• Phase 1: Initiate (Feb 2019-May 2020)
• Phase 2: Draft plan (Sept 2019-May 2020)
• Phase 3: Formal review and approval (Jun 2020-Mar 2021)
• Phase 4: Adoption, distribution (Apr 2021-May 2021)

• Plan expiration date: September 28, 2021
Status and outlook of WMP

- Adaptive management and Prioritized, Targeted & Measurable (PTM) implementation
- Plan implementation status
- Progress toward goals
- Remaining work
Adaptive Management Approach

- Assess Progress
- Design Strategy
- Implement
- Evaluate
- Monitor

Adaptive Management
PTM – Prioritized, Targeted, Measurable

BWSR’s vision for One Watershed, One Plan and Metro Watershed Plan updates is for implementation actions to be

Prioritized
Targeted
Measurable
BWSR’s vision for One Watershed, One Plan and Metro Watershed Plan updates is for implementation actions to be

Prioritized
Targeted
Measurable
There are three steps to prioritizing your implementation plan:

1. Identify priority resources
2. Identify priority concerns
3. Identify associated set of measurable goals
Prioritized or not?

TO-DO LIST:
1. EVERYTHING
2. EVERYTHING
3. EVERYTHING

Protecting Your Water Resources
District issues and goals are organized by the following Issue Areas as identified through the planning process:

1. Floodplain
2. Lakes
3. Streams
4. Wetlands
5. Upland Resources
6. Groundwater
7. Public Education
8. Interagency Communication

**Priority Concerns for Lakes**
- Water quality rating
- Summer phosphorus concentration
- Summer Secchi depth
BWSR’s vision for One Watershed, One Plan and Metro Watershed Plan updates is for implementation actions to be

Prioritized
Targeted
Measurable
According to BWSR, there are three facets to targeting your implementation plan:

• Location
• Activity Type
• Timing
Targeted – BWSR Example

**Traditional approach:**
Solves individual farm water quality problems but may not be enough to solve in-stream water quality problems

**Targeting to clean up streams:**
Achieves amount of the right practices in right locations & has in-stream monitoring to document changes

*Farm conservation contracts*

*American Farmland Trust*

*Ultimately, the purpose of targeting is to ensure that the right practices are installed in the right locations at the right time.*
Project Targeting

• 80/20 Rule (a.k.a. the Pareto Principle)
  • Vilfredo Pareto: An Italian economist often referenced in Lean Six Sigma process improvement discussions
  • Can be applied to almost anything

https://due.com/blog/the-pareto-principle-the-secret-of-successful-freelancers/
Adaptive Management Approach

Comfort Lake
- Monitoring/Diagnostic: 2019-20
- Project Feasibility: 2019-20
- Implementation: 2020→
- Effectiveness Monitoring

Little Comfort Lake
- Monitoring/Diagnostic: 2016-18
- Project Feasibility: 2019→
- Implementation: 2019→
- Effectiveness Monitoring

Moody Lake
- Monitoring/Diagnostic: 2012-14
- Project Feasibility: 2015
- Implementation: 2016→
- Effectiveness Monitoring

Sunrise River
- Monitoring/Diagnostic: 2010-11
- Project Feasibility: 2012
- Implementation: 2015→
- Effectiveness Monitoring

Forest Lake
- Monitoring/Diagnostic: 2015-17
- Project Feasibility: 2016→
- Implementation: 2017→
- Effectiveness Monitoring

Shields Lake
- Monitoring/Diagnostic: 2015-16
- Project Feasibility: 2016
- Implementation: 2017→
- Effectiveness Monitoring

Keewahtin Lake
- Monitoring/Diagnostic: 2016-17
- Project Feasibility: 2017
- Implementation: 2019→
- Effectiveness Monitoring

Bone Lake
- Monitoring/Diagnostic: 2015
- Project Feasibility: 2016→
- Implementation: 2017→
- Effectiveness Monitoring
BWSR’s vision for One Watershed, One Plan and Metro Watershed Plan updates is for implementation actions to be

Prioritized
Targeted
Measurable
Event Average TP Conc. Reduction:
2017: 40%
2018: 33%

Total Phosphorus
Low: < 0.15
Mod: 0.15-0.4
High: > 0.4

Phosphorus Reduction = 200 lb/yr

0.15 mg TP/L
FWMC 1.0 CFS

0.19 mg TP/L
FWMC 1.8 CFS

0.22 mg TP/L
Moody Lake

• **Diagnostic/Modeling Studies**
  - [2012 Internal Load Options](#)
  - [2014 Sequential Diagnostics](#)

• **In-Lake TP**
  - 2040 District Goal: < 40 µg/L
  - Current 5-yr/10-yr: 103 µg/L / 108 µg/L

• **Watershed Reductions = 555 lb/yr**
  - Completed/In-Progress
    - Wetland A/B/C Rehab. (445 lb/yr)
  - Future (110 lb/yr)
    - Lofton Pond Alum
    - Targeted Agricultural BMPs

• **Internal Reductions = 324 lb/yr**
  - Completed/In-Progress
    - Carp harvest (Bone Lk barrier)
    - Winter aeration system
    - Alum treatment = 324 lb/yr
Prioritized, Targeted, Measurable: Moody Lake

Multi-Year Adaptive Management Projects
Address highest watershed phosphorus loads then internal loading

- **Watershed Load**
  - Wetland A/B rehabilitations and managed livestock access (2017)
  - Wetland A/B spot alum treatments (2018)
  - Wetland C/Peterson Pond (2019)

- **Internal Load**
  - *Winter aeration system* (annual)

Project Location: southern Chisago County, MN
Prioritized, Targeted, Measurable: Moody Lake

2014 Phosphorus Loads

Northeast watershed contributes 3/4 of flow and 1/3 of load
- Nutrient retention in Fourth Lake

Northwest watershed contributes 1/4 of flow and 2/3 of load
- Flow and some nutrient reduction from wetland improvements at Peterson site
- Some cow manure and erosion observed at 250th site
- Legacy loads from degraded wetlands
Moody Lake Sequential Diagnostic Study

Achieve 80% of necessary watershed phosphorus load reductions by treating 25% of the flow to the lake.
Prioritized, Targeted, Measurable: Moody Lake

- Moody subshed area = 2,315 acres

- 80% of goal watershed load reduction achieved by implementing project on ~12 acres of land (.5% of subshed area)
80% of nonpoint source pollution may be coming from 20% (or less) of the watershed

Could have implemented dozens of projects all over the watershed without coming close to this reduction
• Diagnostic/Modeling Studies
  • 2014 Partially Drained Wetlands
  • 2015 Diagnostic Study
  • 2017 Rural SWA & 2018 Prioritization

• In-Lake TP
  • 2040 District Goal: < 30 µg/L
  • Current 5-yr/10-yr: 37 µg/L / 36 µg/L

• Watershed Reductions = 649 lb/yr
  • Completed/In-Progress
    • Wetland restorations (50 lb/yr)
    • Rural SWA Ag BMPs (72 lb/yr)
  • Future (492 lb/yr)
    • Diagnostic Implementation

• Internal Reductions = 137 lb/yr
  • Completed/In-Progress
    • Carp harvest/barrier
  • Future (TBD)
Little Comfort Lake

- Diagnostic/Modeling Studies
  - 2010 Watershed Load Assessment
  - 2016-2018 Targeted Monitoring
  - 2019 H&H Update & BMP Scenarios
  - 2019 Birch/School Paleo Cores

- In-Lake TP
  - 2040 District Goal: < 30 µg/L
  - Current 5-yr/10-yr: 61 µg/L / 52 µg/L

- Watershed, Upstream Lakes Reductions = 347 lb/yr, 215 lb/yr
  - Future
    - July Ave Tributary Ag BMPs
    - Birch/School Internal Loads
    - Bone Lake Outlet Wetland Resto.
    - Heath Ave Drainage SW BMPs

- Internal Reductions = 278 lb/yr
  - Future
    - Alum treatment (278 lb/yr)
Shields Lake

- Diagnostic/Modeling Studies
  - [2015 PCSWMM Modeling](#)
  - [2016 Diagnostic Monitoring](#)

- In-Lake TP
  - 2040 District Goal: < 60 µg/L
  - Current 5-yr/10-yr: 243 µg/L / 224 µg/L

- Watershed Reductions = 110 lb/yr
  - Completed/In-Progress
    - Harvest & Reuse System (94 lb/yr)
    - Chestnut Creek Permitting (16 lb/yr)

- Internal Reductions = 913 lb/yr
  - Completed/In-Progress
    - Winter aerator
  - Future
    - Carp removal (600-900 carp to remove)
    - Alum treatment (913 lb/yr)
Keewahtin Lake

- Diagnostic/Modeling Studies
  - 2016 Shoreline Assessment
- In-Lake TP
  - 2040 District Goal: < 20 µg/L
  - Current 5-yr/10-yr: 15 µg/L / 16 µg/L
- Watershed Reductions = 0 lb/yr
  - Future
    - Shoreland management
    - Groundwater recharge protection
- Internal Reductions = 0 lb/yr
• **Diagnostic/Modeling Studies**
  - [2014 South Shore SWA](#)
  - [2015 North Shore SWA](#)
  - [2018 Street Sweeping Plan](#)
  - [2018 Diagnostic Update](#)
  - [2018 WJD6 Assessment & Feasibility](#)
  - [2018 Hayward Ave Assessment & Feasibility](#)
  - [2018 Castlewood East Assessment & Feasibility](#)
TP Reductions to Meet Goals

- East 3rd: 405 lb/yr
  - Watershed: 176 lb/yr
    - JD6: 169 lb/yr
    - 3rd Pond: 6.4 lb/yr
  - 2nd Lake: 229 lb/yr

- Middle 2nd: 657 lb/yr
  - Shields Lk: 531 lb/yr
  - Watershed: 68 lb/yr
    - Hayward: 40 lb/yr
    - Castle: 20 lb/yr
    - Direct: 7.7 lb/yr
  - 3rd Lake: 58 lb/yr

- West 1st: 267 lb/yr
  - Watershed: 154 lb/yr
    - Hayward: 83 lb/yr
    - Direct: 66 lb/yr
  - 2nd Lake: 113 lb/yr
TP Reductions to Meet Goals

- Total Reductions: 929 lb/yr
Forest East

- Diagnostic/Modeling Studies
  - [Forest Lake East Algal Investigation](#)
  - [2018 WJD6 Assessment & Feasibility](#)
  - Internal Load Assessment

- In-Lake TP
  - 2040 District Goal: < 30 µg/L
  - Current 5-yr/10-yr: 36 µg/L / 36 µg/L

- Watershed Reductions = 175 lb/yr
  - Completed/In-Progress
    - 3rd Lake Pond (56 lb/yr)
  - Future (119 lb/yr)
    - JD-6 Implementation
      - Wetland restoration
      - Cattail harvesting

- Internal Reductions = TBD
• Diagnostic/Modeling Studies
  • 2018 Castlewood East Assessment & Feasibility

• In-Lake TP
  • 2040 District Goal: < 30 µg/L
  • Current 5-yr/10-yr: 35 µg/L / 36 µg/L

• Watershed Reductions = 599 lb/yr
  • Completed/In-Progress
    • Hilo Lane IESF (12 lb/yr)
    • Shields Lake (531 lb/yr)
    • Street Sweeping (8-12 lb/yr)
    • Castlewood Ag. field conversion
  • Future (44 lb/yr)
    • Hayward
      • Wetland restoration/biofiltration
      • Iron enhanced sand filters/P-absorbing media

• Internal Reductions = 0 lb/yr
Forest West

• Diagnostic/Modeling Studies
  - 2018 Hayward Ave Assessment & Feasibility
  - Internal Load Assessment

• In-Lake TP
  - 2040 District Goal: < 30 µg/L
  - Current 5-yr/10-yr: 35 µg/L / 34 µg/L

• Watershed Reductions = 149 lb/yr
  - Completed/In-Progress
    - Street Sweeping (24-36 lb/yr)
  - Future
    - Stormwater Retrofits (30-42 lb/yr)
    - Hayward (83 lb/yr)
      - Wetland restoration/biofiltration
      - Iron enhanced sand filters/P-absorbing media

• Internal Reductions = TBD
Sunrise River
Comfort Lake

• Diagnostic/Modeling Studies
  • [2002 Resource Investigation](#)
  • [2012 Sunrise River WQ & Flowage Study](#)
  • [2019 H&H Model Update & BMP Scenarios](#)

• In-Lake TP
  • 2040 District Goal: < 30 µg/L
  • Current 5-yr/10-yr: 34 µg/L / 33 µg/L

• Watershed Reductions = 725 lb/yr
  • Completed/In-Progress
    • Bixby Park (93 lb/yr)
    • Target Retrofit (5 lb/yr)
    • Permitting (20 lb/yr)
  • Future
    • Little Comfort Lake (415 lb/yr)
    • Tax Forfeit, Ducharme, Banta
    • Shallow Pond
    • Lower Sunrise Restoration

• Internal Reductions = 101 lb/yr
Quantitative Goals

Plan Goals—Year [2020, 2030, or 2040]

• Maintain a water quality rating of ____.
• Maintain a five-year mean summer phosphorus concentration below _____ µg/L ± 4%.
• Maintain a mean summer Secchi depth no less than _____ ft.
<table>
<thead>
<tr>
<th>Lake</th>
<th>Phosphorus Concentration (2005-2009)</th>
<th>Years of Data</th>
<th>Measured Average (2014-2018)</th>
<th>Phosphorus Concentration</th>
<th>Years of Data</th>
<th>% Change from '05-'09 Avg</th>
<th>5-Year Mean Concentration</th>
<th>Goal Load (approximate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moody</td>
<td>165 µg/L TP</td>
<td>3</td>
<td>103 µg/L TP</td>
<td>5</td>
<td>-38%</td>
<td>40 µg/L TP</td>
<td>144 lb/yr</td>
<td></td>
</tr>
<tr>
<td>Bone</td>
<td>46 µg/L TP</td>
<td>5</td>
<td>37 µg/L TP</td>
<td>5</td>
<td>-20%</td>
<td>30 µg/L TP</td>
<td>443 lb/yr</td>
<td></td>
</tr>
<tr>
<td>Birch</td>
<td>103 µg/L TP</td>
<td>3</td>
<td>97 µg/L TP</td>
<td>0</td>
<td>N/A</td>
<td>60 µg/L TP</td>
<td>471 lb/yr</td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>66 µg/L TP</td>
<td>4</td>
<td>52 µg/L TP</td>
<td>0</td>
<td>N/A</td>
<td>40 µg/L TP</td>
<td>452 lb/yr</td>
<td></td>
</tr>
<tr>
<td>Little Comfort</td>
<td>42 µg/L TP</td>
<td>4</td>
<td>61 µg/L TP</td>
<td>5</td>
<td>45%</td>
<td>30 µg/L TP</td>
<td>416 lb/yr</td>
<td></td>
</tr>
<tr>
<td>Shields</td>
<td>214 µg/L TP</td>
<td>3</td>
<td>243 µg/L TP</td>
<td>5</td>
<td>14%</td>
<td>60 µg/L TP</td>
<td>84 lb/yr</td>
<td></td>
</tr>
<tr>
<td>Keewahtin (formerly Sylvan)</td>
<td>15 µg/L TP</td>
<td>4</td>
<td>15 µg/L TP</td>
<td>5</td>
<td>0%</td>
<td>20 µg/L TP</td>
<td>74 lb/yr</td>
<td></td>
</tr>
<tr>
<td>Forest (average)</td>
<td>38 µg/L TP</td>
<td>5</td>
<td>36 µg/L TP</td>
<td>5</td>
<td>-7%</td>
<td>30 µg/L TP</td>
<td>2,459 lb/yr</td>
<td></td>
</tr>
<tr>
<td>Forest 1 (west basin)</td>
<td>36 µg/L TP</td>
<td>5</td>
<td>35 µg/L TP</td>
<td>5</td>
<td>-1%</td>
<td>30 µg/L TP</td>
<td>748 lb/yr</td>
<td></td>
</tr>
<tr>
<td>Forest 2 (middle basin)</td>
<td>38 µg/L TP</td>
<td>1</td>
<td>35 µg/L TP</td>
<td>5</td>
<td>-7%</td>
<td>30 µg/L TP</td>
<td>671 lb/yr</td>
<td></td>
</tr>
<tr>
<td>Forest 3 (east basin)</td>
<td>40 µg/L TP</td>
<td>1</td>
<td>36 µg/L TP</td>
<td>5</td>
<td>-9%</td>
<td>30 µg/L TP</td>
<td>1,040 lb/yr</td>
<td></td>
</tr>
<tr>
<td>Heims</td>
<td>37 µg/L TP</td>
<td>1</td>
<td>43 µg/L TP</td>
<td>2</td>
<td>16%</td>
<td>&lt;40 µg/L TP</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Comfort</td>
<td>30 µg/L TP</td>
<td>5</td>
<td>32 µg/L TP</td>
<td>5</td>
<td>7%</td>
<td>30 µg/L TP</td>
<td>1,640 lb/yr</td>
<td></td>
</tr>
</tbody>
</table>
## Progress Toward Goals

### 5221 Moody Lake

<table>
<thead>
<tr>
<th></th>
<th>2020 Goal</th>
<th>2030 Goal</th>
<th>2040 Goal</th>
<th>5-Year Average (‘14-‘18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water quality rating at or above</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>Mean summer phosphorus concentration below (µg/L)</td>
<td>60</td>
<td>40</td>
<td>40</td>
<td>103</td>
</tr>
<tr>
<td>Mean summer secchi depth at or above (ft)</td>
<td>3.3</td>
<td>4.6</td>
<td>4.6</td>
<td>2.2</td>
</tr>
</tbody>
</table>

### Load Component

<table>
<thead>
<tr>
<th>Load Component</th>
<th>2004 Benchmark (152 µg/L) Load (lb/yr)</th>
<th>State Standard (40 µg/L)</th>
<th>District 2040 Goal (40 µg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reduction Needed (lb/yr)</td>
<td>Goal Load (lb/yr)</td>
<td>Reduction Needed (lb/yr)</td>
</tr>
<tr>
<td>Watershed</td>
<td>636</td>
<td>555</td>
<td>81</td>
</tr>
<tr>
<td>Lendt Lake</td>
<td>15</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Internal Load</td>
<td>368</td>
<td>324</td>
<td>44</td>
</tr>
<tr>
<td>Atmosphere</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,023</td>
<td>879</td>
<td>144</td>
</tr>
</tbody>
</table>
BONE LAKE MANAGEMENT DISTRICT

Lakes
Bone, Moody, Lendt, First, Second, Third, Sea

Total Acreage
10082 acres

Land Use Breakdown
34% Row crops
25% Grassland/pastures
16% Developed/mining
15% Forest/shrubland
05% Wetland
05% Open water

Project Progress
How close are we to our phosphorus reduction goals?

Moody Lake
Reduction Goal: 879lbs

Bone Lake
Reduction Goal: 786lbs

Bar Chart
- Moody Lake: 110 (Completed), 393 (Ongoing), 376 (Planned)
- Bone Lake: 564 (Completed), 123 (Ongoing), 99 (Planned)
**Project Progress**

How close are we to our phosphorus reduction goals?

<table>
<thead>
<tr>
<th></th>
<th>Forest Lake</th>
<th>Shields Lake</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lakes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forest, Shields, Keewahtin, Elwell, Cranberry, Twin, Clear</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Acreage</strong></td>
<td>13669 acres</td>
<td></td>
</tr>
<tr>
<td><strong>Land Use Breakdown</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33% Developed/mining</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20% Open water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18% Grassland/pastures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13% Forest/shrubland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09% Wetland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>06% Row crops</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Forest Lake**
- Reduction Goal: 929lbs

**Shields Lake**
- Reduction Goal: 1,023lbs

- **Completed**
- **Ongoing**
- **Planned**
LITTLE COMFORT LAKE MANAGEMENT DISTRICT

**Lakes**
Little Comfort, School, Birch, Nielson

**Total Acreage**
6128 acres

**Land Use Breakdown**
- 32% Developed/mining
- 26% Grassland/pastures
- 21% Forest/shrubland
- 09% Row crops
- 07% Wetland
- 04% Open water

**Project Progress**
How close are we to our phosphorus reduction goals?

Little Comfort Lake
Reduction Goal: 839lbs

- **138** Completed
- **696** Ongoing
- **138** Planned
COMFORT LAKE MANAGEMENT DISTRICT

Lakes
Comfort, Ashton Heims

Total Acreage
7949 acres

Land Use Breakdown
49% Developed/mining
20% Grassland/pastures
14% Forest/shrubland
07% Row crops
06% Wetland
03% Open water

Project Progress
How close are we to our phosphorus reduction goals?

Comfort Lake
Reduction Goal: 825lbs

825
284
Progress toward goals

Qualitative Goals

- **5100 Floodplain**: conserving flood storage capacity and limiting flood damage
- **5200 Lakes**: management to protect and improve water quality, limit spread and entry of invasive species, preservation of shoreline buffers
- **5300 Streams**: managing stream water quality and habitat, aquatic invasive species management education, preservation and establishment of stream buffers.
- **5400 Wetlands**: coordination with local governments to ensure no net loss, improving wetland habitat, research on phosphorus cycling in wetlands, preservation and establishment of wetland buffers.
Progress toward goals

Qualitative Goals (cont’d)

• **5500 Upland Resources**: improving the beneficial use of upland areas for stormwater management, maintaining and restoring uplands, promoting uplands conservation

• **5600 Groundwater**: protection of groundwater quality and quantity, maintaining the function of groundwater-dependent natural resources

• **5700 Public Education**: providing education and outreach services to the public to increase knowledge of and appreciation for the resources of the District, increasing stewardship and participation in District programs

• **5800 Interagency Communication**: partnerships that ensure efficient and cost-effective use of funds for water resource management, coordination of efforts toward managing water resources
60-day Agency Comment Period

• Received initial comments from
  • Board of Water and Soil Resources
  • MN Dept. of Natural Resources
  • MN Dept. of Agriculture
  • Metropolitan Council
  • Washington County
  • Washington Conservation District
  • City of Forest Lake
<table>
<thead>
<tr>
<th>Issue Areas</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 5100 Floodplain</td>
<td>• 3001 Rules</td>
</tr>
<tr>
<td>• 5200 Lakes</td>
<td>• 3002 Permitting</td>
</tr>
<tr>
<td>• 5300 Streams</td>
<td>• 3003 Monitoring &amp; Data Assessment</td>
</tr>
<tr>
<td>• 5400 Wetlands</td>
<td>• 3004 Cost-Share</td>
</tr>
<tr>
<td>• 5500 Upland Resources</td>
<td>• 3005 Education &amp; Outreach</td>
</tr>
<tr>
<td>• 5600 Groundwater</td>
<td>• 3006 Technical Resource Sharing</td>
</tr>
<tr>
<td>• 5700 Public Education</td>
<td>• 3007 Research</td>
</tr>
<tr>
<td>• 5800 Interagency Communication</td>
<td>• 3008 Measurement of Progress</td>
</tr>
<tr>
<td></td>
<td>• 3009 Grant Research &amp; Preparation</td>
</tr>
<tr>
<td></td>
<td>• 3010 Operations &amp; Maintenance</td>
</tr>
<tr>
<td></td>
<td>• 3011 AIS Prevention &amp; Management</td>
</tr>
</tbody>
</table>
Public Input

- Outreach (and interagency communication) plan
- Webpage: www.clflwdplanupdate.org
- Survey (43 respondents so far)
- Kickoff event (June 11th, Arts in the Park)
- Stakeholder group direct outreach/small group mtgs
- District Tour (September 21)
- Public hearing/public meetings
Like Our Lakes?
Take the Survey
Get a FREE treat!
3. In general, do you think that our streams, lakes and wetlands are:

42 responses

- 45.2% Getting worse
- 19% Staying the same
- 19% Getting better
- 16.7% I don't know
4. Which of the following waterbodies in the CLFLWD are you familiar with or do you use?

<table>
<thead>
<tr>
<th>Waterbody</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest Lake</td>
<td>31</td>
<td>73.8%</td>
</tr>
<tr>
<td>Comfort Lake</td>
<td>19</td>
<td>45.2%</td>
</tr>
<tr>
<td>Little Comfort Lake</td>
<td>10</td>
<td>23.8%</td>
</tr>
<tr>
<td>Bone Lake</td>
<td>9</td>
<td>21.4%</td>
</tr>
<tr>
<td>Sylvan Lake</td>
<td>6</td>
<td>14.3%</td>
</tr>
<tr>
<td>Shields Lake</td>
<td>5</td>
<td>11.9%</td>
</tr>
<tr>
<td>Moody Lake</td>
<td>2</td>
<td>4.8%</td>
</tr>
<tr>
<td>Sunrise River</td>
<td>7</td>
<td>16.7%</td>
</tr>
<tr>
<td>Heims Lake</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Sea Lake</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>School/Birch Lakes (Chisago County)</td>
<td>5</td>
<td>11.9%</td>
</tr>
<tr>
<td>First/Second/Third/Lendt/Fourth Lakes (Chisago County)</td>
<td>1</td>
<td>2.4%</td>
</tr>
<tr>
<td>Nielson/Elwell/Cranberry/Twin/Clear Lakes (Washington County)</td>
<td>1</td>
<td>2.4%</td>
</tr>
</tbody>
</table>
5. How do you use the CLFLWD’s wetlands, lakes and streams?

42 responses

- I swim or visit beaches: 21 (50%)
- I go boating: 31 (73.8%)
- I fish: 27 (64.3%)
- I hunt: 5 (11.9%)
- I camp: 5 (11.9%)
- I participate in nature studies/walks: 11 (26.2%)
- I participate in water sports: 13 (31%)
- I like to bike or walk near the water: 14 (33.3%)
- I live near the water: 21 (50%)
- I don’t use wetlands, lakes or streams in CLFLWD: 1 (2.4%)
6. In your opinion and experience, which of the following are sources of pollution to the CLFLWD’s streams, lakes and wetlands?

40 responses

- City streets and county roads: 28 (70%)
- Construction sites: 20 (50%)
- Farms with livestock: 22 (55%)
- Lawns: 29 (72.5%)
- Leaves and other yard waste: 22 (55%)
- Litter: 22 (55%)
- Pet Waste: 15 (37.5%)
- Row crops: 15 (37.5%)
- Other: Motor boating: 1 (2.5%)
- Other: Forest Lake City development: 1 (2.5%)
- Other: Gasoline: 1 (2.5%)
- Other: Winnick’s scrap yard waste water drains into Clear Lake: 1 (2.5%)
7. Looking at the list below, which do you think should be the TOP 3 highest priorities for the District in the next 10 years?

42 responses

- Regulations: 7 (16.7%)
- Clean and safe streams, lakes, and wetlands: 34 (81%)
- Groundwater supply: 19 (45.2%)
- Healthy habitat: 21 (50%)
- Recreational opportunities and family activities: 9 (21.4%)
- Public involvement in decision-making process: 5 (11.9%)
- Education and outreach: 15 (35.7%)
- Monitoring and data collection: 15 (35.7%)
- Regulations - Fertilizer & Lawn Chemicals: 1 (2.4%)
- Other: 0
8. What is the most important thing the Comfort Lake - Forest Lake Watershed District should do to protect and improve wetlands, lakes and streams in the watershed?

Responses sorted into categories

- Public Education & Outreach
- Aquatic Invasive Species
- Regulatory
- Shoreline Erosion
- Service to Public
- Nonpoint Source Pollution
Future advisory committee meetings

- **September 2019** - Steps 6-8: Discuss results of needs assessment, review of relevant plans and programs, identify priority issues and goals

- **March 2020** - Step 12: Board and Advisory Committees discuss and provide direction on first draft
Final Discussions and Adjournment