Dealing With New Invasive Species through Partnerships

Water lettuce
Pistia stratiotes

Parrot feather
Myriophyllum aquaticum

Water hyacinth
Eichhornia crassipes

Lisa Reid,
U.S. Fish and Wildlife Service

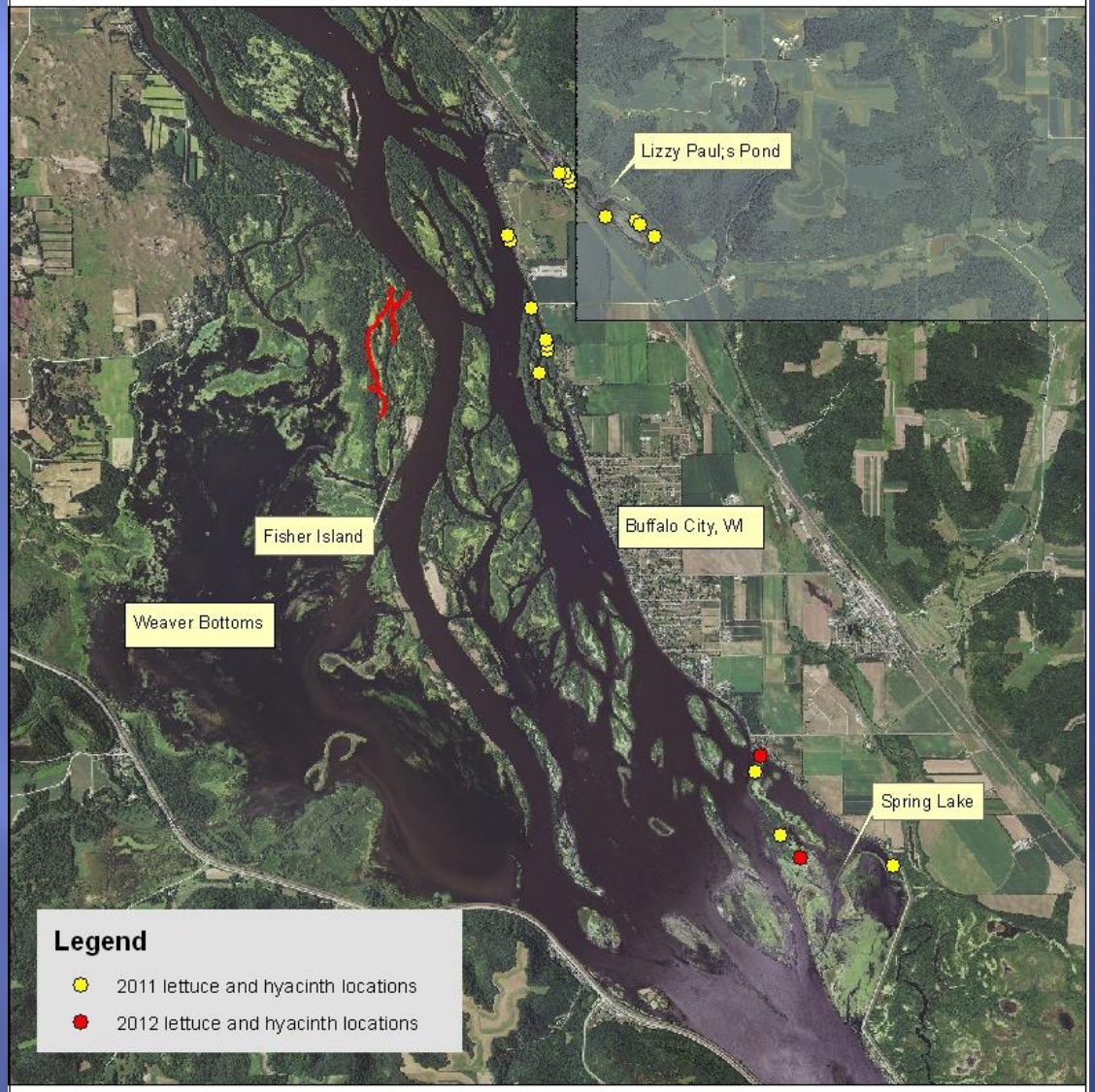
Wildlife
Refuge
Minnesota
Wisconsin
Iowa
Illinois
Mississippi
River
Upper Mississippi River
National Wildlife & Fish Refuge

U.S. Fish & Wildlife Service

Areas Infested with Waterlettuce, Waterhyacinth, and Parrotfeather

Upper Mississippi River National Wildlife & Fish Refuge

Pool 5



Map Created 11/14/12
by Biologist L. Reid
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\lettuce hyacinth parrot feather locations nad 83.mxd
basemap is 2010 aerial photography

0 0.5 1 2 Miles

0 0.5 1 2 Kilometers

N W E S

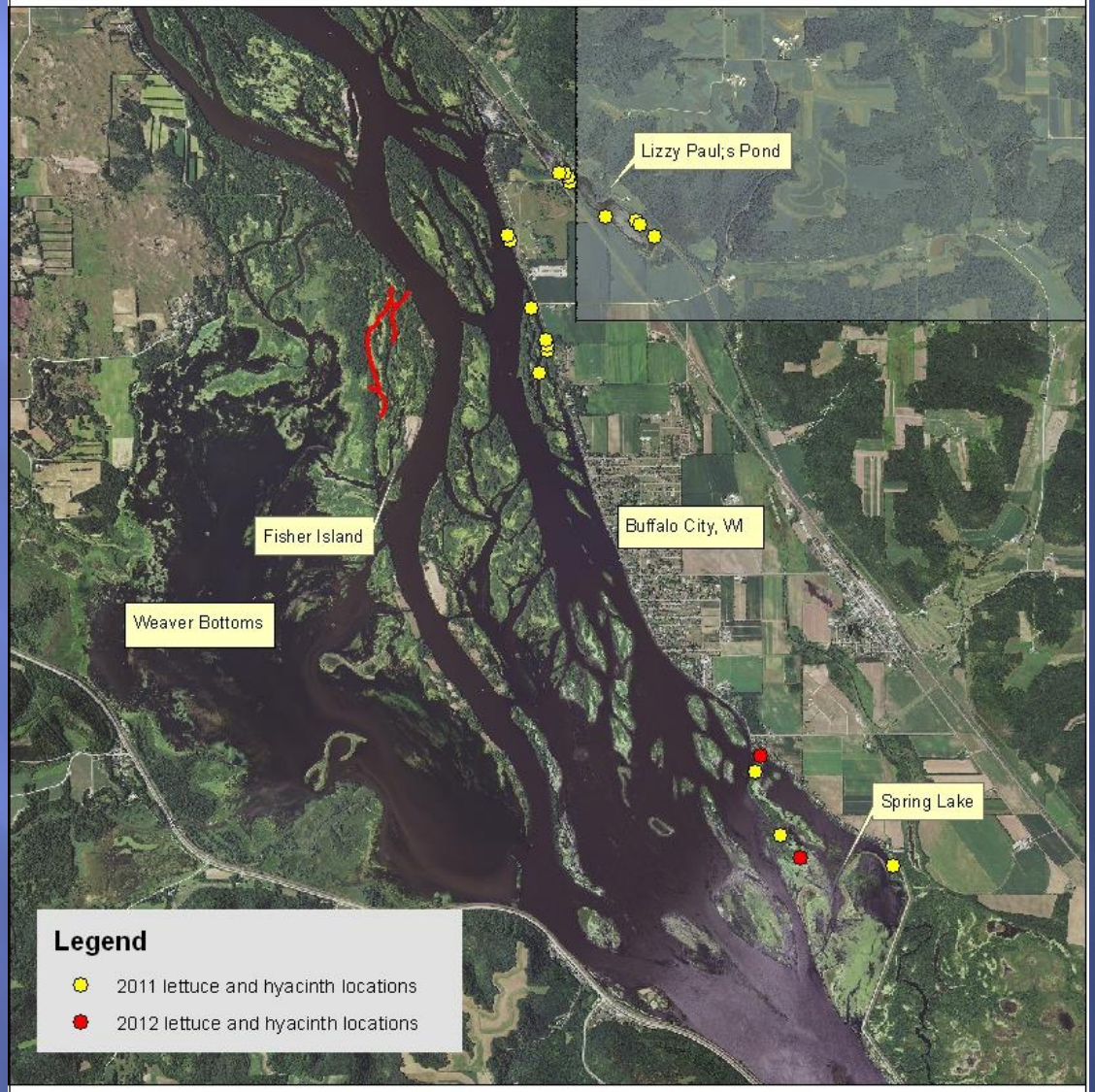
August 8, 2012

U.S. Fish & Wildlife Service

Areas Infested with Waterlettuce, Waterhyacinth, and Parrotfeather

Upper Mississippi River National Wildlife & Fish Refuge

Pool 5



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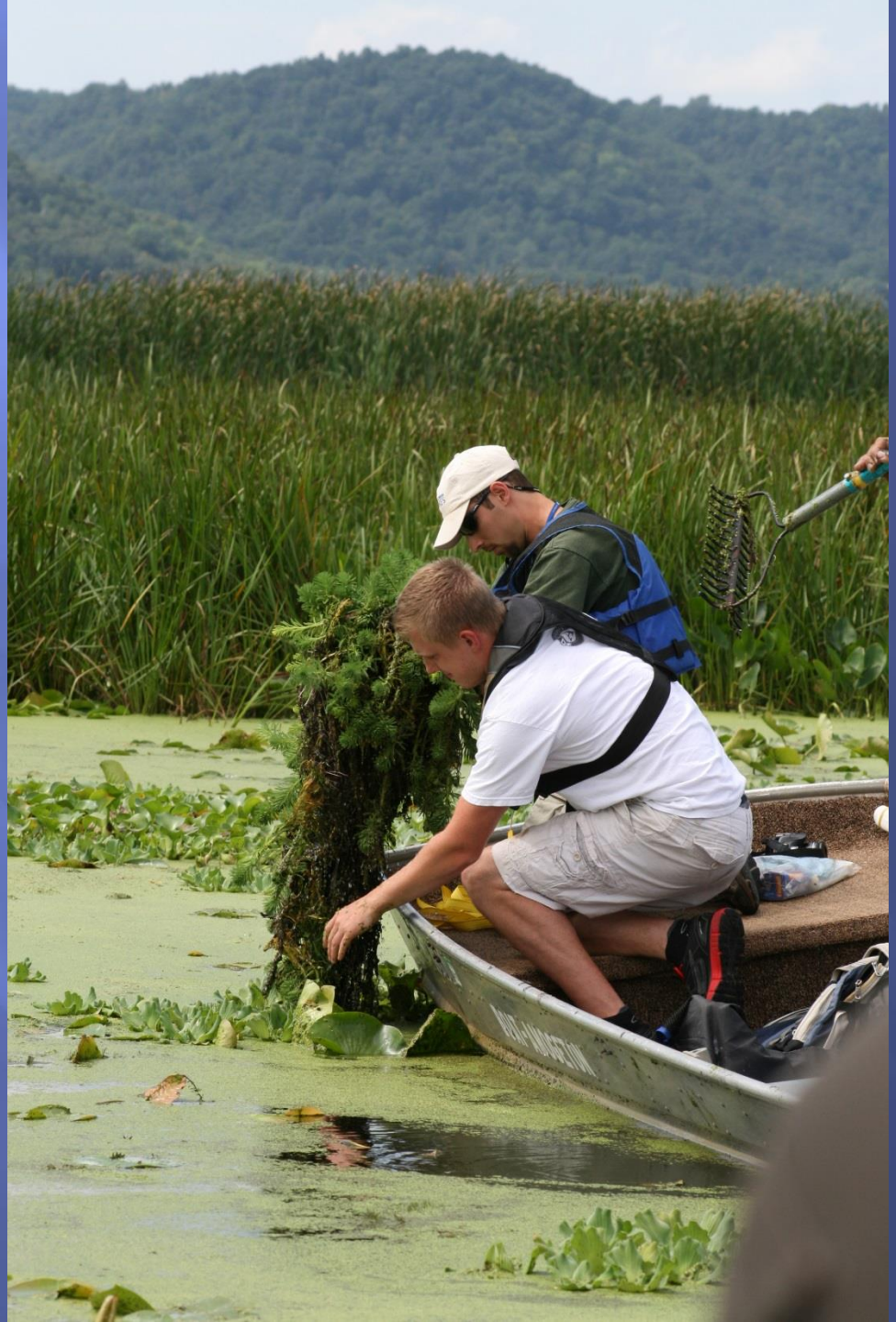


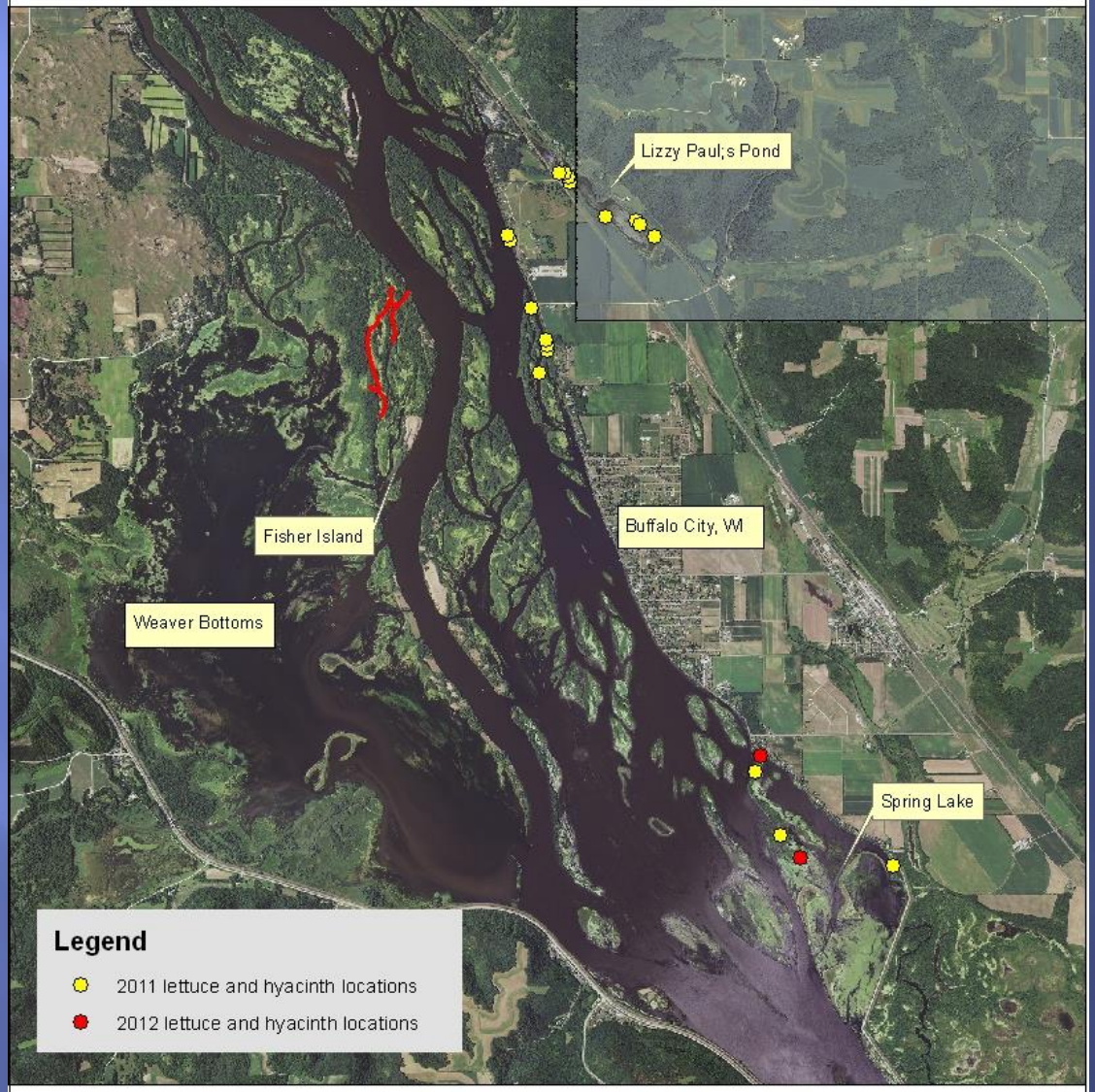
Special Regulation
AREA
CLOSED
to
ENTRY
Invasive Plants
507-454-7351
DEWALT
18V

U.S. Fish & Wildlife Service

Areas Infested with Waterlettuce, Waterhyacinth, and Parrotfeather

Upper Mississippi River National Wildlife & Fish Refuge

Pool 5



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N W E S

Wenonah

Seen Any of These Plants?

If so... take a photo and a GPS location, but leave the plants!

These plants are not native. Because of their ability to spread rapidly, they will harm fish and wildlife that use the area.

With your help we can keep them from spreading!

Please report any sightings!

Lisa Reid
Upper Mississippi River
National Wildlife & Fish Refuge
507-494-6234
lisa_reid@fws.gov

Clues to Identify:

Parrot Feather:

- Feather-like leaves
- Above-water part looks like ground pines
- Flowers tiny; not usually visible
- Leaves blue-green

Water Lettuce:

- Floating
- "Giant duckweed"
- No visible flowers
- Fuzzy leaves
- Feathery roots

Water Hyacinth:

- Floating
- Pretty purple flowers in late summer
- Shiny leaves
- Spongy bulbous stem at water
- Leaves not heart-shaped

Not to be confused with:

Not to be confused with:

Not to be confused with:

Water lettuce

(*Pistia stratiotes*)

If you see this plant, record GPS location, take a photo, and report immediately to: Lisa Reid, USFWS, Winona, MN (507)494-6234 or (507)450-1138. If you are able to collect, bag, and remove the plants, please do so.

Water lettuce is a non-rooted floating plant with leaves resembling lettuce. Short stolons, which easily break, connect mother and daughter plants. Large mats form in water bodies with minimal flow.

Legal classification in WI: not regulated; being reviewed at this time. No releases into wild.

Legal classification in MN: not regulated; cannot release into the wild

Leaves: thick, fuzzy leaves; spongy at the base; up to 6" long; parallel veins; light, dull green; look similar to first year leaves of common mullein.

Stems: None.

Flowers: very small; found in the center of the leaves; small stalk with female flower below and whorl of male flowers above

Fruits and Seeds: a many-seeded green berry

Roots: submersed; feathery; not in sediment unless stranded on a mudflat

Similar Species: no similar looking species. When discussing with the public, some think you are talking about water lily.

Ecological Threat: thick mats prevent submersed aquatic vegetation from growing. Mild winters may allow seed survival.

Water hyacinth

(*Eichornia crassipes*)

If you see this plant, record GPS location, take a photo, and report immediately to: Lisa Reid, USFWS, Winona, MN (507)494-6234 or (507)450-1138. If you are able to collect, bag, and remove the plants, please do so.

Water hyacinth is a free-floating plant in the pickerelweed family. It forms dense mats and is considered to be the worst aquatic invasive plant.

Legal classification in WI: not regulated; being reviewed at this time. Cannot release into the wild.

Legal classification in MN: not regulated; cannot release into the wild.

Leaves: round to oval, shiny green; up to 10" in diameter; on thick, spongy stalks.

Flowers: 2-3" tall; terminal spike; lilac flowers each with 6 petals; one petal has a yellow spot.

Fruits and Seeds: 3-celled capsule holding many tiny ribbed seeds.

Roots: many feathery roots.

Similar Species: The native common pickerelweed is easily confused with hyacinth. Pickerelweed lacks the spongy stems and is rooted in the sediment. The pickerelweed leaves attach to the stem forming a heart shape.

Ecological Threat: Dense mats crowd out native submersed and floating-leaved plants, cause low oxygen conditions, and impede water flow.

Seen Any of These Plants?
If so...Take a photo and a GPS location, but leave the plants!
Parrot Feather
Water Lettuce
Water Hyacinth
With your help we can keep them from spreading!
Please report any sightings!
Because of their ability to spread rapidly, they will harm fish and wildlife that use the area.
CLEAN BOATS CLEAN WATERS
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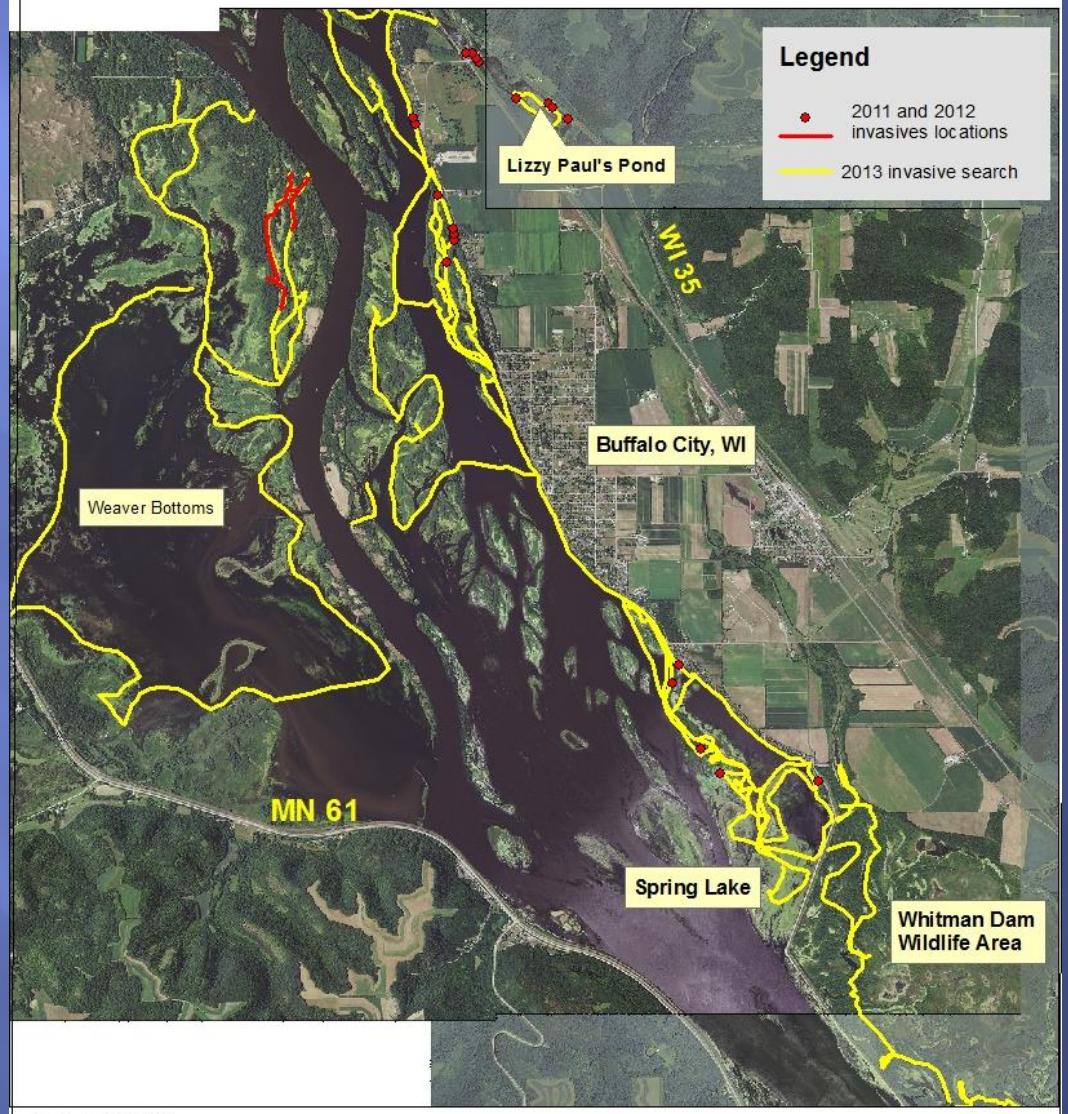
U.S. Fish & Wildlife Service

2013 Search Efforts for Lettuce/Hyacinth/Parrotfeather

Upper Mississippi River National Wildlife & Fish Refuge

Pool 5



Map Created 9/25/2013
by Biologist L. Reid
Project Saved as S:\hyacinth and lettuce\
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Base map 2010 aerial photo

0 0.5 1 2 Miles

0 0.5 1 2 Kilometers

N W E S

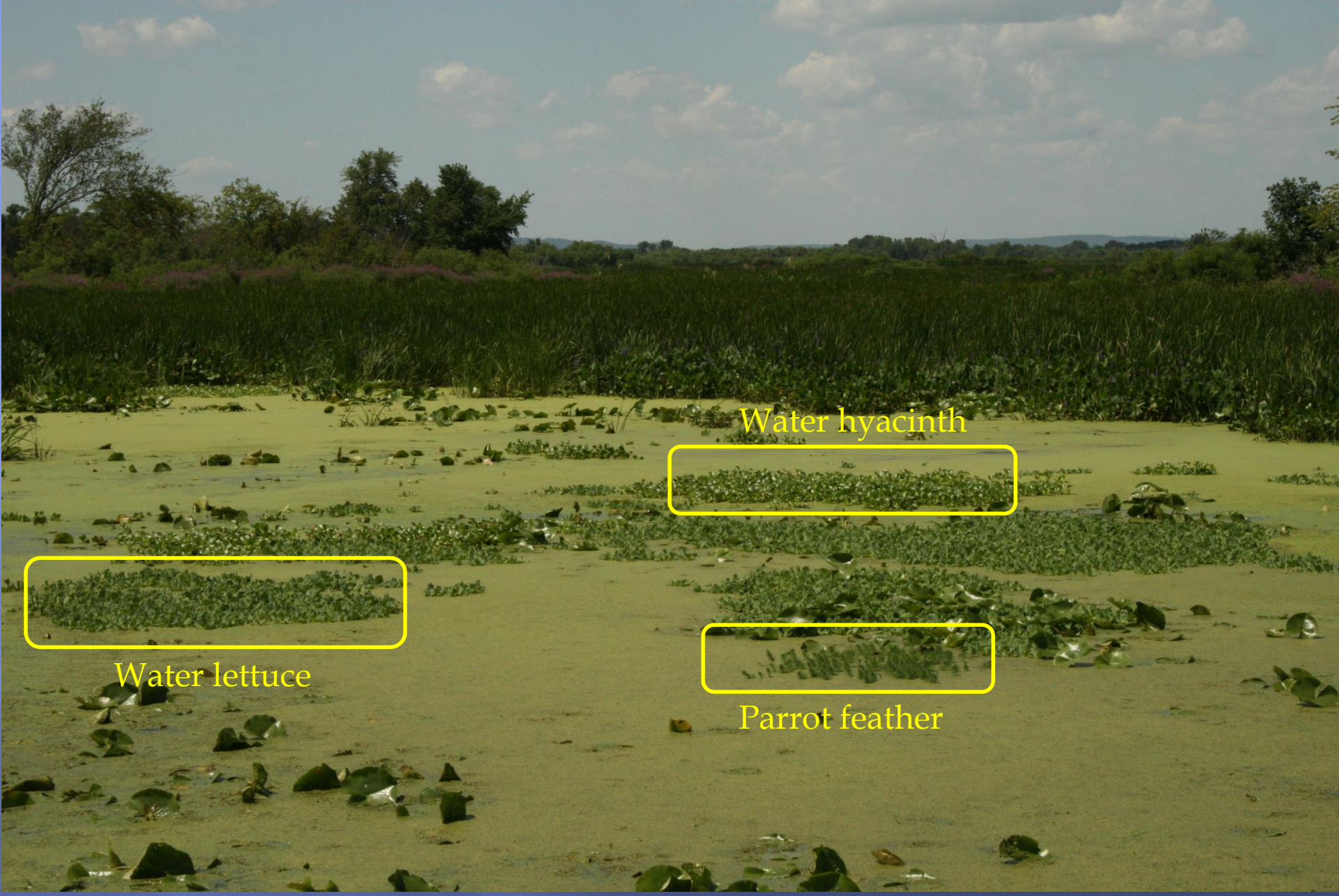
Water hyacinth
(*Eichhornia crassipes*)
Late July 2012

Water hyacinth
Late September 2012

Water lettuce (Pistia stratiotes)

Parrotfeather (*Myrriophylum aquaticum*)

Parrotfeather - Extent of infestation in Spring Lake
Early August 2012



July 26, 2012