



TU and Forests

Michigan Society of American Foresters – October 5, 2017

Grayling, MI

Dr. Bryan Burroughs – Exec. Dir. MI Trout Unlimited

Our Mission

To conserve, protect and restore North America's coldwater fisheries and their watersheds.

Our Vision

By the next generation, Trout Unlimited will ensure that robust populations of native and wild coldwater fish once again thrive within their North American range, so that our children can enjoy healthy fisheries in their home waters.

About Trout Unlimited



TU formed in Michigan in 1959.

TU is a national organization with more than 150,000 members organized into about 400 chapters from Maine to Montana to Alaska. Currently has >200 professional staff.

MITU, statewide council of 20 MI local chapters. 8,000 members, 2 fulltime professional staff, 2-7 seasonal or short-term staff/interns.

6 other TU (Nat'l) staff located in MI
(3 working on national forest lands)



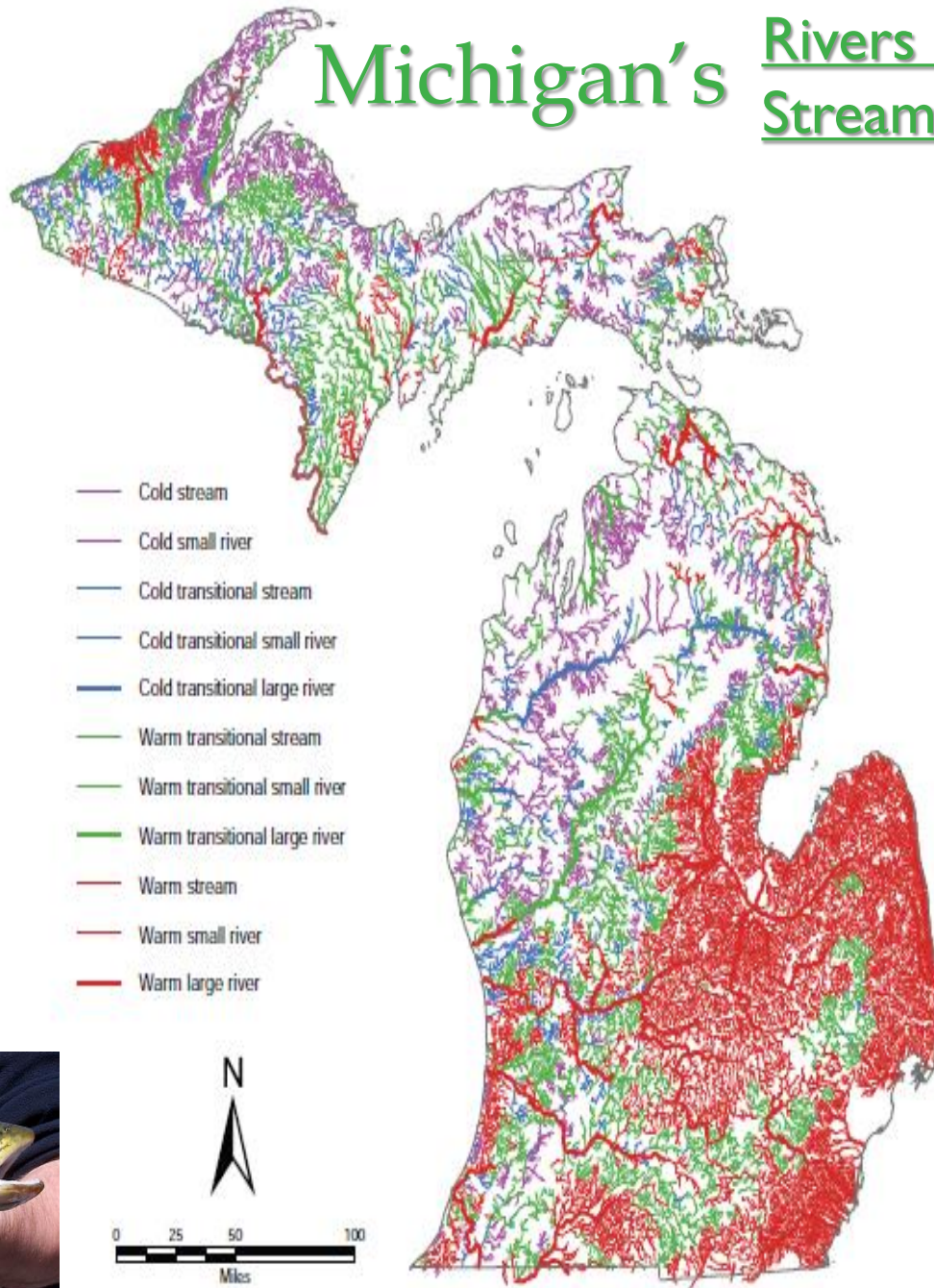
TU's strength is in its legion of dedicated and passionate members and volunteer leaders.

TU focuses on ensuring the health of coldwater fish through work involving:

- habitat enhancement
- resource protection
- research
- education and stewardship engagement
- advocacy



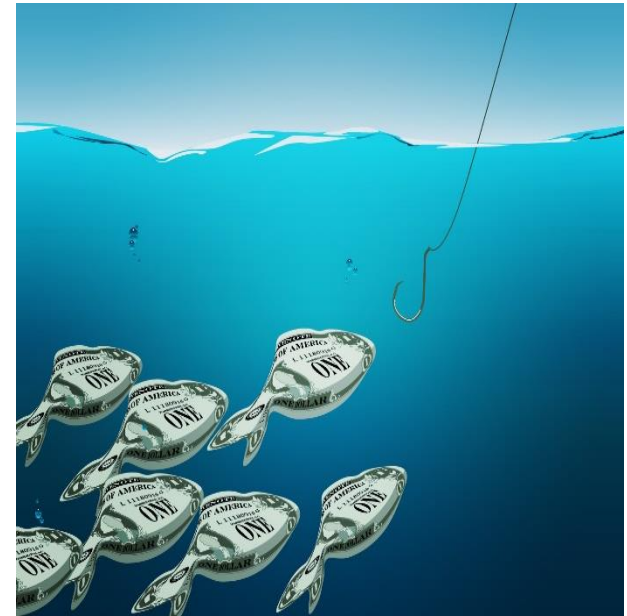
Michigan's Rivers & Streams



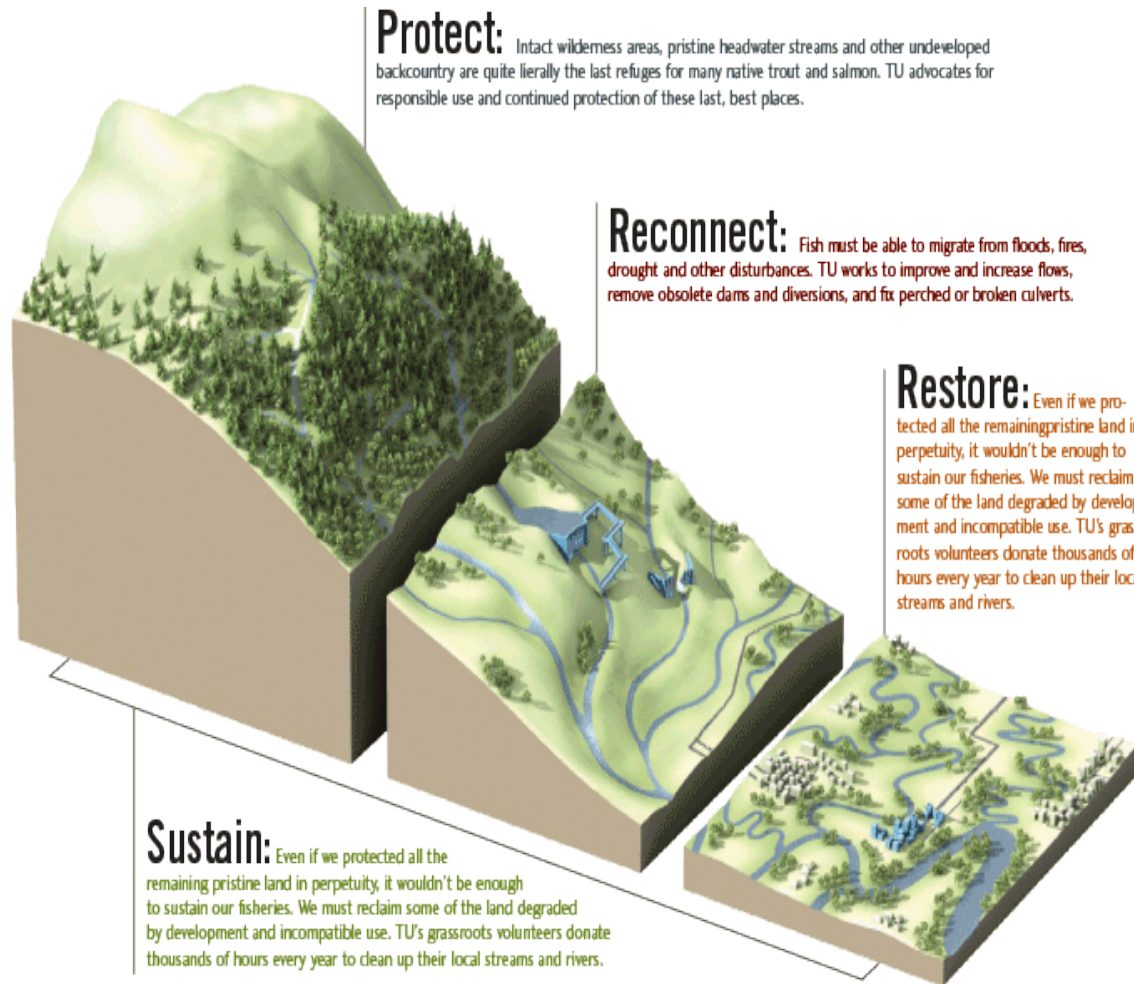
Importance of Fisheries in Michigan



1.4 – 1.7 million anglers fishing Michigan
2nd in US States for non-resident fishing visitors (347,000)
28 million total fishing days
3rd in US states for total angler expenditures
\$2.5 billion in retail sales, \$4.3 billion in ripple effect
\$1.5 billion in salaries & wages
38,000 jobs
\$335 million in federal tax revenue
\$287 million in state and local tax revenue



from most recent, 2011 ASA analysis



Trout Unlimited's watershed approach to coldwater fisheries management includes Protect, Reconnect, Restore and Sustain elements, providing an important approach to climate change adaptation and many other complex problems affecting stream systems. Illustration by Bryan Christie Design for TU.

Coldwater Fish and Forests



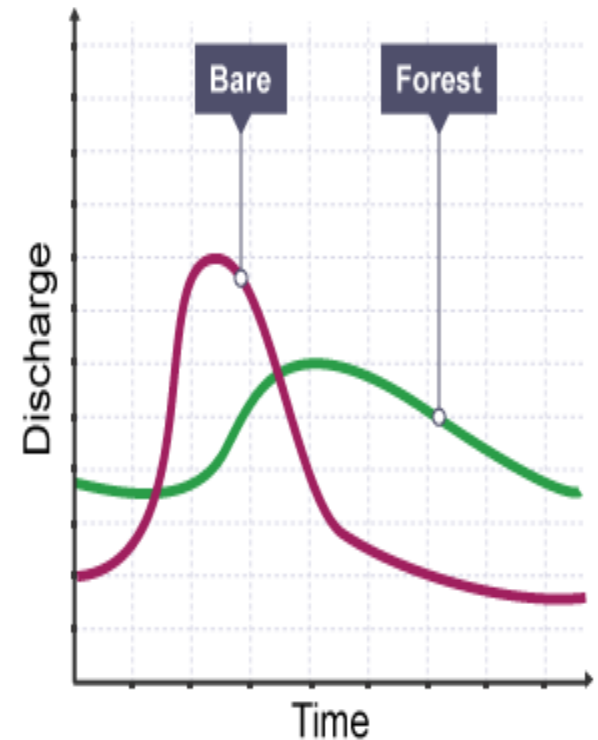
- ✦ Land use has significant impacts on water quality and quantity, and forests are **CRITICAL** for providing abundant clean water.
- ✦ About 80 percent of the surface freshwater in the United States originates in our forests that cover only 34 percent of our nation's land area.
- ✦ In Michigan, forests cover 56 percent of our land, and play a vital role in producing clean water for domestic, commercial and ecological needs.

Forested Watersheds (land cover)

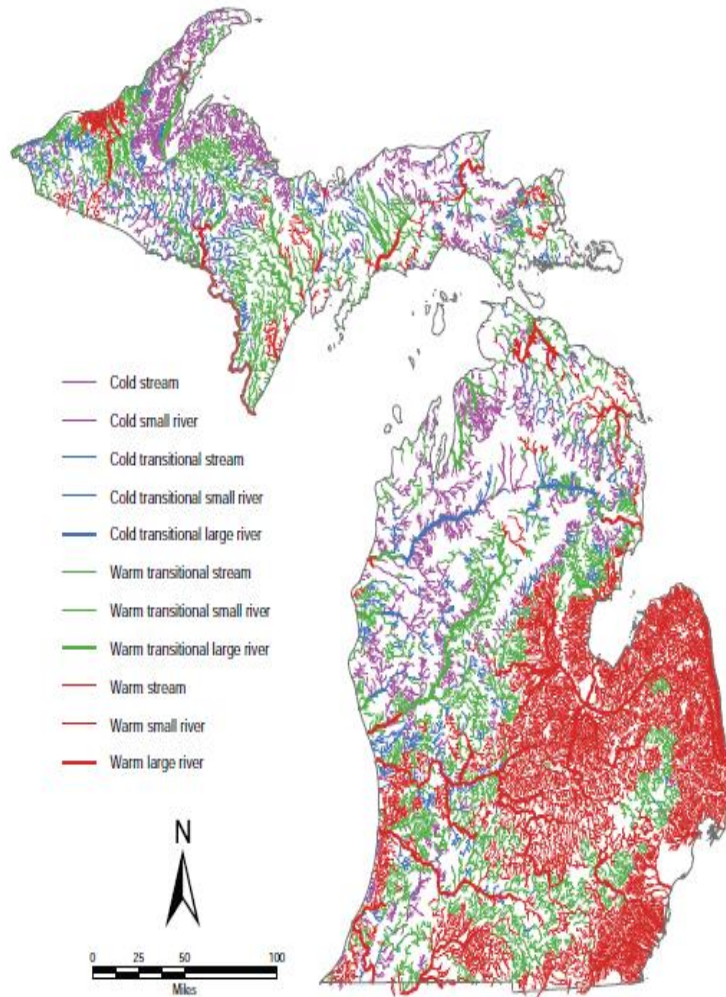


- Numerous research studies show more % forested land cover in a watershed:
 - Higher base flows
 - More stable, less “flashy” stream flows
 - Improved water quality
 - Higher quality aquatic insect communities
 - Better fish populations
- * *as compared with urban or agricultural lands*

Other factors



Forested Watersheds (land cover)



Forested Stream Corridors (buffers)



Forested Stream Corridors...

- Prevent erosion and sedimentation in streams,
 - Increases fish and insect productivity
 - Helps maintain narrower/deeper stream channel shape
- Trees along the banks
 - Help shade streams, keep water temps colder
 - Provide leaf litter, major source of primary energy input
 - Dead fallen trees in stream are important for dozens of r



Forests for Fish Program



“**Forests for Fish**” is a three year project to bring together foresters, loggers and fisheries stewards to promote the message that:

“**Michigan’s forests provide abundant clean water and quality fish habitat.**”

“**Healthy forests sustain healthy fisheries.**”

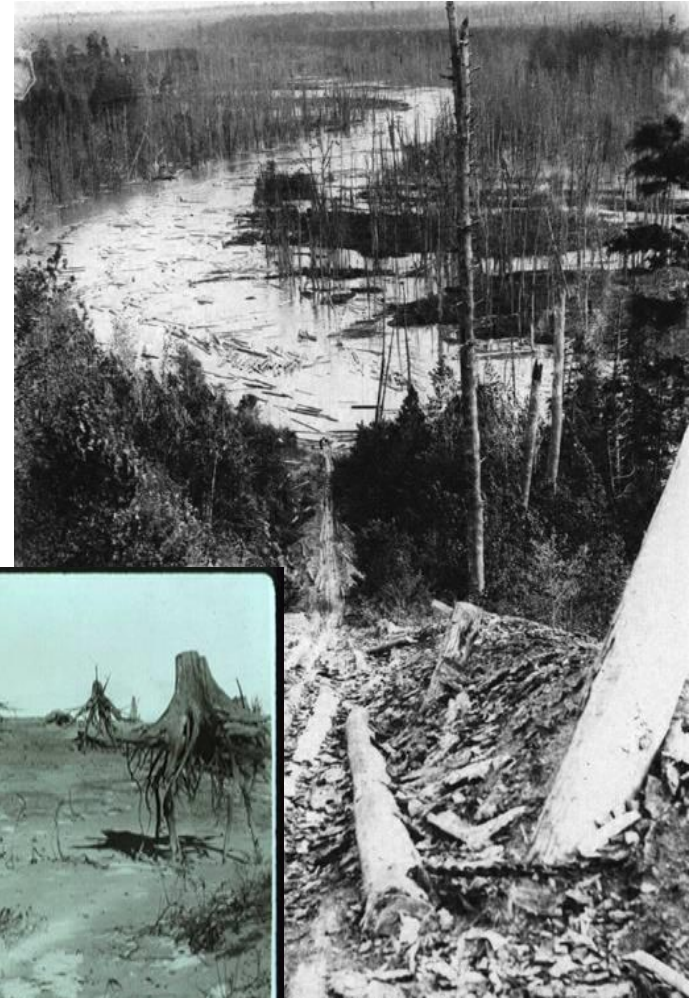


Forests for Fish Program



- 👉 Program Deliverables to watch for
 - Website
 - Publications
 - Short online videos
 - Workshops
- 👉 Resources for explaining how BMP's help
- 👉 Resources for going past BMP's to actively enhance stream fisheries

A forester's importance to coldwater fisheries



A forester's importance to coldwater fisheries



Today

- Forestry and fisheries management have progressed mightily in 100 years
- Forestry has developed and is using BMP's
- Fisheries is learning about fish ecology and how to restore/protect it
- Fisheries are backlogged with things to fix, and cant afford to address more than the smallest percentage of top priorities. Immediate fixes are incredibly expensive, and usually only partly effective.
- Work to restore urban or agricultural streams is difficult
- Stressors for coldwater fisheries are constant, and with climate change, are expected to accelerate. Heavily forested watersheds will be the strongholds for coldwater fish.

A forester's importance to coldwater fisheries



- Thinking Like a Mountain... or thinking like a Forest(er)...
 - Foresters have a longer perspective in planning than a fisheries manager
 - Forested acres are needed to maintain healthy watersheds
 - Universal implementation of effective BMP's protect aquatic systems
 - Active & progressive management in riparian zones for stream enhancement could accelerate improvement to aquatic systems.

A forester's importance to coldwater fisheries



- ✦ So... hearing everything at this conference about forests and stable flows, cold water temps, sedimentation, nutrients and food webs, wood debris and the complex interactions that determine a healthy fishery...
- ✦ Who has the greater ability to ensure our grandchildren have clean water, and beautiful places left to fish for robust coldwater fisheries?
Foresters or Fisheries Biologists?
- ✦ **You do!**

THANK YOU



We look forward to working with all of you;

www.michigantu.org

517-599-5238

