

Totogatic Flowage and Wozny Rd. Dam: Totogatic State Wildlife Area



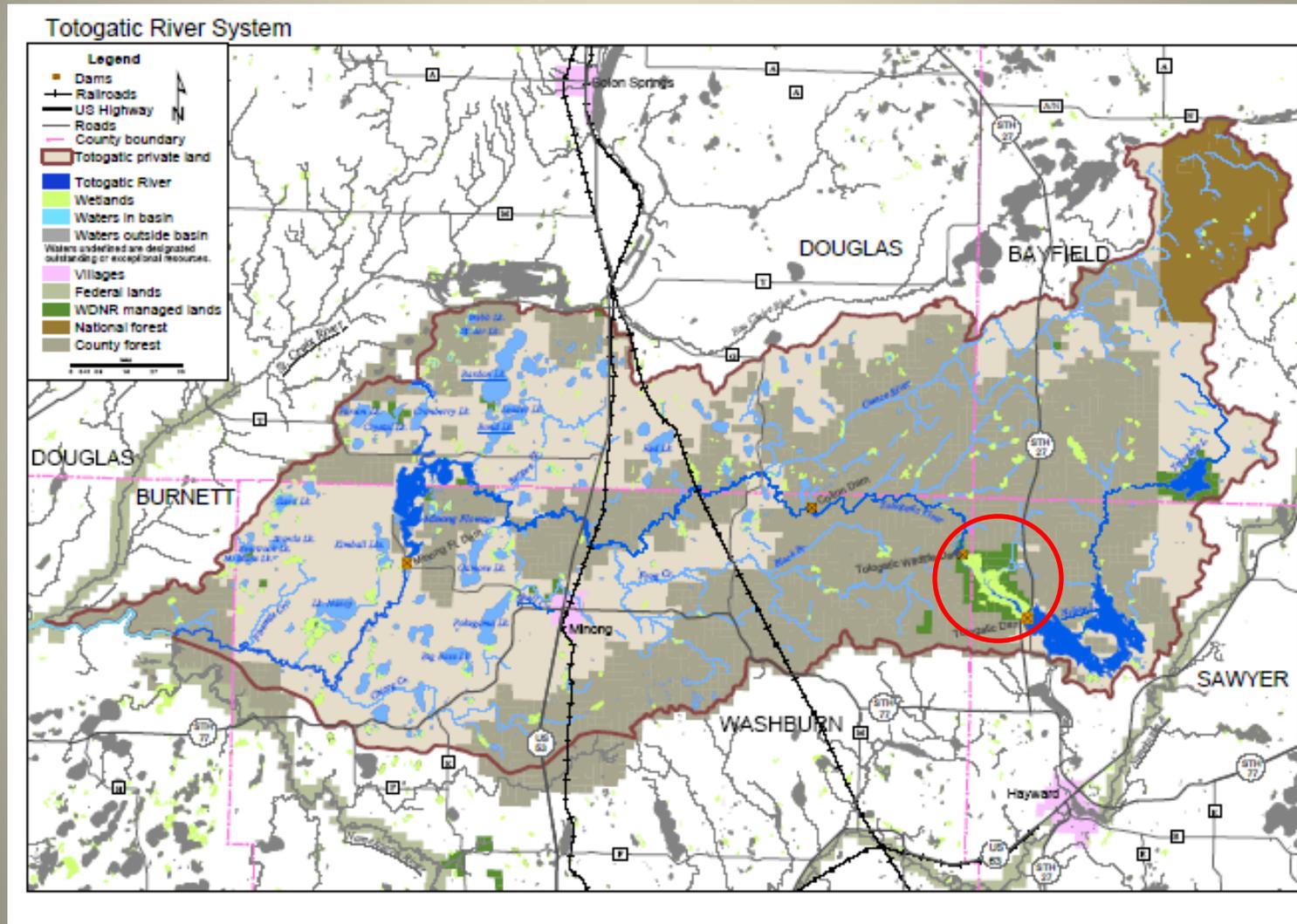
January 13, 2016



Meeting Agenda

- Presentation – Property overview and dam
- Questions and Answers
- Discussion
- Next steps for public input

The Totagatic:



The Totogatic:

- *is ~ 70 miles long*
- *flows through parts of:
Bayfield, Sawyer,
Washburn, Douglas and Burnett counties*
- *is impounded by 4 dams forming
Nelson Lake (Sawyer Co.)
Totogatic Flowage (Washburn Co)
Colton Flowage (Washburn Co)
Minong Flowage (Washburn Co.)*



The Totogatic:

➤ *Is classified as an
“Outstanding Resource Water”*

➤ *Was designated a
“State Wild River”
on July 10, 2009*





*Which portions
are “Wild River”
reaches?*

*Most of the free flowing portions are included
in 4 separate reaches*

*Developed flowages and areas near dams are
excluded*

Totogatic Wildlife Area Overview

Wetland details:

- Approximately 1,800 acres of wetland habitat
- Up to 400 acres of standing water
- Between 100-200 acres of open water during the growing season



Source: Wisconsin Wetland Inventory

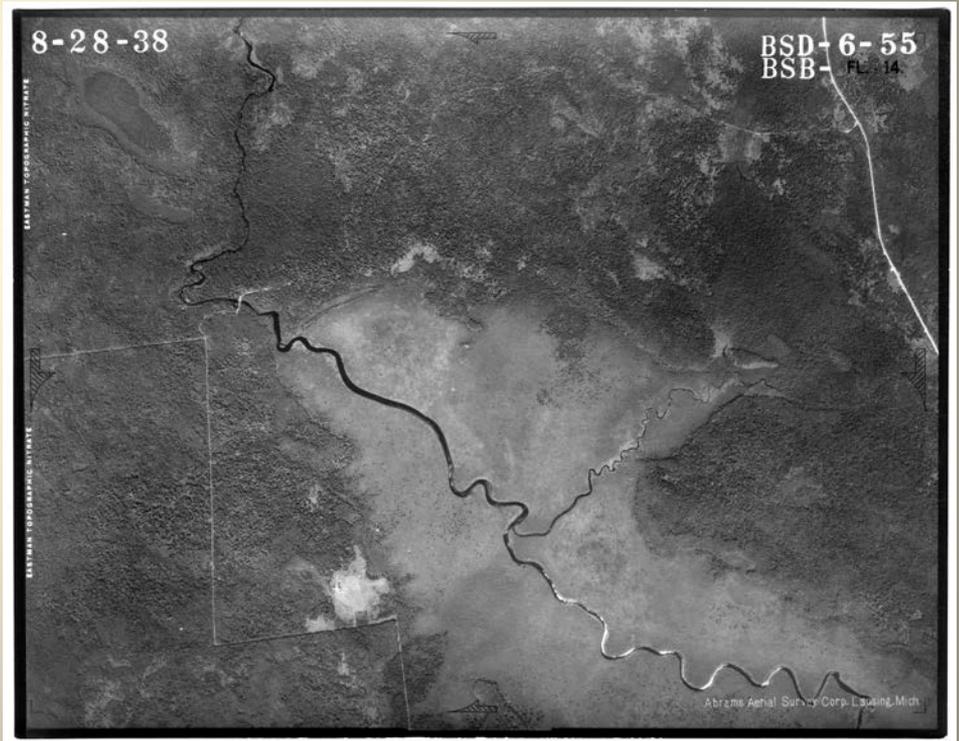
Current Dam Situation

- Wozny Rd. dam is nearing the end of it's useful life:
 - Deteriorating spillway (dam)
 - Seepage in earthen dike
- WDNR must repair, replace or abandon the dam
- Flowage has been partially lowered (drawn down) to:
 - alleviate pressure on the leaky dike
 - manage moist soil for wildlife benefits
 - begin preparing the impoundment for the next steps



Property and Dam History

- **1869** - Original dam constructed for logging, and washed out around **1912**
- **1936** - Logging dam rebuilt, and washed out in **1941**



Aerial photo - 1938

Property and Dam History

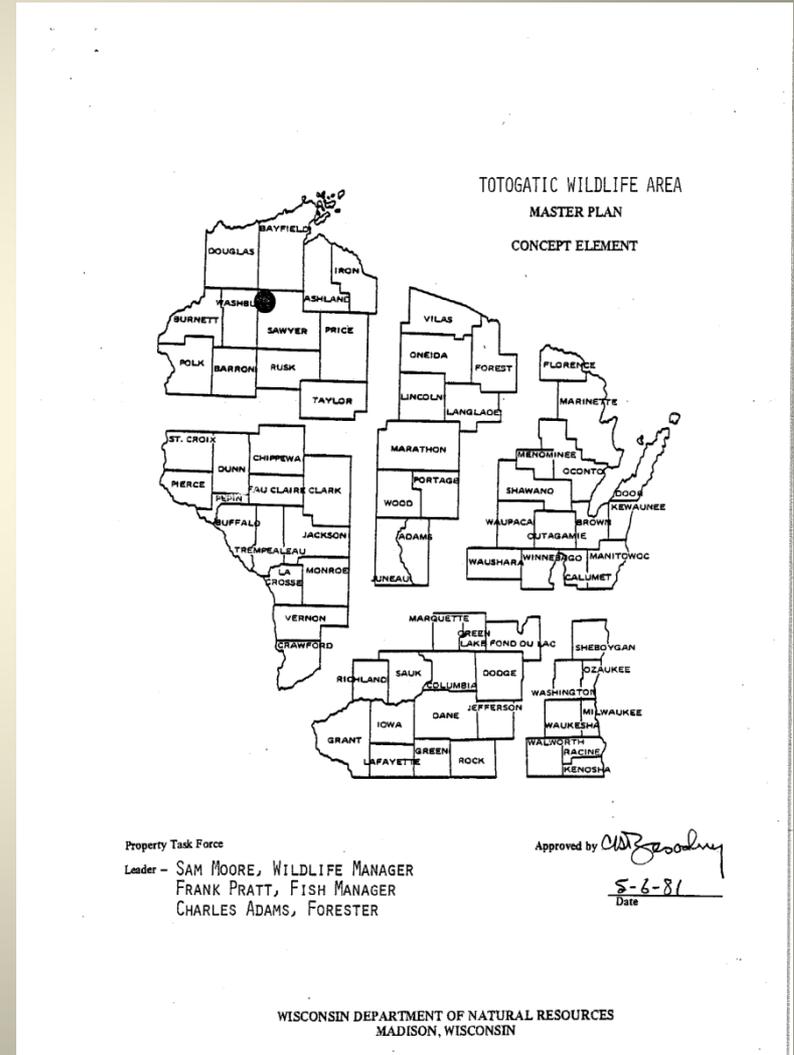
- **1941** – Hayward Rod & Gun Club promoted reconstruction of the dam and public land acquisition through federal funding
- **1951** - Acquisition of 2,719 acres for the wildlife area complete
- **1953** – Construction of the current dike, spillway and bridge complete
- **1959** – Stop logs added to raise the flowage two feet



Dam following construction - 1953

Property and Dam History

- **1977** – Dam repaired after frost damage following a drought. Fish restocked in flowage and parking lot and launch constructed on upstream side
- **1981** – Property Master Plan Concept Element approved
- **1983** – Property Master Plan Implementation Element approved



Property and Dam History

- **2013** – Contracted engineering firm sends inspection report to DNR, addressing dam deficiencies
- **2014** - Estimates provided for repair and abandonment options
- **2014** – 6” of stoplogs pulled
- **2014** – Meeting between DNR, townships, Washburn County, and DOT officials
- **2014** – Flowage sediment cores analyzed; sediment thickness survey done

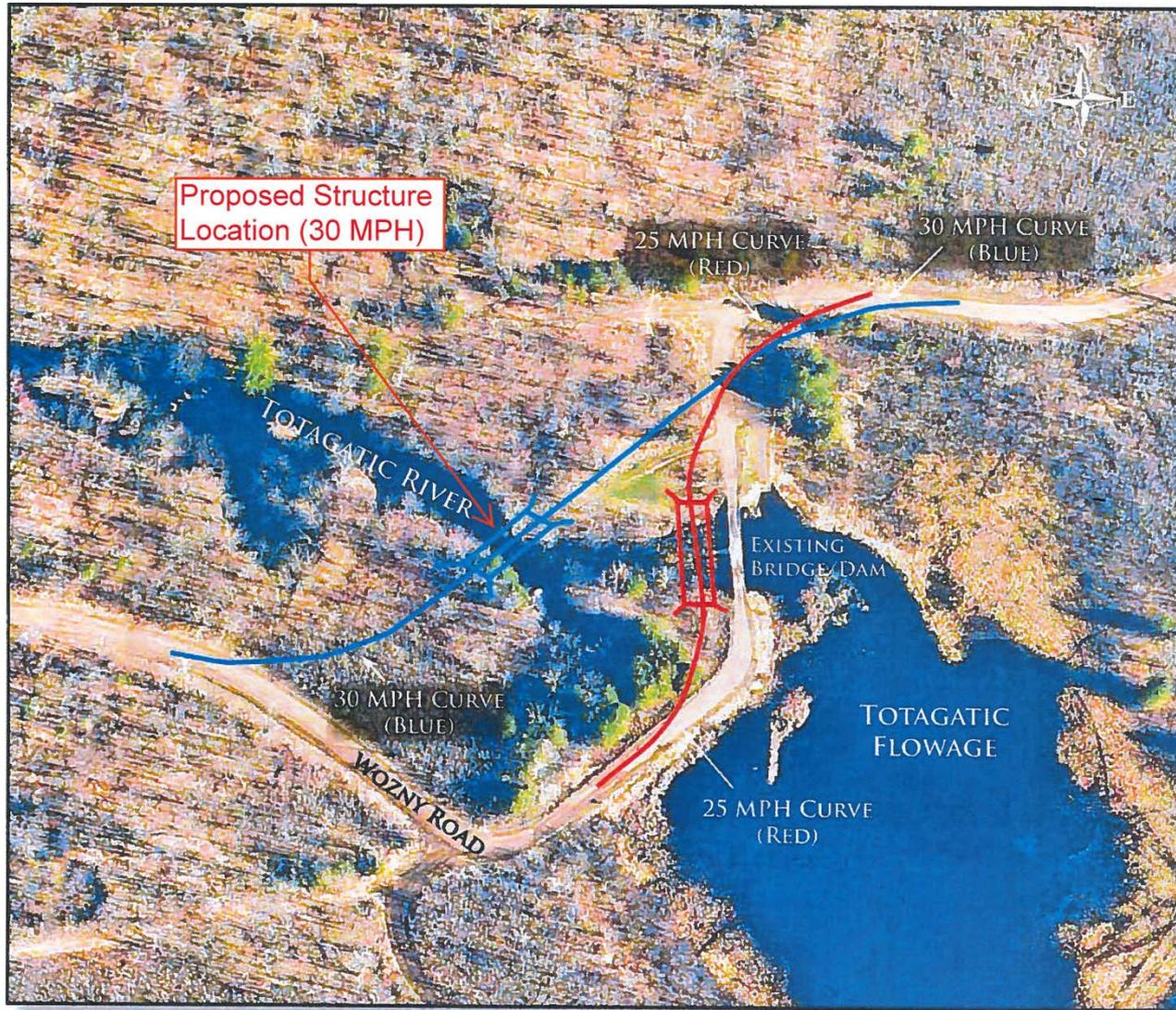


Property and Dam History

- **2015** - Another 6" of stoplogs removed
- **2015** - Meeting with Sawyer County
- **2015** – Discussion with USFWS on Pittman Robertson implications. Decision to re-write property management plan.



Wozny Road and Bridge Proposal



Flowage Fishery

- Weedy impoundment
- Limited overwintering habitat, fish kills reported in past. Some indication that low-oxygen tolerant species do better (pike, pumpkinseed, golden shiner)
- Flowage likely “restocked” annually with escapees from Nelson Lake. Some DNR stocking has also occurred after winter kills.

Fishery- then and now

- 1978 electrofishing
 - Pike, few but good size
 - Largemouth moderately abundant
 - Panfish abundant, small
 - Walleye present, but rare
- 2014 electrofishing
 - Pike, few but good size
 - Largemouth relatively rare
 - Panfish common, small
 - Walleye present, but rare



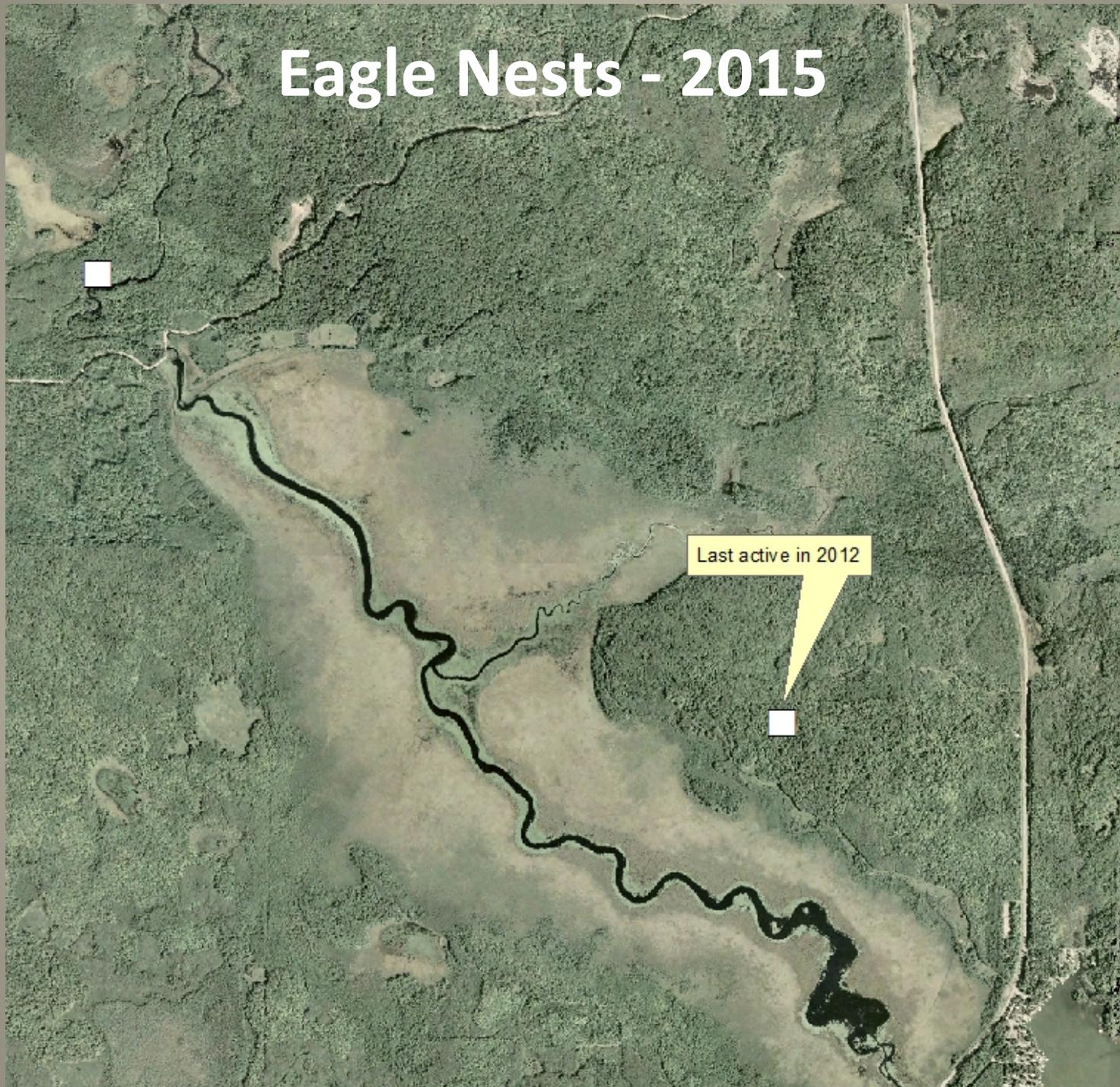
Totogatic Wildlife Area – Uncommon Wildlife



Nesting Osprey - 2014



Eagle Nests - 2015



Last active in 2012

Blanding's Turtle – Wetland habitat



Wood Turtle – Stream habitat



Purple Wartyback (*Cyclonaias tuberculata*) END

Stream Habitat



Freshwater Mussels – Totogatic River

Elktoe (*Alasmidonta marginata*) SC

Stream Habitat



Trumpeter Swan



Black Terns - THR



Flowage Waterfowl Habitat

- Deep water habitat contains mainly pond & water lily, water shield, and coon tail (limited waterfowl value)
- Marginal duck nesting habitat quality surrounding flowage
- Marginal waterfowl brood habitat quality
- Ducks mainly use flowage for loafing during migration
- Very little wild rice present



Flowage Recreational Values

- Boat launches on the upper and lower end
- Access on the upper end is more commonly used for fishing by motorized boats.
- Waterfowl hunting during Fall migration



Boat launch below Nelson Dam

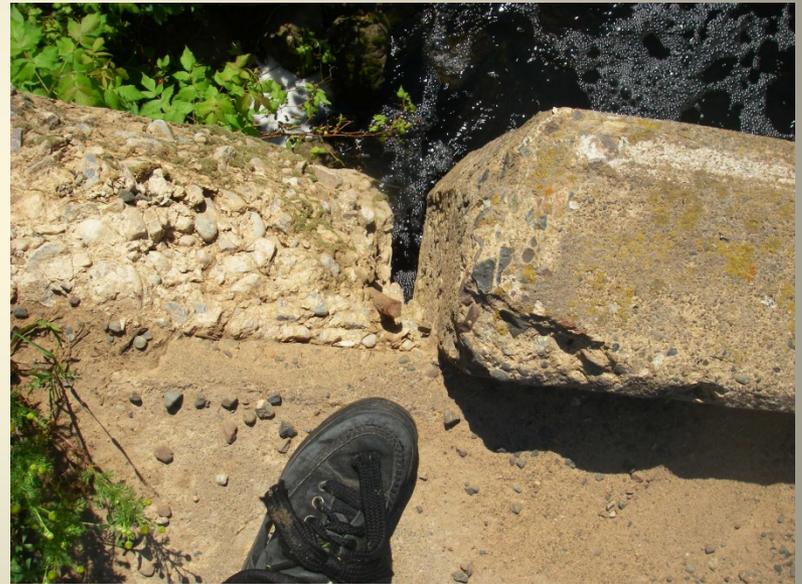


Deck/bridge over Wozny Rd. dam

- ATV and snowmobile use over the Wozny Rd. deck/bridge
- Canoe/Kayaking
- Trapping
- Bird watching

Alternatives: Repair Dam

- Follow through with repairs as recommended by engineering firm
- Most patchwork of deteriorating concrete, rebar and alterations to stop-log bays estimated at \$500,000
- Band-aid approach: short-term solution before the next problem structural problem occurs
- Long-term safety risks and maintenance costs will remain with the dam in place



Alternatives: Reconstruct Dam

- Long-term safety risks and maintenance needs with any dam
- Flowage would need to be dewatered before the current dam is removed and rebuilt
- Consider different styles/types of dams as replacements
- Status quo – New dam with fixed crest (limited operability); similar ecosystem functions and recreation opportunities to the current flowage management
- New dam with lift gates to enable routine water level manipulation (full operability) for wildlife management purposes



Alternative – Reconstruct dam with active water level management

Moist soil management for wildlife habitat

- Lift gate style structure
- Manipulate water levels through seasonal draw downs every 4-10 years
- Mimics wet/dry conditions of natural wetlands
- Rejuvenates annual plant food sources for waterfowl and other birds
- Provides a tool for combatting invasive species



Alternatives: Dam Removal

Wildlife

- Wild rice likely to be more prevalent due to shallower water
- Conversion of wetland types toward historic functions
- Overall wildlife values and use will convert due to shallower water habitat
- Trade-offs for uncommon species
- Potential beaver damming



Top photo: Wild rice beds in Wolf River – Oneida Co.



Alternatives: Dam Removal

Fishery and Water Resources

- Fish passage and spawning habitat could increase
- Uninterrupted flow and exchange of water, energy, sediments, nutrients, and organisms.
- Stream connectivity (longitudinal and lateral) improved due to nearly 4 miles of restored stream



Alternatives: Dam Removal

Recreation

- Launches still in place for river access
- Fishing opportunities would change
- Trapping opportunities could change
- May become too shallow in some areas of the river for larger motorized watercraft
- Canoeing/kayaking may increase with existing connection to the designated Wild River
- Huntible open water area for waterfowl would shrink, but opportunities would still exist along the river corridor
- New wild rice harvesting opportunities if rice becomes more widespread





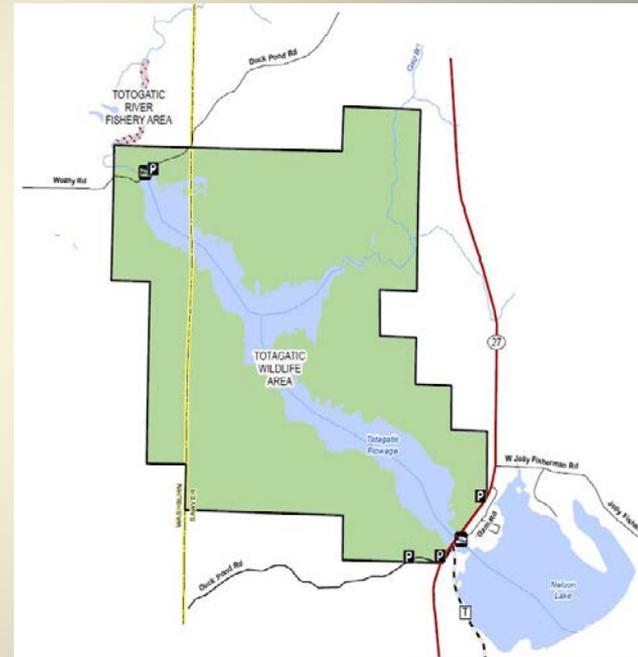
Considerations

- Dam repair estimate approximately \$500,000
- Dam reconstruction alternatives are likely to be substantially more expensive, but will last longer
- Preliminary dam removal estimated \$50,000, but could be more to protect wild river downstream
- Bureau of Wildlife Management currently has a backlog of other wetland infrastructure needs totaling \$2-3 million statewide
- How and when will drawdown continue
- Protect downstream river reach during construction (regardless of selected alternative)

Tier 3 Property Management Plan for Totogatic State Wildlife Area

Outline

- Not an NR 44 “Master Plan”
- More public input needed on dam decision, and management of the Wildlife Area
- A draft of the plan will go out for additional public input before it is finalized for DNR Secretary and NRB review and approval





Additional follow-ups from DNR

- Tribal consultation
- USFWS consultation
- Local government consultations
- Communications with DOT
- Capital funding requests through state or grants
- Permitting applications
- DOA – construction implementation of the approved alternative



Next Steps

- Another public meeting to formally gather public input on dam and property management plan (summer 2016)
- Online and mail-in public input opportunities
- A recommendation provided to DNR Secretary
- Draft property management plan goes to Natural Resources Board for review and approval
- Modify draft as needed and finalize management plan
- Seek federal and state wetland/waterway permits based on the preferred dam alternative
- Attempt to secure funding (FY17-19 Capital budget) or other sources, and cooperate with DOA to contract construction

How to stay engaged

- DNR website: dnr.wi.gov, and search for “Totogatic Wildlife Area”
- Sign up for email updates by clicking on  icon. Register, and check the “Totogatic Wildlife Area” box under the “Property Master Planning” category.
- Sign-up sheets at front entrance
- DNR news releases
- Email jason.fleener@wisconsin.gov or mike.zeckmeister@wisconsin.gov

Questions and Open Discussion

Thank you