

# Compatibility Determination

## Title

Compatibility Determination for Horseback Riding on the Valentine National Wildlife Refuge

## Refuge Use Category

Outdoor Recreation (General)

## Refuge Use Type(s)

Horseback Riding

## Refuge

Valentine National Wildlife Refuge

## Refuge Purpose(s) and Establishing and Acquisition Authority(ies)

The Migratory Bird Hunting Stamp Act of March 16, 1934, as amended by section 3 of the Act of August 1, 1958 (72 Stat. 486, 16 U.S.C. sec. 716 d[c]), authorized the Secretary of Interior to acquire small wetland or pothole areas suitable as Waterfowl Production Areas.

Additional Authorities include the following: Consolidated Farm and Rural Development Act, Migratory Bird Conservation Act, North American Wetlands Conservation Act, and the Emergency Wetlands Resources Act.

## National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as Refuge System, is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (Pub. L. 105-57; 111 Stat. 1252).

## Description of Use

Is this an existing use?

Yes

What is the use?

This activity involves riders mounted on horses or mules traveling within the Valentine NWR areas open to public use.

Is the use a priority public use?

No

Where would the use be conducted?

These activities take place on all Refuge units open to the identified public uses. The same areas currently used by non-horseback visitors for wildlife observation, wildlife photography, hunting, fishing, environmental education, and interpretation would therefore also be available for visitors on horseback. **When would the use be conducted?** These activities would take place year-round, subject to the Refuge-specific regulations or laws governing the individual public use. **How would the use be conducted?** An estimated 5-10 horseback riders use the Refuge annually. If refuge management determines that the use is causing unacceptable impacts to habitat, wildlife, staff resources, or other Refuge visitors, the refuge manager reserves the right to limit or discontinue the use until further notice. No special equipment, or associated facilities would be needed to allow horse use and conveyance on the refuges. Roads and parking lots that are established to support other wildlife-dependent public uses would be available to support horse use. These roads and parking lots are currently maintained to support the other uses and refuge management activities. No other structures or improvements are necessary to support horse use. This activity occurs during any time of the year, with most visits falling on the weekends.

Why is this use being proposed or reevaluated?

The use was last reviewed in the 1999 Comprehensive Conservation Plan to facilitate access for wildlife observation and hunting. Reevaluation is due per policy 603 FW 2.11 H(2), which states: "We will reevaluate compatibility determinations for existing wildlife-dependent recreational uses when conditions under which the use is permitted change significantly, or if there is significant new information regarding the effects of the use, or concurrently with the preparation or revision of a comprehensive conservation plan, or at least every 15 years, whichever is earlier. In addition, a refuge manager always may reevaluate the compatibility of a use at any time."

The Refuge would continue to allow horseback riding to facilitate and enhance the experience of visitors while participating in wildlife-dependent priority public uses.

## **Availability of Resources**

Administration of the use requires minimal Refuge resources. No trails or special access points are maintained for horseback riding. Signs mark access points for riders. In the event that groups of riders associated with a special event desire to assess the Refuge, a special use permit may be required if the use is deemed commercial. Issuance of a special use permit would require additional resources to develop and ensure compliance with the permit. Permits for commercial activities will be assessed a minimum fee of \$250. Staff resources are sufficient to administer the use.

## **Anticipated Impacts of the Use**

Potential impacts of a proposed use on the refuge's purpose(s) and the Refuge System mission

### **Short-term impacts**

Horseback riding is a rare use on the Refuge with an average of 5-10 visits over the last 10 years. In 2021, six horseback riders were observed on the Refuge. At the current use level, impacts of the use are negligible to non-existent.

Horse travel can impact plants by directly crushing them. Indirectly, horses can impact vegetation by compacting soils, which diminishes soil porosity, aeration, and nutrient availability (Kuss 1986); and limits the ability of plants to re-vegetate affected areas (Hammit and Cole (1998). Additionally, if use increases, there is an increased possibility that invasive and exotic plants could be introduced to natural communities via seeds deposited in manure.

The Refuge will monitor the use to determine whether increased use levels are causing unacceptable impacts to habitat, wildlife, staff resources, or other Refuge visitors. If such impacts occur, the refuge manager would limit or discontinue the use until further notice.

### **Long-term impacts**

Long-term impacts of horse travel may include certain wildlife species avoiding areas as a result of this use over time. Additionally, Weaver and Dale (1978) found use of horses for travel caused a greater loss of vegetation cover, wider and deeper trails, and greater soil compaction when compared to hiker use on meadow and forest trail conditions. At current and anticipated use levels, no long-term impacts are expected.

## **Public Review and Comment**

## **Determination**

Is the use compatible?

Yes

### **Stipulations Necessary to Ensure Compatibility**

1. Horseback riding remains at or near current use levels.
2. Access points will be signed.
3. Groups associated with commercial uses will require a special use permit.

### **Justification**

Horseback riding is not a priority wildlife-dependent recreational use as identified in the National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997; however, horseback riding does facilitate two priority public uses including wildlife observation and hunting. At current levels, horseback riding is an acceptable mode of transportation for visitors participating in wildlife observation, interpretation, photography, hunting, and general recreation within all units including the Wilderness Area. At existing use levels, horseback riding does not conflict with other approved uses, and is not anticipated to materially detract from meeting Refuge purposes or the mission of the Refuge System.

### **Literature Cited/References**

Hammitt, William E. and Cole, David N. 1998. Wildland Recreation. John Wiley & Sons, New York, 361pp.

Kuss, Fred, R. 1986. A review of major factors influencing plant responses to recreation impacts. *Environmental Management*, 10:638-650.

Weaver, T. and Dale, D. 1978. Trampling effects of hikers, motorcycles and horses in meadows and forests. *Journal of Applied Ecology*, 15:451-457.