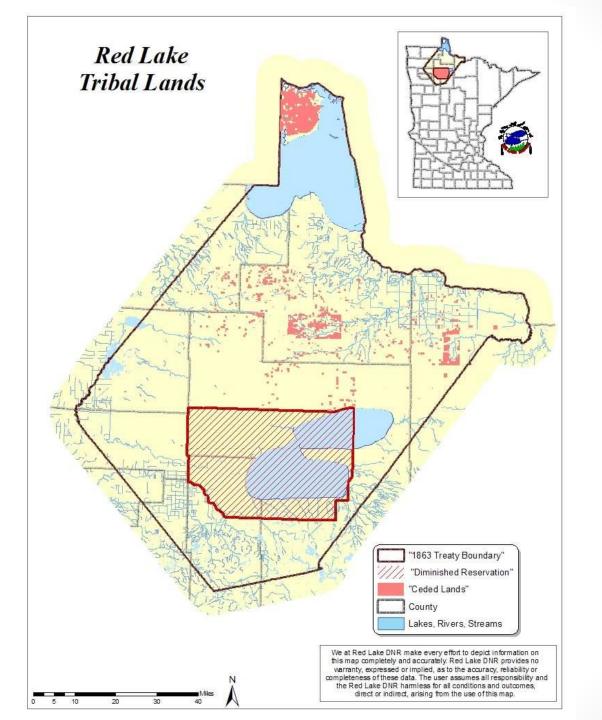
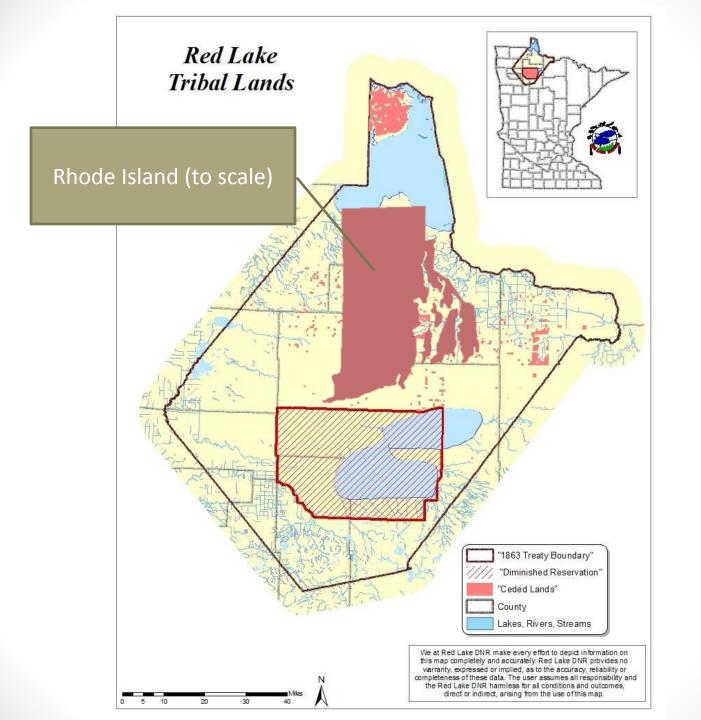
# State and Tribal Cooperative Work at Red Lake Reservation, MN.

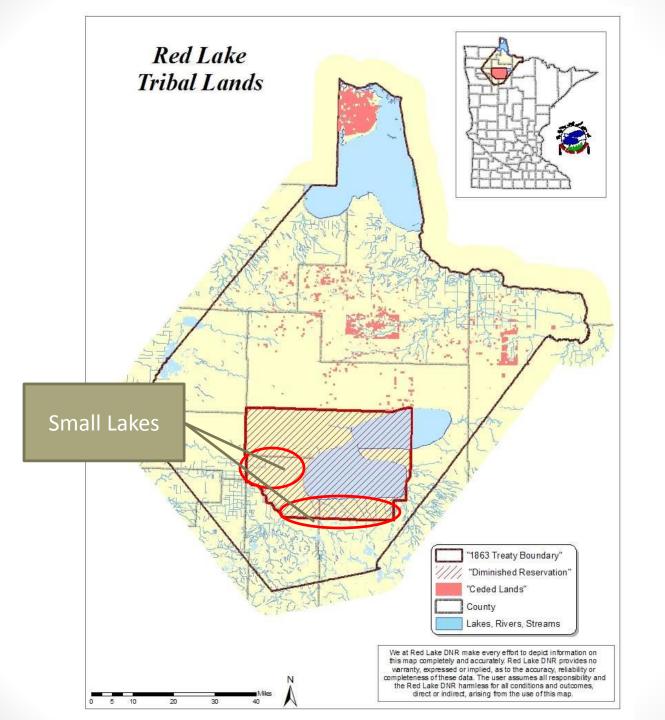


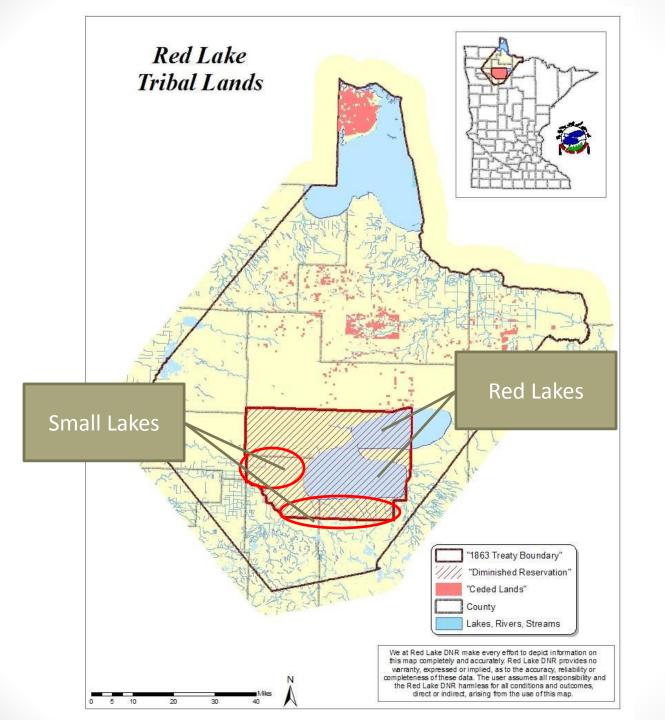
### Introduction

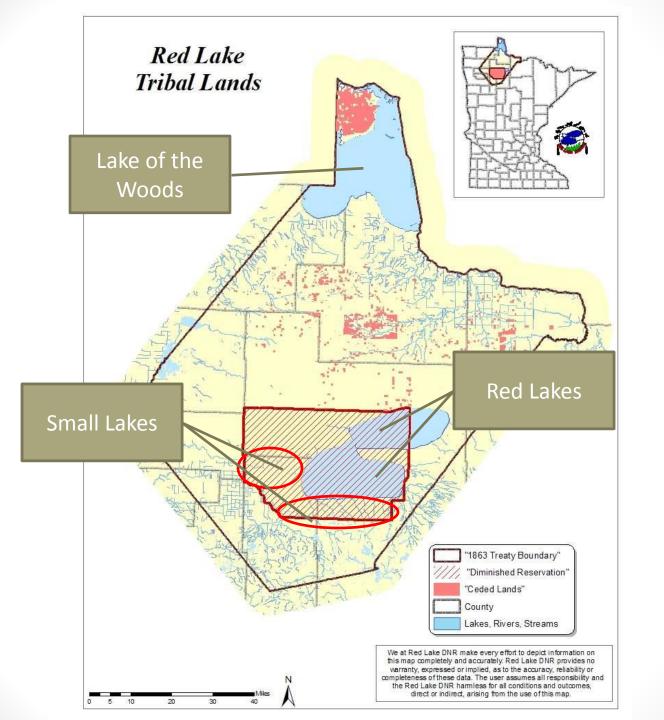
- Red Lake Reservation description
- Examples of cooperative efforts
- WRAPS (Watershed Restoration and Protection Strategy)
- Impairment of shared waters
- Moving forward













### **Examples of Cooperative Efforts**

- Long history of combined monitoring effort in the watershed
- MPCA assisted Red Lake in developing draft WQS in the 90s
- Bioassessment
- Watershed Assessment Team determines appropriate data for impairment determination
- Data sharing
- WRAPS

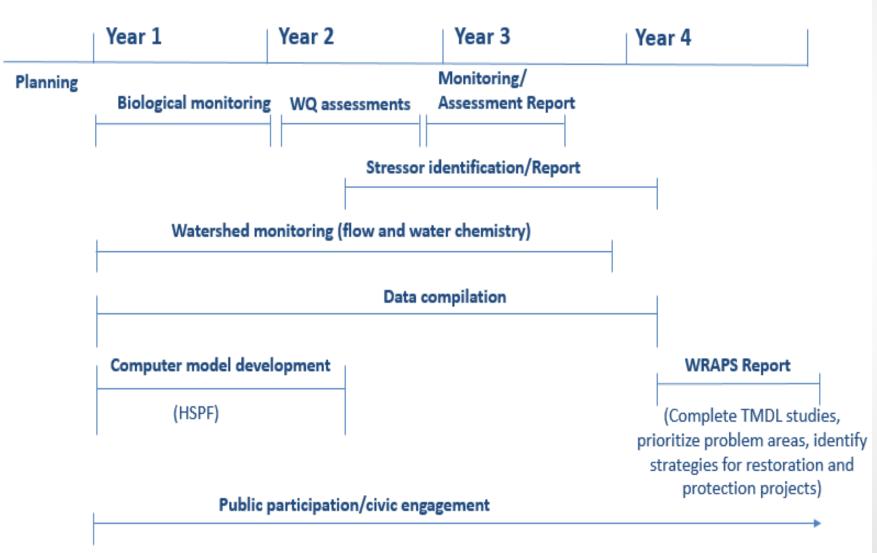
### **WRAPS** Components

- Intensive Watershed Monitoring Assessment
- Stressor Identification
- Watershed Model (Hydrologic Simulation Program Fortran – HSPF)
- TMDL Study
- WRAPS Report
- Public Participation

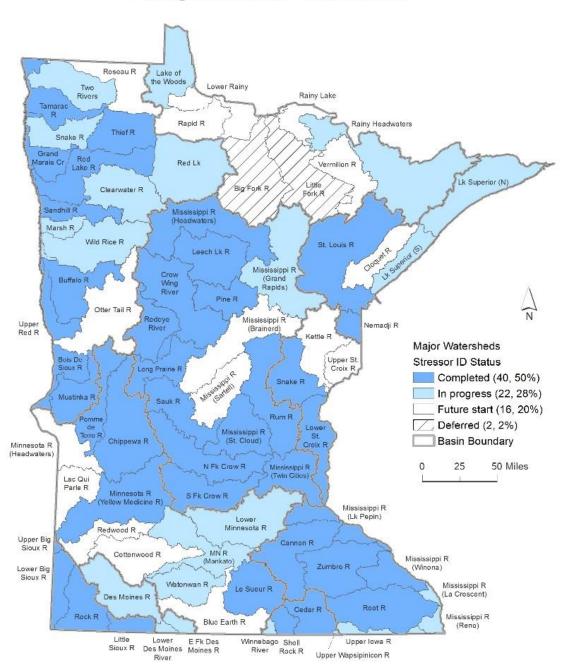
### The WRAPS (Watershed Restoration and Protection Strategy) process

Generalized work elements and timeline

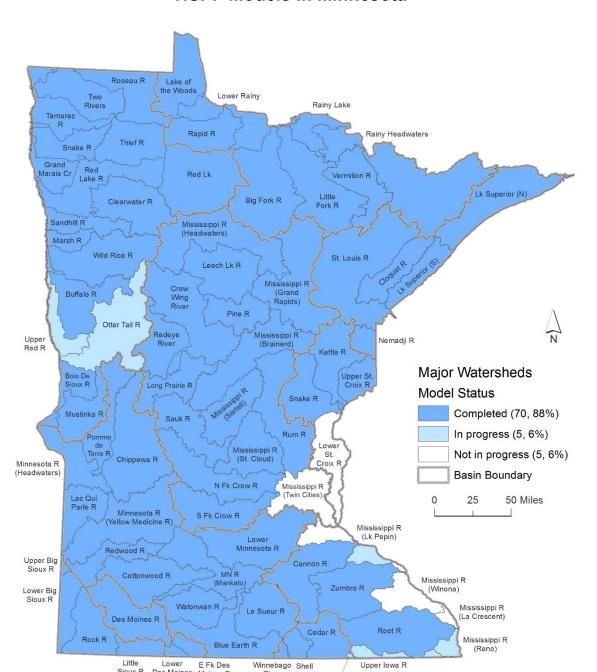
Intensive watershed monitoring starts



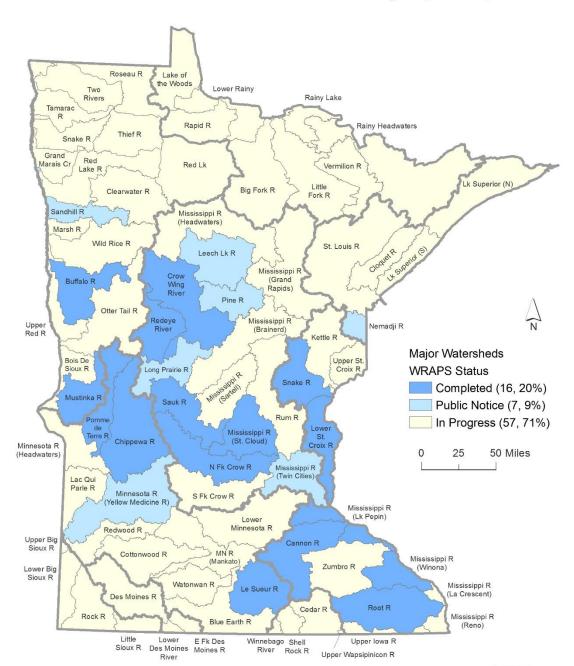
#### **Biological Stressor Identification**

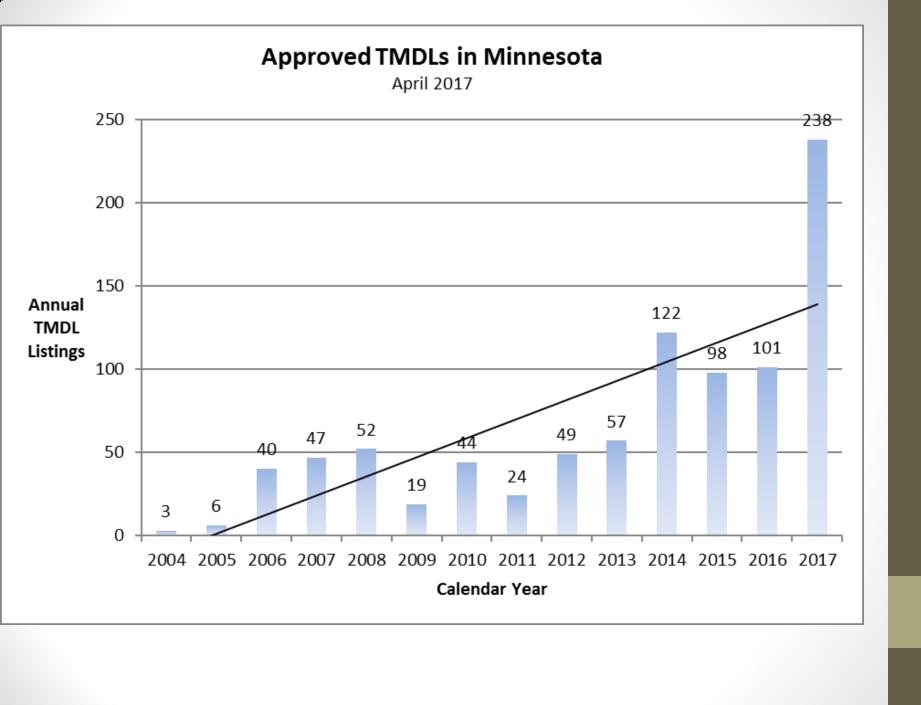


#### **HSPF Models in Minnesota**



#### Watershed Restoration and Protection Strategies (WRAPS)





### Impairment of Shared Waters

- MPCA policy regarding shared jurisdiction and tribal jurisdiction.
- Upper and Lower Red Lake are not meeting the state's criteria.
- Cooperative decision
- Moving forward with a study to determine site specific standards without listing
- Resulted in an effort by Red Lake Tribal DNR to develop an MOU for all shared waters
  - This effort is underway now

## Moving Forward

- Complete WRAPS by 2019
- Fund Site Specific Standard Study for Lake
- Cooperate With BWSR on Implementation activities if desired by Tribe
- Explore Possibility of Cooperation in a One
  Watershed One Plan effort if desired by Tribe.
- Cycle 2 Monitoring and Assessment
- MOU and water quality standards

