Appendix F

Water Quality Summary
Growing Season Average for the Past 10-Years (2003-2012) = 59.4 µg/L

MPCA NCHF Deep Lake Standard ≤ 40 µg/L

Total Phosphorus Concentration

Growing Season Average for the Past 10-Years (2003-2012) = 35.7 µg/L

MPCA NCHF Deep Lake Standard ≤ 14 µg/L

Chl a Concentration (µg/L)

Growing Season Average for the Past 10-Years (2003-2012) = 1.6 m

MPCA NCHF Deep Lake Standard ≥ 1.4 m

Secchi Disc Transparency (m)
MEDICINE LAKE – Southwest Basin (23-0104-00-115)

**Growing Season Average for the Past 10-Years (2003-2012) = 58.4 µg/L**

**MPCA NCHF Deep Lake Standard ≤ 40 µg/L**

**Growing Season Average for the Past 10-Years (2003-2012) = 35.2 µg/L**

**MPCA NCHF Deep Lake Standard ≤ 14 µg/L**

**Growing Season Average for the Past 10-Years (2003-2012) = 1.6 m**

**MPCA NCHF Deep Lake Standard ≥ 1.4 m**
### Total Phosphorus Concentration

<table>
<thead>
<tr>
<th>Year</th>
<th>Samples</th>
<th>Total Phosphorus Concentration (µg/L)</th>
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</thead>
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<td>2002</td>
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**MPCA NCHF Deep Lake Standard**: ≤ 40 µg/L  
**Growing Season Average for the Past 10-Years (2003-2012)**: 30.2 µg/L

### Chlorophyll a Concentration

<table>
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<th>Samples</th>
<th>Chlorophyll a Concentration (µg/L)</th>
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</thead>
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<td>2010</td>
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**MPCA NCHF Deep Lake Standard**: ≤ 14 µg/L  
**Growing Season Average for the Past 10-Years (2003-2012)**: 11.2 µg/L

### Secchi Disc Transparency

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<th>Secchi Disc Transparency (m)</th>
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</thead>
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<td>2010</td>
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</tbody>
</table>

**MPCA NCHF Deep Lake Standard**: ≥ 1.4 m  
**Growing Season Average for the Past 10-Years (2003-2012)**: 2.4 m
**Sweeney Lake – North Basin (27-0035-01-201)**

### Total Phosphorus Concentration (µg/L)
- **Growing Season Average for the Past 10-Years (2003-2012) = 53.6 µg/L**
- **MPCA NCHF Deep Lake Standard ≤ 40 µg/L**

### Chlorophyll a Concentration (µg/L)
- **Growing Season Average for the Past 10-Years (2003-2012) = 19.4 µg/L**
- **MPCA NCHF Deep Lake Standard ≤ 14 µg/L**

### Secchi Disc Transparency (m)
- **Growing Season Average for the Past 10-Years (2003-2012) = 1.5 m**
- **MPCA NCHF Deep Lake Standard ≥ 1.4 m**
SWEENEY LAKE – South Basin (27-0035-01-101)

**Total Phosphorus Concentration (µg/L)**

- Growing Season Average for the Past 10-Years (2003-2012) = 56.8 µg/L
- MPCA NCHF Deep Lake Standard ≤ 40 µg/L

**Chl a Concentration (µg/L)**

- Growing Season Average for the Past 10-Years (2003-2012) = 18.5 µg/L
- MPCA NCHF Deep Lake Standard ≤ 14 µg/L

**Secchi Disc Transparency (m)**

- Growing Season Average for the Past 10-Years (2003-2012) = 1.4 m
- MPCA NCHF Deep Lake Standard ≥ 1.4 m
TWIN LAKE

Growing Season Average for the Past 10-Years (2003-2012) = 33.1 µg/L

MPCA NCHF Deep Lake Standard ≤ 40 µg/L

Growing Season Average for the Past 10-Years (2003-2012) = 8.5 µg/L

MPCA NCHF Deep Lake Standard ≤ 14 µg/L

Growing Season Average for the Past 10-Years (2003-2012) = 2.6 m

MPCA NCHF Deep Lake Standard ≥ 1.4 m
WESTWOOD LAKE

Growing Season Average for the Past 10-Years (2003-2012) = 56.1 µg/L

MPCA NCHF Shallow Lake Standard ≤ 60 µg/L

Westwood Lake
Growing Season Average (June-September)
Total Phosphorus Concentration

Growing Season Average for the Past 10-Years (2003-2012) = 11.6 µg/L

MPCA NCHF Shallow Lake Standard ≤ 20 µg/L

Westwood Lake
Growing Season Average (June-September)
Chlorophyll a Concentration

Growing Season Average for the Past 10-Years (2003-2012) = 1.2 m

MPCA NCHF Shallow Lake Standard ≥ 1.0 m

Westwood Lake
Growing Season Average (June-September)
Secchi Disc Transparency

n=x: Number of Samples in Growing Season Average
NORTHWOOD LAKE

Growing Season Average for the Past 10-Years (2003-2012) = 199.2 µg/L

MPCA NCHF Shallow Lake Standard ≤ 60 µg/L

Total Phosphorus Concentration

Growing Season Average for the Past 10-Years (2003-2012) = 22.7 µg/L

MPCA NCHF Shallow Lake Standard ≤ 20 µg/L

Chl a Concentration µg/L

Growing Season Average for the Past 10-Years (2003-2012) = 1.0 m

MPCA NCHF Shallow Lake Standard ≥ 1.0 m

Secchi Disc Transparency (m)
SUNSET HILL POND

Growing Season Average for the Past 10-Years (2003-2012) = N/A

Sunset Hill Pond
Growing Season Average (June-September)
Secchi Disc Transparency

n=x: Number of Samples in Growing Season Average

Secchi Disc Transparency (m)

MPCA NCHF Shallow Lake Standard ≥ 1.0 m

0.7
HIDDEN LAKE

Growing Season Average for the Past 10-Years (2003-2012) = 30.6 µg/L

Total Phosphorus Concentration (µg/L)

MPCA NCHF Shallow Lake Standard ≤ 60 µg/L

n=x: Number of Samples in Growing Season Average

Growing Season Average (June-September)

Hidden Lake

Growing Season Average for the Past 10- Years (2003-2012) = 7.7 µg/L

Chl a Concentration (µg/L)

MPCA NCHF Deep Lake Standard ≤ 14 µg/L

n=x: Number of Samples in Growing Season Average

Hidden Lake

Growing Season Average (June-September)

Chlorophyll α Concentration

Growing Season Average (June-September)

Secchi Disc Transparency (m)

MPCA NCHF Deep Lake Standard ≥ 1.4 m

n=x: Number of Samples in Growing Season Average

Growing Season Average for the Past 10-Years (2003-2012) = 1.8 m

Hidden Lake

Growing Season Average (June-September)

Secchi Disc Transparency