Wood, Water, and Wildlife: Connecting the Dots

Jim Dexter, Chief
DNR Fisheries Division
March 30, 2017 SAF



Michigan's World-Class Forests and Waters

- 20 million acres of forests
- 3,000 miles of Great Lakes shoreline, 11,000 inland lakes and tens of thousands of miles of rivers and streams



Healthy forests, healthy fisheries

- 80% of U.S. freshwater originates in forests
- Forests cover 34% of U.S. land; 56% of Michigan land



What is "Forests for Fish"?

- A collaboration to help natural resource professionals demonstrate how Michigan's forests provide abundant clean water and quality fish habitat
- Funded by the USFS, State and Private Forestry















Wood is Good!

- Healthy fisheries rely on:
 - Clean water
 - Wood recruitment
- These provide:
 - Habitat
 - Grade Control
 - nutrients



Trees help streams!

Trees:

- filter water/reduce pollution
- reduce erosion
- Minimize the effects of flooding
- Maintain habitat—shade, food, cover, enrich oxygen levels



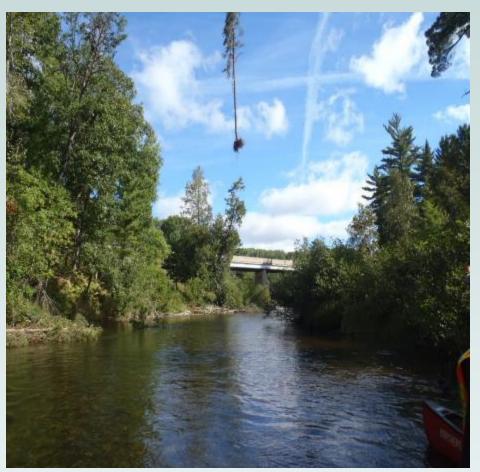
Public land

- Fisheries
 biologists and
 foresters already
 work together on
 public land
 - Compartment reviews
 - Habitat improvement



Tree Drops

- Working together on the Au Sable
 - Lack of recruitment
 - Lack of habitat
 - Lack of channel diversity
 - Overall lack of!!



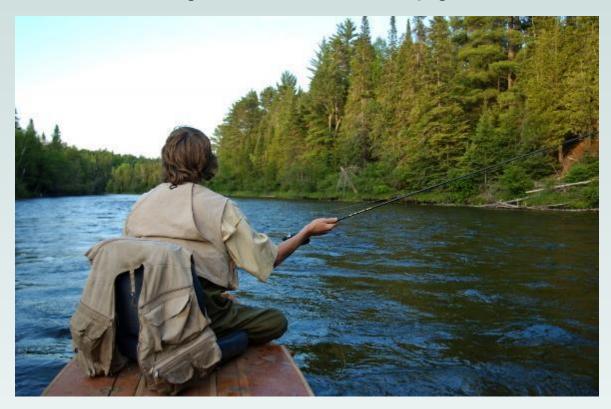
Private land

 How can biologists and foresters work together on private land?



Economics and Scale

- Commercial fishing: \$12 million/year
- Sportfishing: \$2.4 billion/year
- Forest Industry: \$20 billion/year



We need to pay attention to: Fish Habitat and Land Use

- Urban land use
- Agricultural land use
- Forest land use



We need to pay attention to: Fish Populations



What species have:

- Declining?
- Stable?
- Increasing?
- T&E species
- Extirpated species

Fish Habitat

- Stream or lake bottom
- Water quality
 - Sediment
 - Temperature
- Structure



Final Harvests



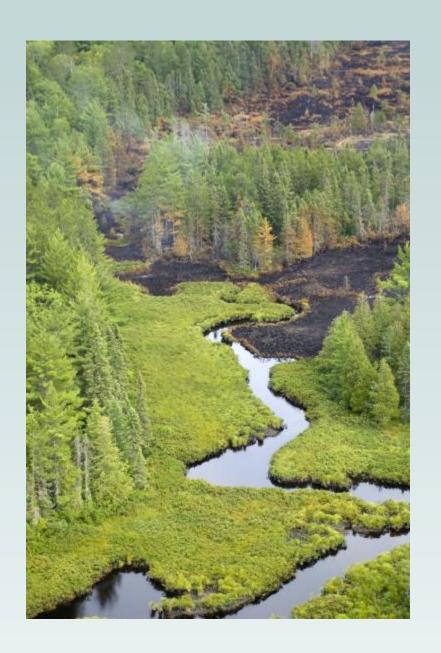


Thinnings









Fire

- Erosion risk
- Invasive species



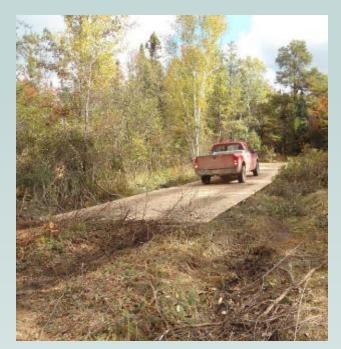




Ruts







Composite mats





Stream Crossings









Regeneration

 Healthy forests provide quality fish habitat







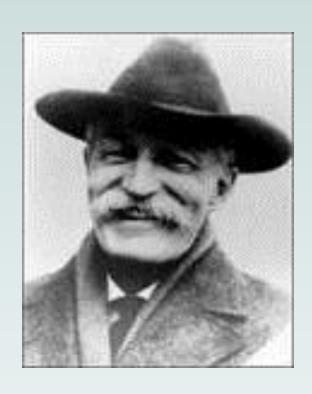
Public Trust & Our Responsibilities

- Natural resources are reserved for public use
- Protect, maintain, and improve the resources



- Consultation can be painful, but it's your job
- If it's the right thing to do, slow down and educate
- Be honest and sincere, listen to others viewpoints
- Great communications= great support

Public Trust, Gifford Pinchot and his Maxims



Thank You for Everything You do!

