluation process it is the Berrien Conservation District's recommendation to provide data to update the Dowagiac River Watershed Management Plan. Under the current 2002 revision there is not information or data regarding dam removals.

Thank you,

Jaroy Carpenter

Nancy Carpenter, Manager Berrien Conservation District 269-471-9111 x3



GOVERNOR

STATE OF MICHIGAN MICHIGAN STATE HOUSING DEVELOPMENT AUTHORITY STATE HISTORIC PRESERVATION OFFICE

KEVIN ELSENHEIMER EXECUTIVE DIRECTOR

November 30, 2016

RICK WESTERHOF U S FISH AND WILDLIFE SERVICE GREEN BAY NATIONAL FISH AND WILDLIFE CONSERVATION OFFICE 6644 TURNER ROAD ELMIRA MI 49730

RE: ER17-26 Pucker Street Dam Removal, Sec. 11, 12 & 13, T7S, R17W, Niles Township, Berrien County (USFWS)

Dear Mr. Westerhof:

Under the authority of Section 106 of the National Historic Preservation Act of 1966, as amended, we have reviewed the abovecited undertaking at the location noted above. Based on the information provided for our review, it is the opinion of the State Historic Preservation Officer (SHPO) that <u>no historic properties are affected</u> within the area of potential effects of this undertaking.

This letter evidences the USFWS's compliance with 36 CFR § 800.4 "Identification of historic properties," and the fulfillment of the USFWS's responsibility to notify the SHPO, as a consulting party in the Section 106 process, under 36 CFR § 800.4(d)(1) "No historic properties affected." If the scope of work changes in any way, or if artifacts or bones are discovered, please notify this office immediately.

We remind you that federal agency officials or their delegated authorities are required to involve the public in a manner that reflects the nature and complexity of the undertaking and its effects on historic properties per 36 CFR § 800.2(d). The National Historic Preservation Act also requires that federal agencies consult with any Indian tribe and/or Tribal Historic Preservation Officer (THPO) that attach religious and cultural significance to historic properties that may be affected by the agency's undertakings per 36 CFR § 800.2(c)(2)(ii).

The State Historic Preservation Office is not the office of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions, please contact Brian Grenneli, Cultural Resource Management Specialist, at 517-335-2721 or by email at GrennellB@michigan.gov. Please reference our project number in all communication with this office regarding this undertaking. Thank you for this opportunity to review and comment, and for your cooperation.

Sincerely,

Brian G. Grenfie

Cultural Resource Management Specialist

for Brian D. Conway State Historic Preservation Officer

SAT:BGG

Copy: Jeff Dunlap, City of Niles Marcy Hamilton, Southwest Michigan Planning Commission



REQUEST FOR MIDWEST RHPO NHPA CLEARANCE

For Undertakings that have the Potential to Cause Effects on Historic Properties

Project Background:

Project Name: Pucker Street Dam Removal on the Dowagiac River in Berrien County, Michigan County/ State: Berrien County, Michigan___ On USFWS land?_____NO_____

USFWS Program (NWR, WMD, NFH, PFW<u>SFSH</u>)ECS, Other (Name)): NFPP, GLFWRA, SOGL _____ Project Location: Township(s) _7 S_, Range _17W_, Section(s): _13_

Total Project Area Size (in Acres): 300 x 5600 x10 ft__ If road/trail, (linear ft, L and W): __320 x 300 x 5 ft__ USFWS Project Leader/Station: __Mark Holey, Green Bay FWCO____ Phone #: _920 866-1760_ If there is a Governmental/NGO partner(s), please name: __City of Niles, Michigan, MIDNR__

Mandatory Attachments (on separate sheets):

- 1. USGS topographical map and aerial photo, ensuring that the project boundaries are exact.
- 2. Details of anticipated project activities, i.e. ground/building disturbance (add maps as necessary)
- 3. Only the relevant sections of design drawings showing soil disturbance boundaries (e.g. planviews)
- 4. Landuse history and environmental setting of the project area (add maps as necessary)

X_Check here if there has been a field survey done in the project area already (if not, check here _____) If so, who conducted it and when? <u>April 2015</u> Did they find any buildings/sites? Please see the next section. Please attach any information/report(s) you have regarding any previous field survey(s).

X_Check here if there are known buildings/sites* in the project area (if not, check here ____) *Sites are such places as artifact scatters, mounds or earthworks, cemeteries, privy pits, old foundations, ruins, bridges, dams, water control structures, historic roads/trails/fences, and trash pits/piles.

Information needed to be furnished to RHPO if there are known buildings/sites in the project area:

- 1. Age of building(s)/site(s) or date(s) built: _1928_____ RPI # or State #(s)____
- 2. Attach ground level photographs of both inside and outside of buildings/sites.
- 3. Attach close-up aerial photo or a sketch map illustrating the placement of the buildings/sites in the project area, key the ground photos to the aerial photo/sketch map.
- 4. Attach detailed descriptions of the buildings/sites with emphasis on their size, floor plans and architectural elements. Individually, what kind of physical shape are they in (good, fair or poor)?

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Investigation	*Final Finding by Regional Director via RHPO
🗙 No Field Survey Needed	No Potential Effect No site/building(s) in APE. No Effect.
Field Survey Done	Site/Building(s) present, but none are Historic Properties. No Effect.
Phase I (ARPA#)	Historic Property(ies) present, but No Effect/No Adverse Effect.
Phase II (ARPA#)	Historic Property(ies) present, Adverse Effect, Resolved with MOA.
Phase III (ARPA#)	Justify Finding: dam has been extensively remodeled
	SHYO EMUNY
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James E. Myster, USFWS Midwest RHPO

*Although the project has been cleared, inadvertent discoveries are still possible. If so, please stop and contact the RHPO at 612-713-5439.

RHPO Project #