Implementation of a Lake Management Plan

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Three Lakes Council

Agenda

- What we did with the 2004 plan
- Why we asked for a plan update
- Next steps with the 2019 plan

Intro to the Three Lakes Council

Organization established in 1970

Purpose largely to manage aerators in Lake Waccabuc

All volunteer – members, leadership

Work with lake associations around the lakes and directly with members

What we did after the 2004 plan

- The 2004 plan was a kick-start
- Education about lakes to users
- Many options for actions
- Invigorated 3LC activity
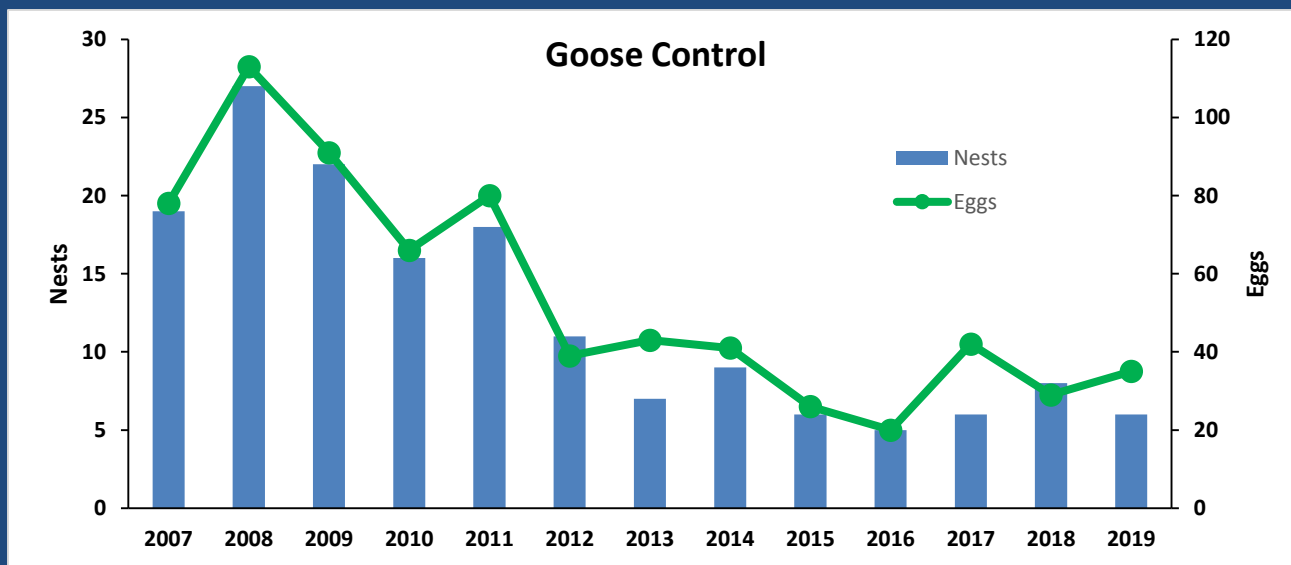- Emphasized asking users what they wanted

After the 2004 plan….

- User survey
  - Lake uses
  - Problem identification
  - How to fund actions: taxing district, fees, associations, voluntary donations
  - Support for actions: septic pumping, ban phosphorus fertilizer, protect open lands

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After the 2004 plan….

- Geese management plan
  - User survey identified problem
  - Investigated "geesepeace" approach
  - Implemented annual egg oiling
  - Dramatic improvement in lake conditions

Goose Control

(Chart showing Nests as bars and Eggs as a line from 2007 to 2019)

After the 2004 plan…. (continued)

- Focus on phosphorus in watershed and beyond
  - Orthophosphate in drinking water system to control lead
  - Trees for tribs planting along tributary
  - Education & outreach: dog waste, septics, fertilizer

- Regulatory assistance since 2004
  - State law: no phosphorus lawn fertilizer, no phosphorus dishwashing soap
  - Town law: dog leash law and poop pick-up law
  - Town law: septic pumpouts at least every 5 years
  - Regional stormwater retrofits – several proposed, one implemented

After the 2004 plan…. (continued)

- Additional research and data
  - CSLAP on all three lakes – started 2006
  - Supplemental testing – DO, temp, and "shoulder season" samples
  - Lake level gauges installed
  - Rainfall tracking - CoCoRaHS
  - Bathymetry for better volume data

- Acquired protected waterfront preserve
  - Manage for water protection as well as natural features

After the 2004 plan…. (continued)

- Plant survey 2008
  - Concept: get a baseline of plant density, diversity, distribution
  - What happened: found an aggressive invasive plant
  - Control and eradication efforts for that invasive consumed volunteers
    - Permits
    - Fundraising
    - Control actions
    - Monitoring
- Effectively highest and only priority through 2011
- Invasive plants remain focus

LOVE OUR LAKES ERADICATE EGERIA
www.ThreeLakesCouncil.org

What we didn't do

- Additional stream and storm measurements of phosphorus & flows
    - Very difficult
    - Very expensive
    - Not sure what we would do with data

- No good measurements of inflows or outflows
    - Water can flow "backwards" into smallest lake
    - Rely on modeling for phosphorus loads

Why to invest in a new plan

- A lot more data has been collected –
  - CSLAP, plant surveys, DO, bathometry...
- Common sense actions already taken
- Second user survey underlined lack of options
- New knowledge and approaches
  - Peroxide, ultrasonic, alum, phoslock, ?, ...
- More frequent / longer lasting HABs on our lakes
- Potential for grants
  - Inland waterway designation
  - EPA 9 element plan required for some grants
- Get help on contentious decisions

Process for new plan

- Proposed in June 2018
  - Report by November
- Detailed contract signed July
  - report by year end
- Provided data in consolidated files
- Expanded data collection in summer
- Site visit October
- Draft report in April

Timing: plan actions no earlier than 2020

Now what?

- Comments on draft plan need to be addressed
- Plan has to be finalized
- Components of EPA 9E plan needed
- Need cost estimates for some actions to evaluate
- Discuss with community to get priorities
- Review details with board:
  - Options, costs, risks, returns
- Incorporate into document to create 9E plan

Predictions

"It's tough to make predictions, especially about the future." – Yogi Berra

- Use report to reassess approaches
- Changing water system corrosion control – very unlikely in regulatory climate
- Nutrient inactivation – consideration
- Grants? TBD
- Outreach, education - always

- Questions?

3LC - Umbrella org for area's lake associations & users