# EnviroDIY Brings Together Non-Profits, Communities, and Agencies to Monitor Aquatic Resources



#### **TU Community Science**



#### TU Community gathering scientific information about the fish and the places they love.



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.



#### Importance of Temperature

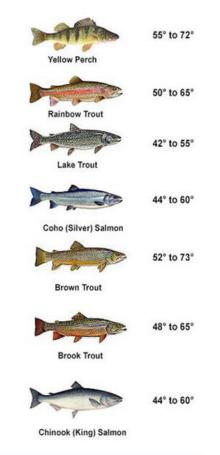


#### **Favored Temperature Ranges**

Listed below are the favored temperature ranges where digestive systems function best, and the oxygen content is high enough. *Usually, the best conditions exist in the middle of the range.* 

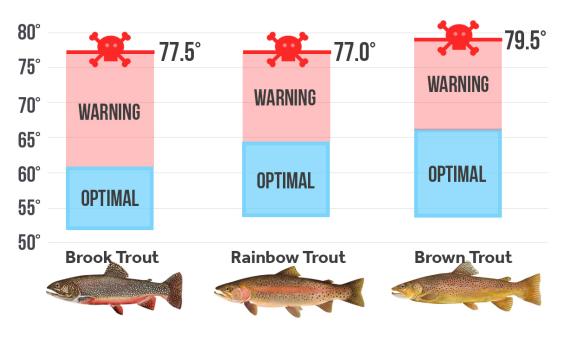
B400	Muskellunge	55° to 73°
日四四〇〇〇日四日	Northern Pike	55° to 75°
	Walleye	53° to 72°
වසසය	Crappie	65° to 75°
四百日白世四日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日		65° to 75°
四母四回四	Bluegill  Largemouth Bass	60° to 77°
8		58° to 71°

Smallmouth Bass



#### Warming Out of Range

Trout temperature zones



Source: Morrow, Jr. and Fischenich, 2000

CLIMATE COD CENTRAL

#### TU and EnviroDIY



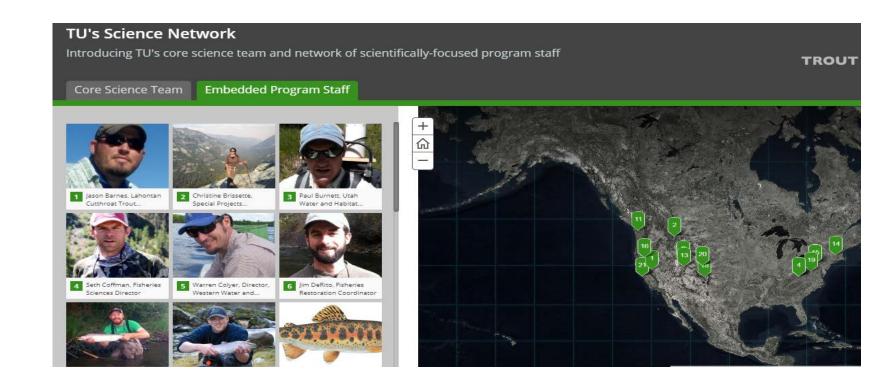




### TU's Community Science Framework



- Science Team
- Volunteer Operations
- Science Coordinators
- Project Staff
- TU Grassroots



https://www.tu.org/science/science-engagement/community-science/

#### How We Work

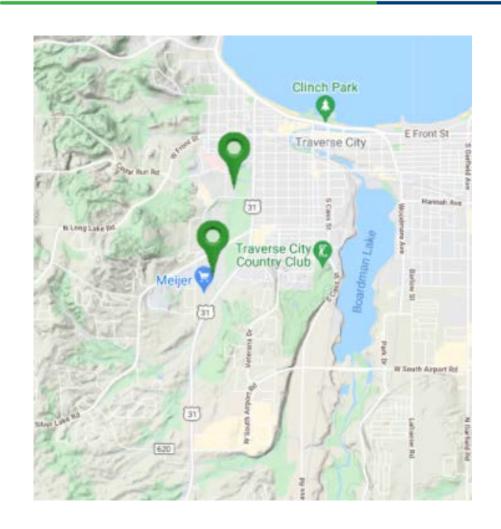


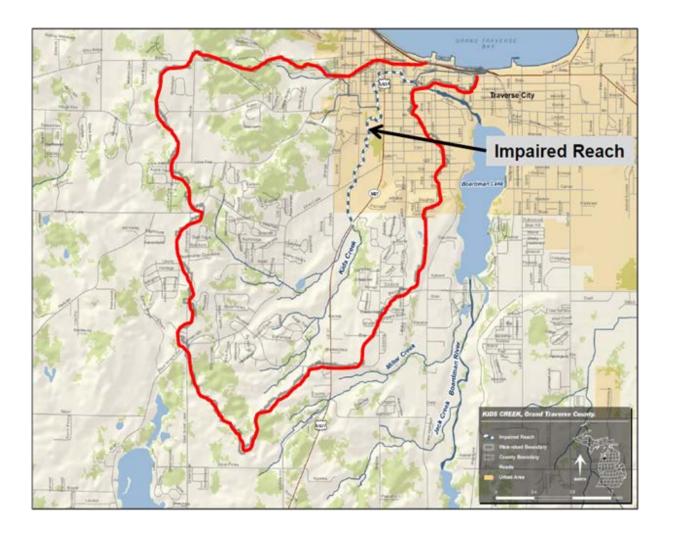




#### Kids Creek



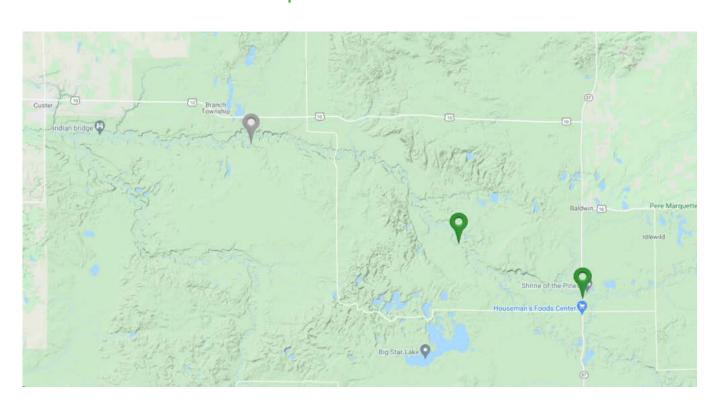




# Leveraging Recreation to Monitor Aquatic Resources



Pere Marquette Watershed







# Beaver Dam Analogs: A Solution for Suspended Sediment





# Maintaining in-stream flows by monitoring irrigation





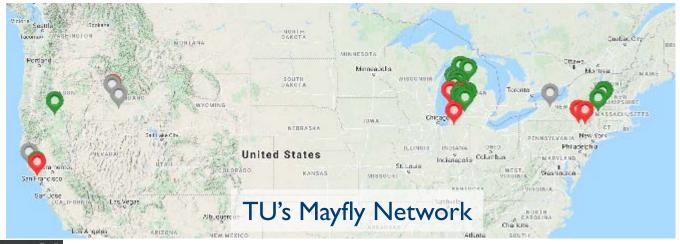


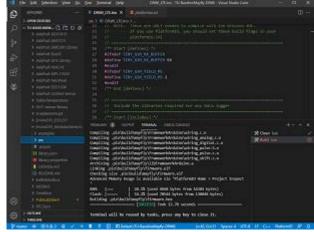
### Technical Challenges and Solutions



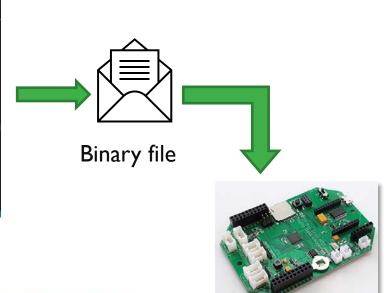
Q: How to support Mayfly deployments across a nationwide organization?

A: Limit the spread of complexity.







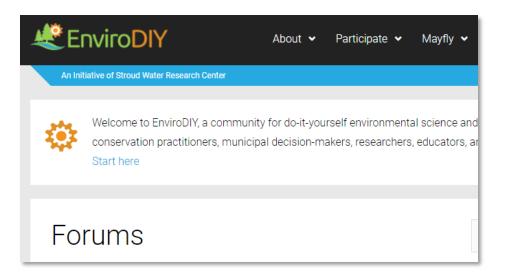


#### Technical Challenges and Solutions, continued



Q: How to support Mayfly deployments across a nationwide organization?

A2: Leverage EnviroDIY community as much as possible!





#### Contacts

Jake Lemon – jlemon@tu.org

Matt Barney – mbarney@tu.org

