

# COLA Water Quality Goals for LCO

- ❑ COLA'S goal is to maintain current water quality into the future
- ❑ Classifications - WIS Rule NR-102---LCO is:
  - A stratified two story lake/fishery
  - LCO is an Outstanding Resource Water (ORW)

# COLA Water Quality Goals for LCO

- ❑ COLA will rely on anti-degradation rules and statutes to provide the legal framework to maintain current water quality and classifications
- ❑ One lake determination
  - COLA intends that applicable water quality standards, criteria, goals and classifications be equally and uniformly applied to all natural bays of LCO
  - COLA will resist any efforts or interpretations that attempt to distinguish one LCO bay from another

# COLA Water Quality Goals for LCO

## □ Total Phosphorus (TP)

- LCO – The long term goal for TP for all natural bays of LCO is 10+/-2 parts per billion (ppb)
- Musky Bay – The short term goal for TP for Musky Bay is 20 ppb to be achieved within five years (2016)
- Musky Bay – The long term goal for TP for Musky Bay is 10 +/-2 ppb

## □ Chlorophyll-a (chl-a)

- LCO – The long term goal for chl-a for all natural bays of LCO is 2ppb

# LCO Lake Management Plan

- ❑ To achieve the water goals, COLA must address the following five management areas over the coming years and decades:

1. Cranberry Discharge
2. Changing land use in the LCO Watershed
3. LCO Shore Land Development and buffer areas
4. Invasive Species Management
5. Lake and Stream Monitoring

# LCO Lake Management Plan

## Cranberry Discharge

- ❑ COLA will work with the three cranberry growers to eliminate their discharges to LCO by 2016
- ❑ COLA will investigate and determine if dredging and/or alum or iron chemical treatment of Musky Bay would be effective in reducing sediment phosphorus recycling

# LCO Lake Management Plan

## Cranberry Discharge (cont.)

- ❑ COLA will work with the Tribe and WDNR to develop and implement a plan to restore muskellunge spawning habitat in Musky Bay
- ❑ COLA will support Tribal efforts to establish water quality standards for LCO and to secure Treatment as State (TAS) status

# LCO Lake Management Plan

## Changing Land Use in the LCO Watershed

- ❑ COLA will evaluate formation of a Lake Management District and make a recommendation to the COLA membership
- ❑ COLA will seek to acquire agricultural land on the south side of LCO east bay
- ❑ COLA will work closely with the Tribe to determine how best to buffer and protect Osprey Creek

# LCO Lake Management Plan

## Changing Land Use in the LCO Watershed (cont.)

- ❑ COLA will work with the other lake associations, WDNR, County and the Tribe to insure forest BMP's are implemented in the LCO watershed
- ❑ COLA will work with the other lake associations, WDNR, County and the Tribe to monitor, advance and help pay for agriculture BMP's for row crop/animal operations in the LCO watershed

# LCO Lake Management Plan

## Changing Land Use in the LCO Watershed (cont.)

- ❑ **COLA will work with the other County, lake associations, and the Tribe to enact a low impact development ordinance that applies to the 68,000 + acre LCO watershed.**

### **The ordinance should:**

- Require the first 1.25 inches of runoff from new development be treated on site
- New development required to minimize soil compaction on D soils

# LCO Lake Management Plan

## LCO Shore Land Development and Buffer Areas

- COLA will support Sawyer County in the updating and implementation of the Shore land Zoning Ordinance by:
  - Advocating for minimum low impact development and better site design requirements
  - Reviewing and taking a position on any variance requests that effect LCO

# LCO Lake Management Plan

## LCO Shore Land Development and Buffer Areas (Cont.)

- ❑ COLA will work with Sawyer County and WDNR to achieve establishment of shore line buffer zones on 100% of LCO lake front properties
- ❑ COLA will work with Sawyer County to actively review compliance with County septic tank requirements

# LCO Lake Management Plan

## Invasive Species Management

- ❑ COLA will continue to aggressively carry out herbicide treatments to control Curly Leaf Pond Weed infestations in LCO
- ❑ COLA will work with Sawyer County to track forest invasive species and assist in efforts to control their introduction and spread
- ❑ COLA will maintain the clean boat program to help prevent introduction of evasive species into LCO

# LCO Lake Management Plan

## Lake and Stream Monitoring

- ❑ COLA will work the Tribe and USGS to implement inlet stream and lake outlet water flow monitoring
- ❑ COLA will work with other lake associations to have Secchi disk transparency monitoring on all lakes in the LCO watershed
- ❑ COLA will assist the Tribe to insure that 10-12 paired TP, chl-a, DO/ temp measurements and Secchi readings are taken in accordance with the Tribes sampling plan during each growing season (May to October)