

## Lower Menominee River AOC BUIs—What's left to do?

For discussion at 10/16/2014 CAC meeting

### **Restrictions on Dredging**

#### Remediation of Ansul/Tyco arsenic site

- GLLA betterment action
- In progress; plan to complete by **2015**

#### Menekaunee Harbor sediment remediation

- Dredging and sea wall work in progress
- Plan to complete by **2015**

#### Rio Vista Slough sediment characterization

- Samples collected 2014
- Results available by end of **2014**
- Results will determine whether remediation is needed—if so, BUI cannot be removed until after remediation is complete

#### Lower Scott Flowage sediment characterization

- Samples collected in 2013
- Results in **2014** showed remediation not needed there

#### Remediation of the WPS coal tar site

- Dredging was completed in 2013
- Ongoing monitoring of sand cover to determine if a dredge management plan is necessary for this location—results in **2015**

#### Dredge management planning

- Can start preliminary work soon, to be completed after sediment remediation
- Complete final plan by **2016**

### **Degradation of Benthos**

Same as Restrictions on Dredging, except for dredge management plan—therefore, **2015** (unless Rio Vista Slough requires remediation)

### **Restrictions on Fish Consumption**

#### Fish consumption advisory assessment

- All fish collected for MDCH/MDEQ fish tissue study—results by **2015**
- Review results to determine if fish contaminant levels in AOC are same as or lower than those in Little Bay de Noc
- If not, need to find and remediate source of contamination

#### Rio Vista Slough sediment characterization

- Samples collected 2014
- Results available by end of **2014**
- Results will determine whether remediation is needed for mercury, PCBs, or dioxins—if so, BUI cannot be removed until after remediation is complete

#### Lower Scott Flowage sediment characterization

- Samples collected in 2013
- Results in **2014** showed remediation not needed there

### **Degradation of Fish and Wildlife Populations and Loss of Fish and Wildlife Habitat**

#### Safe downstream passage around Park Mill Dam

- In progress; plan to complete by October **2014**

Upstream passage (fish lift and research facility) at Menominee Dam

- In progress; plan to complete by April **2015**

Upstream transfer of lake sturgeon (transport trailer)

- Planning and design work in progress; should be completed by spring **2015**

Safe downstream passage below Menominee Dam for both adult and juvenile sturgeon

- Planning and design work in progress; must be completed by September of **2016**

Vegetation improvements on Strawberry, Boom, and Blueberry Islands for rookery habitat

- Some initial work done in 2013
- ACOE restoration/invasives control project funded—to be complete in **2016**

Rookery habitat protection on Strawberry, Boom, and Blueberry Islands

- Blueberry and Strawberry Islands protected through respective ownership
- Boom Island needs further discussion by TAC/CAC—**2014**

Removal of debris and excess riprap below Ogden Street Bridge

- Increase hydrologic connection between South Channel and Menekaunee Harbor
- In progress, to be complete by **2015**

South Channel habitat restoration and protection project

- Design in progress, to be complete in 2015
- Implement in **2016**

Menekaunee Harbor habitat restoration and protection project

- Design in progress, to be complete in 2014
- Implement in **2015**, with 5 years (2016-2020) of invasive plant monitoring and treatment

Identification of existing mechanisms for wetland, aquatic, and riparian protection

- Need to identify protection gaps and ways to fill them
- In progress; needs further discussion by TAC/CAC—**2014**

Fish population surveys in AOC and reference sites

- Surveys complete in 2015
- Review results from lower Menominee River, Peshtigo River, and Escanaba River to determine whether meeting population/recruitment objectives—report by **2016**
- Objective for Lower Scott Flowage is now considered to be achieved (see 2013 interim report)
- Need to use 2014 and 2015 data to determine whether objective for lower river is met
- If any target fish species not meeting objectives, consider options (remove BUI assuming there will be improvement, do additional habitat work, repeat surveys to reassess after x years)

Larval lake whitefish monitoring

- Study required for BUI removal; results of study will not impact BUI removal
- Could not complete sampling this year due to high water
- Project extended through **2015**

Monitoring of rookery activity on all riverine islands

- Monitoring required for BUI removal; results of monitoring will not impact BUI removal
- TAC has decided in 2014 that eBird report meets this requirement
- Next, will present data to CAC for their approval—**2014**

Fish, mussel, bird, and aquatic vegetation surveys after restoration projects completed

- As needed to confirm that objectives have been met
- Catch-all activity, in case additional monitoring is needed for something
- Often can tie monitoring to implementation of project; e.g., when Menekaunee Harbor habitat work is done, have contractor confirm % cover of invasive species
- After projects completed—by **2016?**