

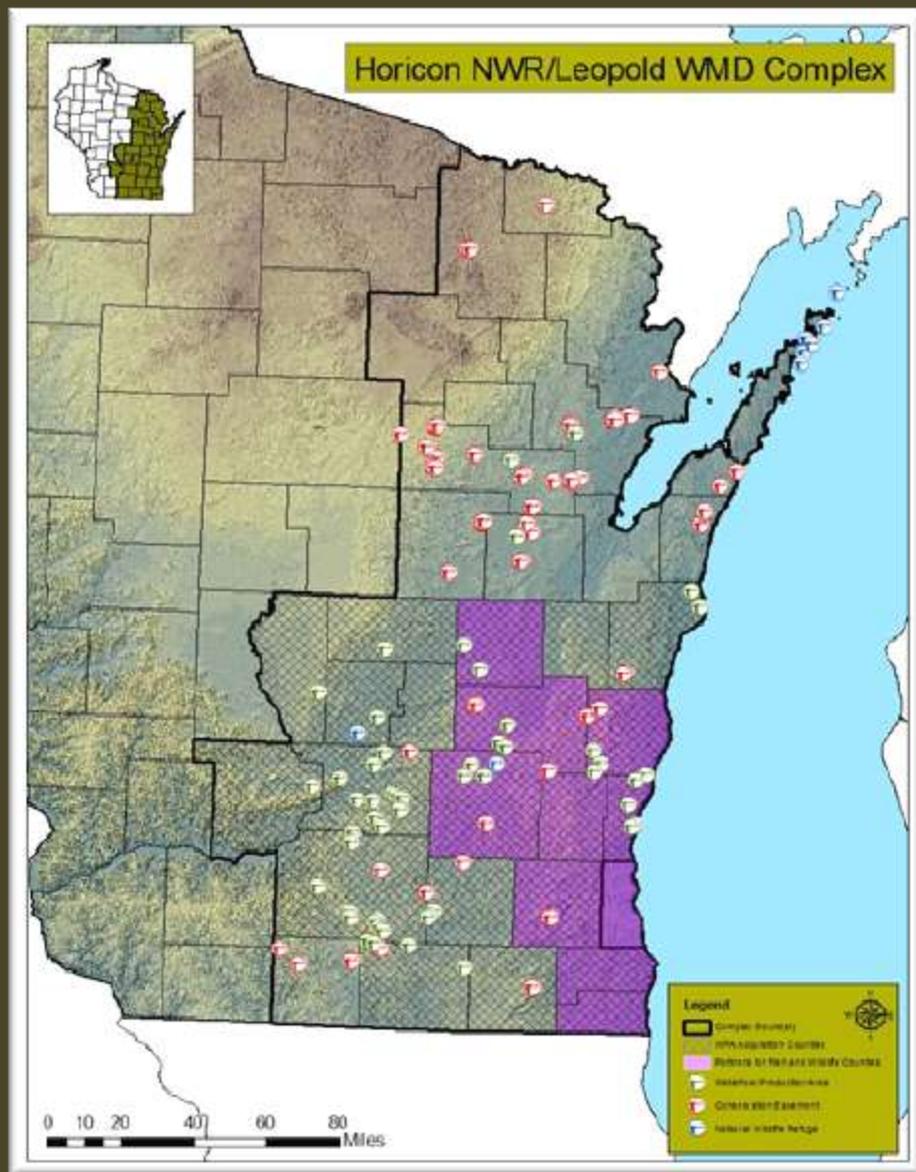


Management to Benefit a Federally Threatened Species





Where Are We?



- ✓ 4 National Wildlife Refuges the largest of which is Horicon NWR at 21,000 acres.
- ✓ 13,300 acres on 55 Waterfowl Production Areas (WPA) in 17 of 21 counties approved for Waterfowl Production Area acquisition.
- ✓ 10-county Partners for Fish and Wildlife Private Lands District
- ✓ 34-county Wildlife Management District involving management and enforcement on 3,000 acres of Conservation Easements in 20 counties.



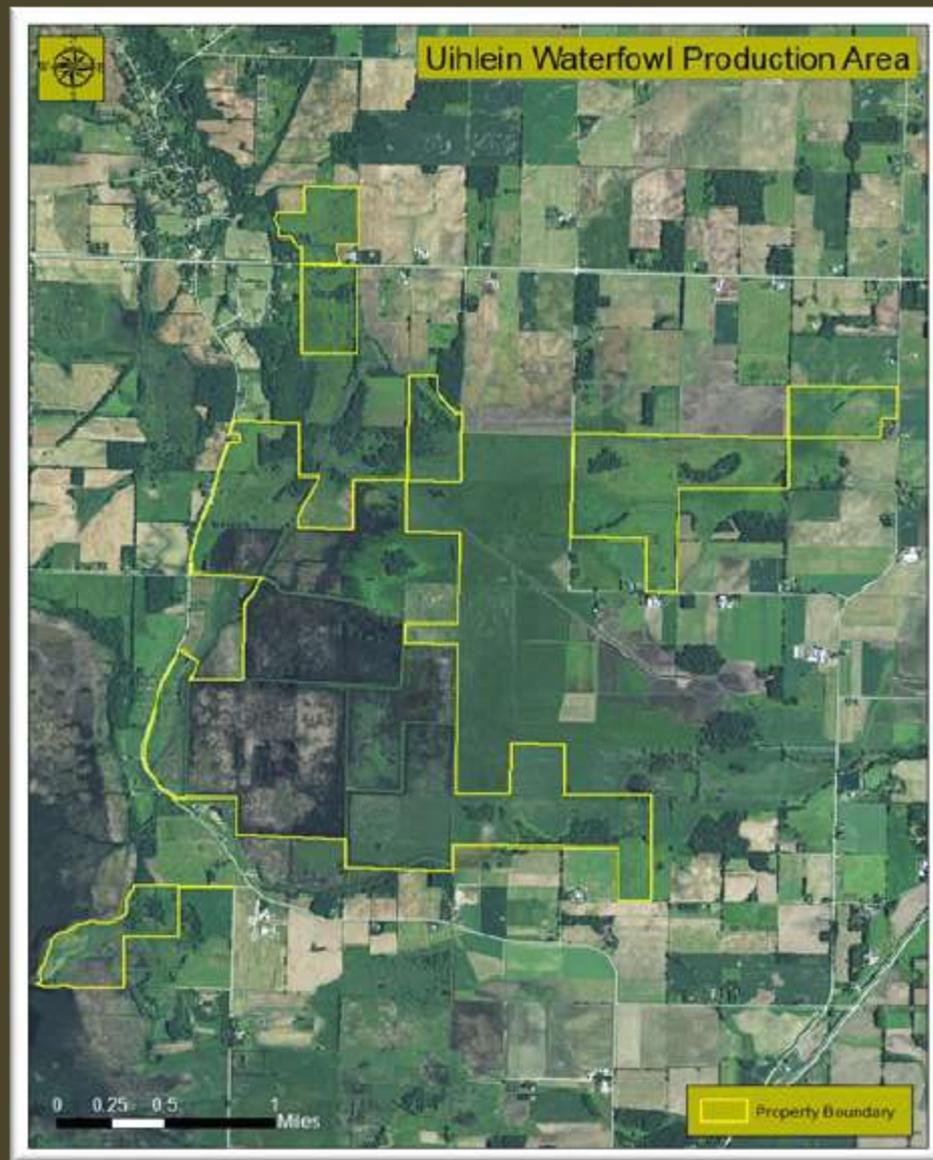
What Do We Do - Waterfowl Production Areas





Uihlein Waterfowl Production Area - Background

- ✓ 2,171 acres
- ✓ Six managed impoundments
- ✓ 10 miles of dikes
- ✓ 12 water control structures
- ✓ 7,000 gpm pump station
- ✓ Water Management capabilities on over 1,000 acres.





Eastern Prairie Fringed Orchid (EPFO) - Background

- ✓ Federally Threatened, State Endangered plant of wet meadows.
- ✓ Nationally - Populations of the EPFO have declined more than 70%.
- ✓ In Wisconsin - Originally found in seventeen counties now only occurs as thirteen populations in eight counties.
- ✓ Greatest threats to the EPFO are drainage, development and the invasion of reed canary grass which dominates a site and shades out the EPFO.





Eastern Prairie Fringed Orchid (EPFO) - Background

- ✓ First documented on Uihlein WPA in the early 70's
- ✓ In the early 80's there were "hundreds".
- ✓ Subsequent searches found nothing until the July of 1996 when three specimens were found.





Habitat management for the EPFO – Water Management

Area inundated at the 817' level



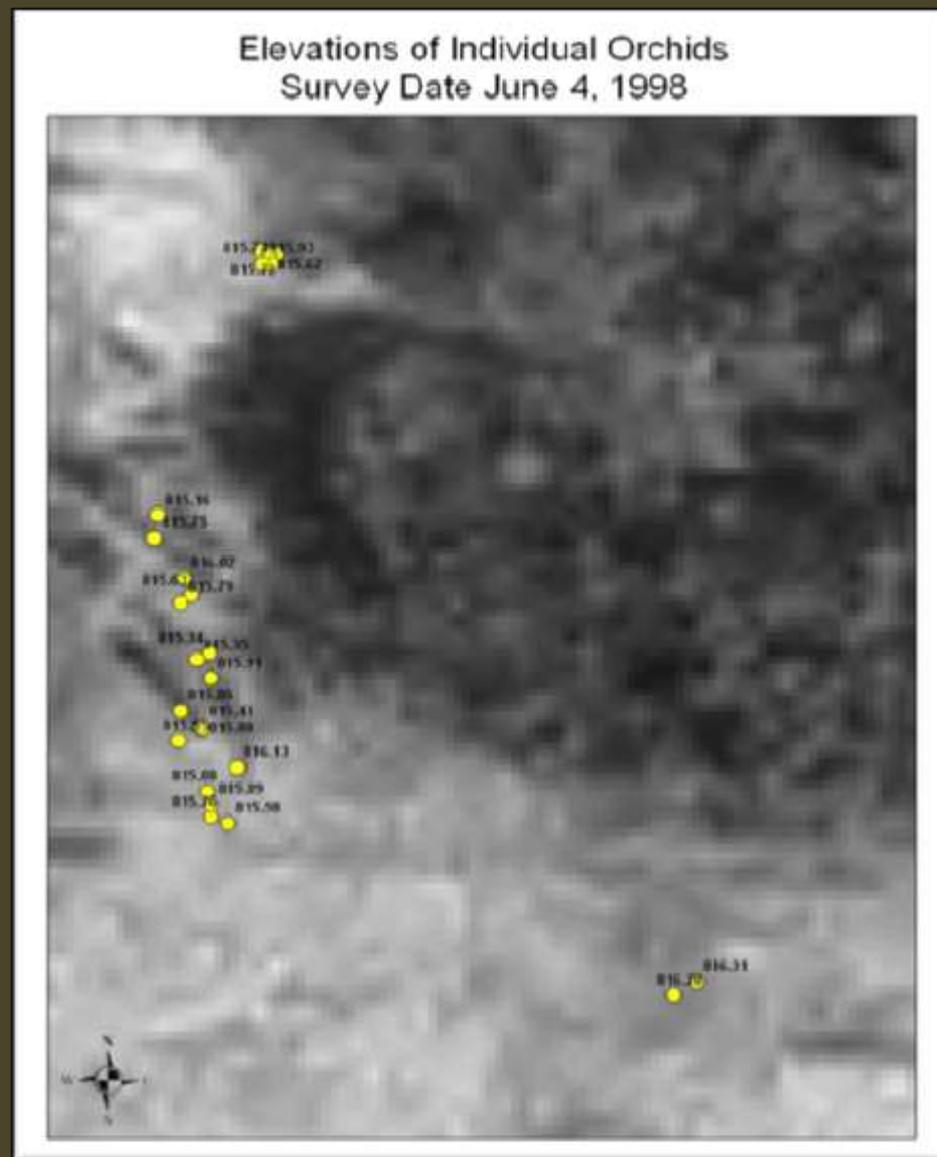
- ✓ 1991/92 - Rehabilitation of several miles of dikes and improvements to the water management capabilities.
- ✓ Designed full pool elevation for the impoundment was 817' msl.





Habitat Management For The EPFO – Water Management

- ✓ 1998 - Topographic survey (.5 foot interval)
- ✓ Elevation of individual orchids.
- ✓ The plants ranged from an elevation of 816.31' msl to a low of 815.16' msl however most were clustered around the mid to upper 815's.





Habitat Management For The EPFO – Water Management

Area inundated at the 814.5' level



- ✓ Based this information the decision was made to manage water levels around 814.5'
- ✓ 2.5' lower than designed full pool elevation.





Habitat management for the EPFO – Prescribed Fire

Prescribed burning is conducted in the spring after a drawdown late in the preceding fall. Refilling the unit starts immediately after the burn and ideally takes less than a week under normal conditions.





Habitat Management For The EPFO – Prescribed burning



- ✓ Burning is allowed prior to May 1st or after October 15th.
- ✓ Dates have been set through NEPA Section 7 Consultation.
- ✓ Since 1994 the unit has been burned annually skipping only 4 years (1997, 1998, 2002, and 2011).





Canarygrass Response – Photo Points 2000



8.30.2000



Canarygrass Response – Photo Point 2014





Canarygrass Response – July 2002





Canarygrass Response – July 2014





EPFO Response – Population Monitoring



- ✓ Early Survey – 3-4 weeks after burn. Mark and GPS new plants
- ✓ Flowering Survey – Early July. Used to validate population viability. Mark and GPS new plants.
- ✓ Pollination Survey – Conducted early August.





EPFO Population Response

Extent of Population in 1998



Extent of Population 1998-2014





Native Vegetation Response





Take Home



- ✓ Dedicated water management and twenty years of semi-annual prescribed spring burning has generally reduced robustness (height/flowering) of canarygrass and increased diversification of the floral community, including the Federally Threatened Eastern Prairie Fringed Orchid, in areas that were initially dominated by reed canarygrass.





Questions?

