COMPATIBILITY DETERMINATION

**Use:** Release of biocontrol agents

**Refuge Name:** Upper Mississippi River National Wildlife and Fish Refuge (Refuge)

**Establishing and Acquisition Authority(ies):** The Upper Mississippi River Wildlife and Fish Refuge was established by Public Law No. 268, 68th Congress on June 7, 1924. This act authorized acquisition of lands for Refuge purposes. Additional lands acquired in fee title by the U.S. Army Corps of Engineers are managed as part of the Refuge under a 1963 Cooperative Agreement between the Department of the Army and the Department of the Interior.

**Refuge Purpose(s):** “The Refuge shall be established and maintained (a) as a refuge and breeding place for migratory birds included in the terms of the convention between the United States and Great Britain for the protection of migratory birds, concluded August 16, 1916, and (b) to such extent as the Secretary of the Interior by regulations, prescribe, as a refuge and breeding place for other wild birds, game animals, fur-bearing animals, and for the conservation of wild flowers and aquatic plants, and (c) to such extent as the Secretary of the Interior may, by regulations, prescribe a refuge and breeding place for fish and other aquatic animal life.”

**National Wildlife Refuge System Mission:** “The mission of the National Wildlife 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.”

**Description of Use:** Invasion of Refuge habitats by non-native plants and animals can have significant, negative impacts on native flora and fauna. Biological control (or biocontrol) is the practice of importing and releasing host specific natural enemies from a pest’s native range to control invasive populations in the area of introduction. Biocontrol has been used for over 100 years in the U.S. and has successfully controlled invasive insect and weed pests such as gypsy moth, winter moth, ash whitefly, eucalyptus longhorned borer, purple loosestrife and Klamath weed. The release and establishment of biocontrols on Refuge lands is an important tool in an integrated approach to pest management. In most cases, the Refuge will work in partnership with other State or Federal agencies and/or researchers to release and establish biocontrols on Refuge lands. Once established, Refuge lands could be utilized as “nurseries” for biocontrols, with subsequent collection of biocontrols from Refuge lands for distribution to other areas where target invasives are in need of management.

**Availability of Resources:** Each Refuge District currently uses existing staff to issue Special Use Permits for release of biocontrols or works in direct partnership to release and establish biocontrols on Refuge lands. Refuge Headquarters staff issue Special Use...
Permits for biocontrol releases that occur across more than one District. Staff resources are deemed adequate to manage this use at anticipated use levels.

Access points, boats, other vehicles, miscellaneous equipment, and limited logistical support are available on the Refuge. Collection of biocontrols from “nursery” sites on the Refuge would likely involve Refuge staff and equipment. Again, existing staff resources are deemed adequate to establish, maintain and manage any biocontrol nurseries established on the Refuge.

**Anticipated Impacts of the Use:** Biocontrols would be released on Refuge lands to manage non-native, invasive species, thereby reducing the impacts of invasive plants and animals on native species. In all cases, proposed biocontrols will have a complete and thorough evaluation completed to ensure minimal to no impacts on native flora and fauna will result from direct negative interactions with proposed biocontrols. Typically, these evaluations are completed by the USDA – APHIS. Environmental documentation of the potential effects of biocontrols is also completed by USDA – APHIS. We will only utilize biocontrols which have demonstrated efficacy in managing invasive plants and animals and have undergone thorough reviews by USDA – APHIS. Post-release monitoring, including impacts on target invasives, non-target natives and the spread and establishment of biocontrols would be required and would provide information on the impacts of biocontrol releases.

Establishment and management of biocontrol nurseries on the Refuge would serve a broad approach to invasives management, by providing a readily available supply of biocontrols for distribution to both on and off Refuge habitats.

**Public Review and Comment:** Beginning December 18, 2015, this Compatibility Determination was posted for a 30-day period at the Winona, LaCrosse, McGregor and Savanna District Offices and Winona Headquarters. Public notification included locally distributed news releases identifying the availability of the draft CD. A notice of availability and the CD itself were published on the Refuge’s website as well.

**Determination:**

- Use is Not Compatible
- Use is Compatible with Following Stipulations

**Stipulations Necessary to Ensure Compatibility:**

1. Prior to biocontrol releases, all 3rd parties will obtain Special Use Permits from the Refuge that make specific stipulations related to when, where, and how the release will be conducted. Managers retain the option to prohibit the releases on the Refuge which do not contribute to the purposes of the Refuge or the mission of the Refuge system, or causes undo resource disturbance or harm.
2. Only biocontrols which have a demonstrated efficacy in managing invasive plants and animals and have undergone thorough reviews by USDA - APHIS will be released.

3. All 3rd parties proposing to release biocontrols must possess all applicable state and federal permits for release of biocontrols.

4. Release of biocontrols in no entry or closed areas of the Refuge will only be permitted between March 15 and October 1 to minimize disturbance to migrating birds.

5. Post-release monitoring, including impacts on target species, non-target natives and the spread and establishment of biocontrols will be required to provide information on the impacts of biocontrol releases. Annual reports of release monitoring will be submitted as prescribed by the Refuge Manager and/or appropriate District Manager.

6. Establishment of biocontrol nurseries will be completed in close consultation with the Refuge Manager and/or appropriate District Manager.

Justification: The use of biological agents to control invasive plants and animals is consistent with and supports integrated pest management (IPM) as required by Department of Interior policy 30 AM 12 (Pest Management Policy and Responsibilities) and US Fish and Wildlife Service (Service) policy 7 RM 14 (Pest Control). The use of biocontrols is also consistent with Refuge policy 601 FW 3 (Biological Integrity, Diversity, and Environmental Health). Partnering with other agencies to develop effective biological controls to reduce the introduction and spread of invasives was identified as part of Objective 2.4 in the Upper Mississippi River National Wildlife and Fish Refuge’s Comprehensive Conservation Plan.

Signature: Refuge Manager: __________________________________________

            (signature and date)

Concurrence: Regional Chief: _______________________________________

            (signature and date)

Mandatory 10- or 15 year Re-evaluations Date: October 2030