# Setting Your Exploration Boundaries

### **Cross Lake in the Pine River Watershed**

You are preparing for an annual meeting with landowners that live on Cross Lake near the center of the Pine River Major Watershed. While their primary interest is in the health of the local lake, you have decided to start your presentation using the major watershed boundary (masked below) as your point of view. <u>Click to open this WHAF map</u>.



### Why start with the major watershed?

The Pine River major watershed is a 'true watershed'. All the surface water that flows to the lakes in the Pine River major watershed originate within the major watershed boundary. That makes the major watershed is a good spatial scale to explore connections between lake conditions and patterns of land use. These Pine River resources can help you easily share watershed information with landowners:

- Watershed Context Report
- Watershed Health Report Card
- Pine River Land Cover Chart

You can also show a flyover of the watershed that follows the Pine River.

• Open the Pine River Google Earth Flyover and follow the instructions.

### DEPARTMENT OF NATURAL RESOURCES

mndnr.gov/whaf

Why look upstream of the lake?



The 'upstream' watershed (masked above) is the land area that delivers surface water to Pine River, which then flows into Cross Lake. Opening the <u>land use chart</u> at the upstream scale confirms a diverse landscape dominated by forest, wetlands and open water with little change in developed lands.



Land Cover Class

## DEPARTMENT OF NATURAL RESOURCES

mndnr.gov/whaf

### Why look downstream of the lake?



Cross Lake is a reservoir created by a dam at the outlet. A dam has been at that location since 1886. Managing a reservoir is different than managing a natural lake with compromises required for creating hydropower while considering impacts to property owners, water quality, fish passage and recreational use.

#### Share the exploration

After investigating and collecting insights across scales, your next step is to share your investigation with others. Share links to your maps to encourage local citizens to get familiar with their landscape and examine their watershed across boundaries.

- Pine River Major Watershed
- Upstream watershed for Cross Lake
- <u>Cross Lake Dam</u>
- Downstream of Cross Lake