

# Draft Environmental Assessment for the Upper Mississippi River and Driftless Area National Wildlife Refuges Warehouse

October, 2003

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Abstract: The Driftless Area National Wildlife Refuge was established in 1989 for the recovery of the endangered Iowa Pleistocene snail and threatened Northern monkshood, by protecting habitat in the Driftless Area of northeast Iowa, southwest Wisconsin, southeast Minnesota, and northwest Illinois. The Upper Mississippi River National Wildlife and Fish Refuge was established in 1924 to provide a refuge and breeding place for migratory birds, other wild birds, game mammals, fur-bearing animals, and for the conservation of wild flowers and aquatic plants, and to provide a refuge and breeding place for fish and other aquatic animal life. Both Refuges are in need of a permanent facility to provide storage and maintenance space for equipment used for flood cleanup, maintenance of public use facilities, and habitat restoration. This Environmental Assessment has been prepared to analyze the alternatives available to establish a permanent warehouse facility for these Refuges.

## **Section I: PURPOSE AND NEED FOR ACTION**

### **A. Purpose for Taking Action:**

The purpose of this Environmental Assessment is to consider whether or where a permanent facility should be constructed to serve the McGregor District of Upper Mississippi River National Wildlife and Fish Refuge and Driftless Area National Wildlife Refuge of the U.S. Fish and Wildlife Service. The McGregor District has a maintenance shop at the office in McGregor and other warehouse facilities that have insufficient or inadequate storage space for equipment such as tractors, ATV's, track loader, dump truck and trailer. The Driftless Area Refuge does not have any equipment storage or maintenance area and has been sharing limited space with the McGregor District. This EA will consider three possible alternatives including a no action alternative.

### **B. Need for Taking Action**

There is a need to establish a warehouse facility that will protect and secure equipment and meet basic safety and OSHA standards. This facility needs to provide equipment storage space as well as an indoor area to work on equipment.

### **C. Decision to be Made**

The Regional Director, U.S. Fish and Wildlife Service, Fort Snelling, Minnesota, needs to make two decisions. (1) Decide whether to construct a permanent warehouse and if so, which alternative to select; and (2) determine if the project is a major Federal action having a significant effect on the environment requiring preparation of an Environmental Impact Statement.

### **D. Identify issues raised during project planning**

#### Wildlife Disturbance

One of the goals for the Driftless Area NWR is protection of fragile endangered species habitat. The 208 acre Howard Creek unit contains endangered species on discrete areas and contains grassland and forest habitat surrounding the endangered species habitat. Construction of a warehouse in a former agricultural field near a former homestead site would not be near or impact endangered species habitat in any way. There is little wildlife use in this area at this time as it has been recently converted from row crop to native prairie. Construction may disturb a small number of ground nesting birds if it occurred during the nesting season. The completed warehouse and associated roadway and parking area would be approximately 0.4 acres. During construction, a small amount of additional land, up to a total of two acres may be impacted.

#### Habitat Damage

Construction equipment activity will cause temporary disturbance to approximately two acres of grassland habitat. This habitat was disturbed by past tillage for row crop agriculture and is now dominated by introduced exotic grasses, or has been seeded to a mixture of warm season native

grasses. Approximately 0.4 acres of grassland habitat would be permanently lost by construction of a 50 by 100 foot warehouse and associated equipment staging area (Attachment #2, warehouse site plan).

#### Cultural Resources

A 2002 Cultural Resources Management Plan (Commonwealth Cultural Resources Group) was completed for Driftless Area NWR comprehensive conservation planning. There are previously recorded archaeological sites within one mile of the Howard Creek unit but no previously recorded sites on the Refuge unit.

#### Reduced Hunting Opportunities

The Howard Creek unit is open to hunting according to seasons and regulations set by the State of Iowa with special Refuge regulations. Placement of a warehouse facility would remove approximately 6.4 acres where upland game hunting may have occurred. This includes the 0.4 acres from the warehouse itself plus an additional buffer area of approximately 6 acres around the building site (Attachment #2).

#### Effect on Local Economy

There should be no effect on the local economy as this is a warehouse facility only and will not attract or detract from visitation to the Refuge.

### **E. Background**

The Upper Mississippi River National Wildlife and Fish Refuge (UMRNWFR) and the Driftless Area National Wildlife Refuge are part of the National Wildlife Refuge System (NWRS). The National Wildlife Refuge System Improvement Act of 1997 (Improvement Act) provides specific guidance for the NWRS in a number of areas. It defines the Mission of the NWRS and the following six wildlife-dependent uses which, when compatible, should be strongly encouraged: hunting; fishing; wildlife observation; wildlife photography; environmental education and interpretation.

The Improvement Act also requires that each Refuge develop a Comprehensive Conservation Plan (CCP) for management of the Refuge, consistent with the provisions of the Act. The process of developing a CCP is ongoing for both Refuges and is scheduled to be completed in 2004. The CCP will identify goals in response to issues raised by the public and will identify facilities needed, if any, to meet those goals. However, in the interim, the Refuges do not have adequate or appropriate space for equipment storage needs. Based on past management and public comment thus far in the CCP process, continued use of equipment and associated facilities is anticipated for habitat restoration and maintenance of public use facilities.

## **Section II: ALTERNATIVES INCLUDING THE PROPOSED ACTION**

### **Alternatives Not Considered for Detailed Analysis**

#### **1. Expand existing Refuge warehouse facilities**

The McGregor District currently has an office and maintenance facility at McGregor, Iowa that has extremely limited space and houses tools and vehicles used on a daily basis. The District also has warehouses at Cassville and Genoa, Wisconsin, and Lansing, Iowa. There is no additional space at Cassville or Genoa for additions to the existing warehouses. There is some space for expansion at Lansing, but it would not provide adequate space for additional storage needs. In addition, the distance to haul equipment that is used on a regular basis to any of these warehouse sites from the office in McGregor is not practical. There is no other Refuge property appropriate for a building site except the Howard Creek unit of the Driftless Area Refuge located 15 minutes from McGregor (Attachment 1). A farmstead was previously located at this site and the land is suitable for building. Suitable access from the county road is also present at the Howard Creek site.

#### **2. Lease Space**

Few possibilities are available for leasing adequate space near McGregor.

#### **3. Purchase new property at McGregor for warehouse facility**

Refuge staff have been actively searching for suitable property in the McGregor area on which to build a new office and warehouse facility and none is currently available. Construction funds for the warehouse also have a limited time frame and property could not be purchased within that time frame.

#### **Alternative A. (No Action Alternative)**

The McGregor District of UMRNWFR manages 100 miles of river and maintains nine public boat landings. Various types of boats are used on a regular basis for Refuge activities; heavy equipment is used for maintenance and improvement of public use facilities, and for habitat restoration. A dump truck and trailer are used to haul heavy equipment. Because of the need for this equipment to accomplish Refuge management, current facilities are full and some equipment is stored outside. The Driftless Area Refuge has no facilities except office space shared with the McGregor District. Equipment, including a tractor and disc, has been acquired for habitat restoration on the Driftless Area Refuge. There is no secure location to store this equipment out of the elements and no maintenance facility.

This Alternative would result in no changes to the physical, biological or cultural resources of the McGregor District or Driftless Area NWR. However, wear and tear on equipment will be greater with no storage facility.

## **Alternative B. Build warehouse facility at Howard Creek unit, Driftless Area NWR (The Preferred Alternative)**

The Service proposes to build a 50 by 100 foot pole barn style warehouse to provide the space necessary to secure, properly store, and maintain valuable equipment necessary for the Refuges to meet habitat and public use goals. This size building would have enough space for equipment not currently stored in buildings and leave room for anticipated new equipment. This is the maximum size building for which current funding is available. The facility will not be fenced.

The Howard Creek Unit is located in Section 19, Farmersburg Township, Clayton County, Iowa and was identified as the best location for a warehouse facility. It is located 1/2 mile south of Farmersburg, Iowa along county highway X28 (Attachment 1). The proposed building site is located within a former agricultural field adjacent to a former farmstead that was destroyed by the Service in 1993. The Howard Creek unit is located approximately 12 miles southwest of the McGregor District office and would be a reasonable distance to transport equipment in a reasonable time. Access to the site is from a paved county road.

Construction of this facility would be tentatively scheduled for calendar years 2003-2004. The building would be 50x100 feet or less with a gravel driveway and equipment turnaround on the south side (Attachment #2). The building will meet all OSHA requirements.

Project costs will be primarily funded from a congressional appropriation in FY2003 to the UMRNWFR for flood damage. The cost of construction is estimated between \$125,000 and \$200,000.

Future operation costs for the proposed facility are anticipated to be minimal since it will not be used daily. Additional electrical costs will be the primary costs. The annual Refuge budget is expected to be adequate to cover this increase in annual operating expenses.

This Alternative results in primarily minor and temporary disturbance to wildlife and their upland habitats. The warehouse facility footprint, entrance road and parking lot would permanently eliminate approximately 0.4 acres of habitat. No additional buildings are planned for the Howard Creek unit.

The Preferred Alternative will allow more efficient completion of habitat management goals and public use facility maintenance on both Refuges. The warehouse facility will enable the Refuges to more effectively contribute toward the Mission of the NWRS, which is: "To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans."

**Alternative C. Build warehouse on the former homestead site at the Howard Creek Unit, Driftless Area NWR**

The Service proposes to build a 50 by 100 foot pole barn style warehouse as in Alternative B. The number of acres impacted would be similar to Alternative B. The warehouse would be located exactly on the site of a former homestead thereby reducing historic preservation concerns.

**Section III: AFFECTED ENVIRONMENT**

The Driftless Area NWR is comprised of nine units in four counties in the Paleozoic plateau of northeast Iowa that was a mix of hardwood forest, tall grass prairie and savanna. The landscape has been altered from its pre-settlement condition for conversion to row crop agriculture and pasture. The 208 acre Howard Creek unit is located in Section 19, Farmersburg Township, Clayton County, Iowa. It has fragile algific slope habitat where federal endangered species occur, oak/hickory forest, native prairie remnants, cool season exotic grassland, riparian zone, cropland, and restored prairie. (Attachment 3, Howard Creek unit habitat types and proposed warehouse location).

The warehouse facility and equipment staging area would be located in an area that was tilled for agricultural crop production such as corn or soybeans. The use of this area for row crop production was discontinued in 1991 when it was planted to cool season grasses like smooth brome grass (*Bromus racemosus*). It was put into the Service's cooperative farming program from 1999-2001 in preparation for native prairie restoration. It was planted in the fall of 2001 to native prairie. The building site is in the northwest corner of this restoration and overlaps an area still planted to brome grass. The building site is accessed by an existing field road directly off county highway X28, located along the west boundary of the unit. This field road is located on the north side of the area dominated by introduced exotic grasses described above. A new driveway will align with this road for the first portion and then would be constructed 50 to 100 feet south of this existing road.

There are no endangered or threatened plants or animals located in the proposed warehouse construction zone. (Attachment #4; Section 7, Intra-Service Consultation).

**Section IV: ENVIRONMENTAL CONSEQUENCES**

**Alternative A (No Action)**

This Alternative would result in no changes to the physical, biological or cultural resources of the Driftless Area NWR.

**Alternative B. Build Warehouse Facility at Howard Creek Unit, Driftless Area NWR**

The Environmental Consequences of this Alternative are minor and in many instances temporary.

### 1. Temporary Disturbance

Construction activities such as leveling the building site, removing sod for the parking lot and access road will be completed using earth moving equipment. This will flatten or kill primarily grass located in an area of two acres or less. All affected areas have been previously disturbed through crop tillage and grazing.

The potential for soil erosion exists during the construction phase of this project. However, the area is relatively flat with no adjacent waterways.

There are no Federal or State Listed Threatened or Endangered plant or animal species located in the affected area.

Construction activities are tentatively scheduled to commence during the fall/winter of 2003. Pheasants and non-game ground nesting birds may use the Howard Creek unit for nesting during the months of April through June. Disturbance from earth moving equipment at, and immediately adjacent to the construction site and entrance road, could cause nest abandonment during these months. This is not a prime nesting area and very few nests are likely to be located at the construction site. Any nest abandonment would have a minimal effect on these wildlife populations because in most cases, the birds will find another suitable location and renest. Possible reduced production resulting from renesting would be minor and is not considered a serious concern.

### 2. Permanent Changes to Wildlife Habitat.

Construction of the warehouse, equipment staging area, and access road will eliminate approximately 0.4 acres of existing ground nesting habitat. This area is currently providing little nesting habitat and was recently converted from row crop.

A gravel or hard surfaced parking lot will have less capacity to absorb precipitation than the grass it replaces. Runoff from this field enters a road ditch and may eventually enter Howard creek although adjacent grasses in this flat area will absorb most runoff.

### 3. Cultural Resources

No archeological sites have been identified on Refuge property but two known sites are located within one mile. A review for cultural resources will be completed by the regional historic preservation officer, Region 3.

### 4. Aesthetic Concerns

Placement of a warehouse building on a natural area such as the Howard Creek unit could, to some people, diminish the natural aesthetic qualities of the site. However, buildings were previously present here and the building will be located near the highway and out of the primary viewshed of the natural features of the Refuge. The building will be a one story pole barn construction with natural colors such as tan. There are trees at the old farmstead site that will provide some visual barrier from the highway.

### 5. Reduced Hunting Opportunities

The 208 acre Howard Creek unit is currently open to public hunting according to seasons set by the State of Iowa with special Refuge regulations. Endangered species habitat within the unit is closed to all public entry. Some pheasant hunting may occur near the warehouse but the need to close the area to protect the building is unforeseen at this time. However, if hunting pressure increased, then a buffer area around the building of approximately 6 acres would be closed to hunting.

### 6. Cumulative Impacts

The proposed warehouse would impact 0.4 acres of wildlife habitat. If additional area around the building is closed to hunting, then a total of approximately 6.4 acres would be impacted. This facility would be in addition to existing facilities on the 90,680 acre McGregor District of Upper Mississippi River NWFR. Existing facilities are a warehouse at Cassville and Genoa, Wisconsin and McGregor and Lansing, Iowa. The 775 acre Driftless Area NWR currently has no buildings. All of the above potential impacts are minor and would not result in appreciable cumulative impacts.

### **Alternative C. Build Warehouse Facility on the former homestead site at the Howard Creek Unit, Driftless Area NWR**

Temporary disturbance would be similar to Alternative B. Several large trees present around the former homestead site would have to be removed that are currently providing habitat for many bird species. Although it is a small area, removal of these trees would permanently change wildlife habitat at this building site. The building would be closer to the road at this location and together with the removal of trees, would make the building more visible from the county road. However, visual impacts from within the Refuge would be similar to Alternative B.

The area of reduced hunting opportunity would be slightly less because the building would be closer to the Refuge boundary. Buffer to the east and south of the building would therefore not extend as far into the Howard Creek unit.

Locating the warehouse on the former homestead site lessens historic preservation concerns. However, the old buildings were buried on the site. This debris may cause difficulties and additional cost to level the site for a new building. The homestead location also would require more grading for a level building site thereby increasing construction costs. In addition, a warehouse at this location may not be adequate distance from the Refuge boundary for local zoning. For these reasons, alternative C is not preferred.

Cumulative impacts of this alternative would be similar to Alternative B with a slightly smaller amount of land impacted if a buffer area around the building is closed to hunting.

## **Section V: LIST OF PREPARERS**

This EA was prepared by Cathy Henry, Refuge Operations Specialist for the Driftless Area National Wildlife Refuge.

## **Section VI: COMPLIANCE, CONSULTATION AND COORDINATION WITH OTHERS**

### **A. Parties contacted during the planning process**

Clayton County zoning.

#### Future Coordination with others.

Information would be provided to local communities concerning the Preferred Alternative in the following ways:

-News releases

### **B. Pertinent laws, executive orders and regulations**

1. National Wildlife Refuge Improvement Act of 1977.
2. Section 106 of the National Historic Preservation Act
3. Native American Graves Protection and Repatriation Act (NAGPRA)
4. Endangered Species Act of 1973

## **Section VII: References**

Commonwealth Cultural Resources Group, Inc. Comprehensive Conservation Plan  
Archaeological and historic resources, Driftless Area NWR in Allamakee, Clayton, Delaware,  
Dubuque, Fayette, and Jackson Counties, Iowa and Grant County, Wisconsin. November 2002.  
WR-0110.

National Wildlife Refuge Improvement Act of 1997 (P.L. 105-57)