

Great Lakes Fish and Wildlife Restoration Act

FINAL Project Report

Project Title: Lake Erie Watershed Wetland Restoration Program

Project Sponsor: The Ohio Division of Wildlife

FWS Agreement Number: 301819G023

Principal Investigator(s):

Dane Cramer, Regional Biologist, Ducks Unlimited, Inc., 1220 Eisenhower Place, Ann Arbor, MI 48108 dcramer@ducks.org

Luke Miller, Wildlife Biology Program Administrator, Ohio Division of Wildlife, 2045 Morse Road, Building G, Columbus, OH 43229-6693 Luke.Miller@dnr.state.oh.us

Report Author(s): Dane Cramer

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Program Objectives: This program will increase the quantity and quality of wetlands within the Lake Erie watershed of Ohio by:

1. Restoring more than 100 acres of wetlands on private lands throughout the Ohio Lake Erie watershed.
2. Providing long-term habitat management to promote sustainable populations of wetland dependent wildlife.
3. Contributing to improving water quality and increasing flood-water retention within the Lake Erie watershed.

Description of Tasks: This program is a cooperative effort between the Ohio Division of Wildlife (ODOW), Ducks Unlimited (DU), and the U.S. Fish and Wildlife Services' Great Lakes Fish & Wildlife Restoration Act to restore more than 100 acres of wetlands in Ohio's Lake Erie watershed.

1. Landowner and project site identification: Completed

ODOW, DU, and other partners identified and worked with 9 willing landowners to complete 10 wetland restoration projects (See Table 1). Project sites adjacent or in close proximity to other conservation lands of significant size and within focus areas of the North American Waterfowl Management Plan were given priority.

2. Landowner contract agreements: Completed

In exchange for receiving cost-share assistance, the 9 landowners with completed projects have signed a contract with ODOW agreeing to maintain and manage their restored wetlands for an average of 20 years.

3. Topographic survey and engineering designs: Completed

ODOW coordinated with conservation partners, including various Soil and Water Conservation Districts and Natural Resources Conservation Service, to conduct topographic surveys and develop engineering designs to restore hydrology to previously drained wetlands. Where possible, wetlands were designed to capture surface water runoff to moderate flood events and improve water quality basin-wide.

4. National Historic Preservation Act (NHPA) and National Environmental Policy Act (NEPA) compliance: Completed

ODOW secured the required NHPA documentation for the 10 wetland restoration projects from the U.S. Fish and Wildlife Service – Partners for Fish and Wildlife program through a cooperative agreement they have with the Ohio Historic Preservation Office. NEPA compliance was also secured for the 10 projects from the U.S. Fish and Wildlife Service – Partners for Fish and Wildlife program. Supporting documentation accompanies this report as an attachment.

5. Wetland restorations: Completed

ODOW hired contractors and purchased supplies to carry out restoration activities and completed wetland restorations on 10 projects. ODOW biologists inspected these wetland restoration projects to verify construction activities were satisfactorily completed.

Major findings and accomplishments: A total of 130.7 acres of emergent wetlands were restored at 10 locations. The project goal of restoring 100 acres of wetlands on private lands was nearly met during the first field season with 84.2 acres restored, and exceeded during the second field season with the addition of 46.5 restored acres. Wetlands were restored to emulate natural hydrology, by breaking sub-surface drain tiles, plugging drainage ditches, constructing low-level earthen berms, and installing water control structures as necessary. Restored wetlands were designed for variable water depths and permanence (seasonal duration), from moist soils and wet meadows to a maximum depth of three feet. Where possible, pipes were installed to connect wetlands to adjacent ditches and streams to allow for flow-through conditions. Topsoil was replaced on areas of excavation to provide a seed bank of native wetland plants and berms were seeded to native grasses and forbs to prevent erosion and provide additional habitat. Buffer areas of up to 100 feet were established adjacent to the restored wetlands where possible, and included a mixture of grasses, legumes, or forbs. Completed wetlands restorations ranged in size from 3.5 to 35 acres.

Budget: Proposed grant funds were \$50,000. Of this, \$47,750 were allocated for contractor charges/supplies to complete restorations and \$2,250 to cover a small portion of DU's indirect costs (4.7%). Actual grant expenditures followed the proposal exactly (Table 1). Proposed DU matching funds were \$16,000 cash for contractor charges/supplies and \$4,000 of in-kind staff time for grant administration. Actual DU matching funds were \$10,221 cash for contractor charges/supplies and \$16,306 of in-kind staff time for grant administration. ODOW contributed an additional \$7,150 of non-federal cash for contractor charges/supplies, although no ODOW matching funds were committed in the proposal. The total match commitment was \$33,677 and was 40% of the total project costs.

Management implications of your work: Ohio has the second highest loss of wetlands in the country, with fewer than 10% of pre-settlement wetlands remaining. The predominance of agricultural production in the Lake Erie watershed coupled with extreme wetland loss has resulted in high rates of erosion and severe water quality impairments. Urban and industrial development continues to be a significant source of wetland loss and habitat fragmentation, impacting a myriad of obligate and facultative wetland users. Agricultural and industrial runoff has created serious water quality issues, impacting not only wildlife, but also area residents who rely on ground water for their drinking water supply and recreate on public beaches that are forced to close for health safety. With approximately 95% of Ohio's landscape held in private ownership, efforts to restore wetlands on private lands are a necessity and voluntary landowner programs have proved to be a successful means to increase wetland habitat in Ohio while also helping to improve water quality. This project restored 130.7 acres of nationally decreasing palustrine emergent wetlands that provide long-term habitat for populations of wetland dependent wildlife, including threatened and endangered species, improve water quality, and increase flood water retention within Ohio's portion of the Lake Erie watershed. Increasing wetland habitat ultimately improves the health of Lake Erie and indirectly benefits fish and other aquatic organisms.

Additional restoration work needed and/or areas for future research: The mentality of landowners is evolving to one of land stewardship and voluntary programs such as the one utilized in conjunction with this grant are a practical and successful strategy to restore wetlands on private lands. Despite the successes achieved through this strategy, the need to maintain and expand this type of work is significant. We would appreciate being alerted to future funding opportunities to maintain and expand on the wetland restoration efforts completed under this grant.

List of presentations delivered and outreach activities: None.

Include relevant pictures or images associated with the project: Pictures accompany this report.

Geographic region project occurred in or effects: Wetland restorations occurred throughout Ohio's portion of the Lake Erie watershed on private lands. Latitude and longitude for the project sites are given in Table 1.

List of reports and peer-reviewed papers completed or in-progress: None.

Table 1. Lake Erie Watershed Wetland Restorations – Grant No. 301819G023

PROJECT	YEAR	ACRES	COUNTY	LATITUDE	LONGITUDE	GRANT FUNDS	MATCH FUNDS	TOTAL COST
Decker	2009	4.2	Ashtabula	41.73865	-80.60235	\$1,924	\$1,226	\$3,150
Grand River Partners, Inc.	2009	22	Ashtabula	41.58010	-80.88469	\$6,110	\$3,890	\$10,000
Costilow	2009	35	Ashtabula	41.81974	-80.77698	\$6,110	\$3,890	\$10,000
Cahlik	2009	3.5	Trumbull	41.48287	-80.82338	\$1,604	\$1,021	\$2,625
Holtcamp	2009	6	Ashtabula	41.78420	-80.64440	\$2,597	\$1,653	\$4,250
Decker 2	2009	13.5	Ashtabula	41.74286	-80.57259	\$5,530	\$3,470	\$9,000
Grant Administration						\$0	\$5,230	\$5,230
Indirect Recovery						\$1,250	\$0	\$1,250
SUBTOTALS		84.2				\$25,125	\$20,380	\$45,505
South Lake Hunt Club	2010	30	Ottawa	41.60481	-83.14744	\$7,750	\$250	\$8,000
Zimmerman	2010	7	Ottawa	41.58778	-83.11336	\$8,875	\$1,125	\$10,000
WDK Ashtabula Ltd.	2010	4	Ashtabula	41.51716	-80.70054	\$3,500	\$500	\$4,000
River Valley Sportsmen	2010	5.5	Trumbull	41.49028	-80.91194	\$3,750	\$346	\$4,096
Grant Administration						\$0	\$11,076	\$11,076
Indirect Recovery						\$1,000	\$0	\$1,000
SUBTOTALS		46.5				\$24,875	\$13,297	\$38,172
TOTALS		130.7				\$50,000	\$33,677	\$83,677