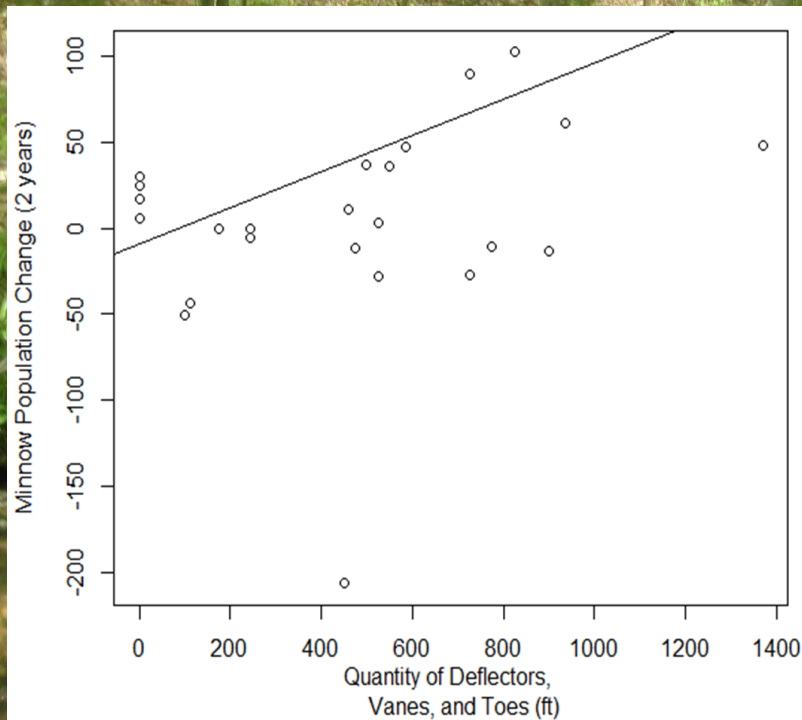


Susquehanna University Fisheries Research Updates

Dr. Jonathan Niles
Freshwater Research Initiative
Susquehanna University

Farm Streams Research

Worked in collaboration with NPC, DEP, PFBC, and Conservation Districts to monitor BMP's and bank stabilization structures at 30+ sites



Unassessed Waters

Sampled 88 sites looking for wild trout for PFBC

South Branch Towanda Creek (Bradford County)

Shermans Creek (Perry County)

Cocolamus Creek (Juniata County)

Lititz Run (Lancaster County)

Conewago Creek (Adams County)

A few other locations

Unassessed Waters

Sampled 88 sites looking for wild trout for PFBC

Overall, we found wild trout at only 15 of the 88 sample sites.

Eight of the sites had only wild Brook Trout (Shermans Creek)

One site had only wild Brown Trout. (Cocolamus Creek)

Six sites had wild Rainbow Trout (Lititz Run)

Unassessed Waters



Wild Rainbow Trout in Lititz Run

Unassessed Waters



Wild Brook Trout in UNT to Sherman Creek

Plunketts Creek Berm Removal Study

Worked in collaboration with NPC, PA Game Commission, Loyalsock Creek Watershed Association, and Foundation for Pennsylvania Watersheds to evaluate existing conditions for trout on Plunketts Creek at SGL 134

Plunketts Creek Berm Removal Study

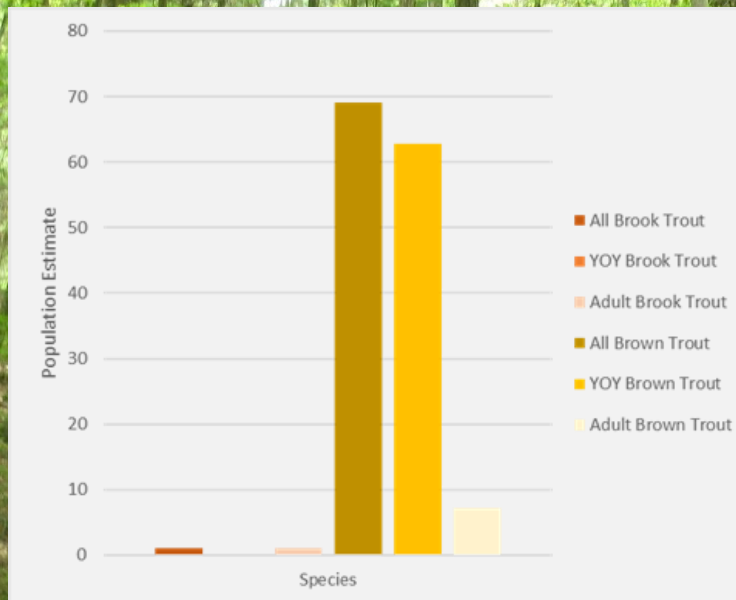


Electrofishing

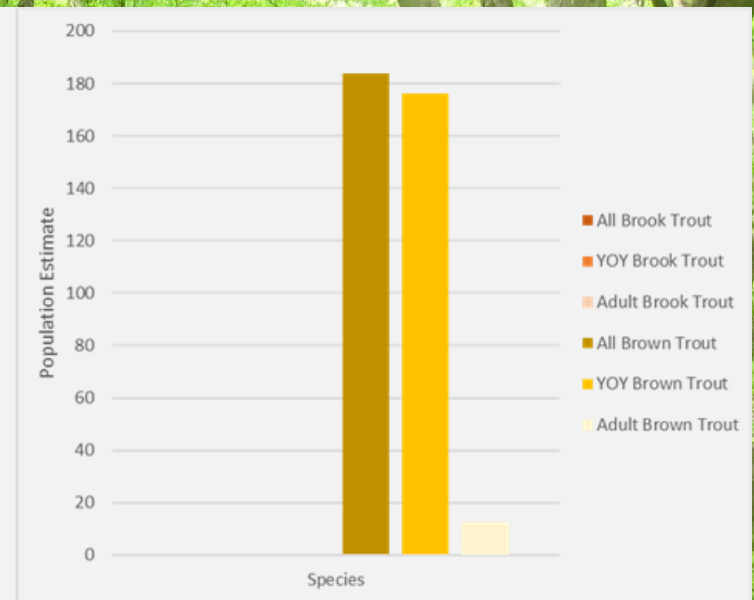


Sediment sizes and habitat

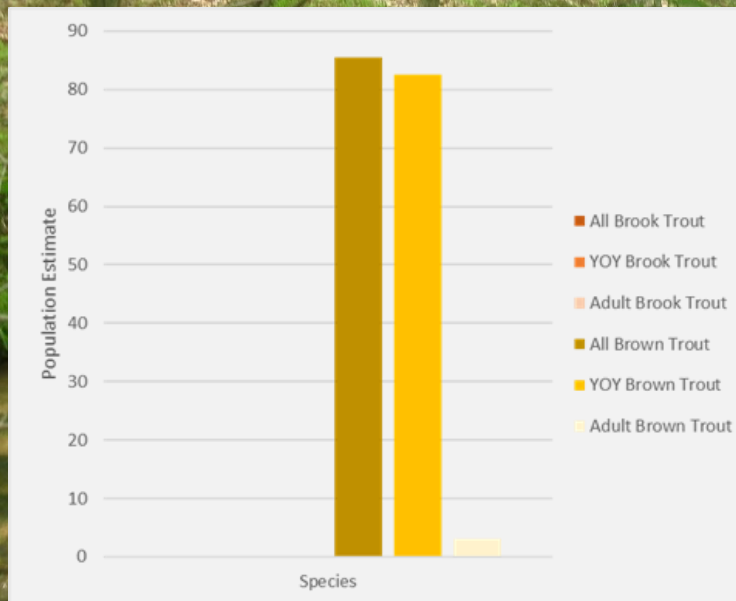




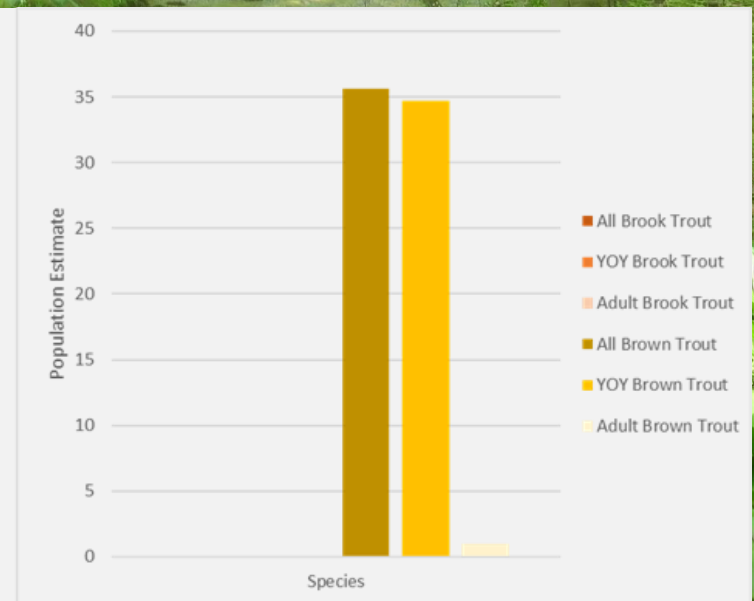
Downstream of Berm Removal



Berm Removal



Berm Removal & Habitat Addition

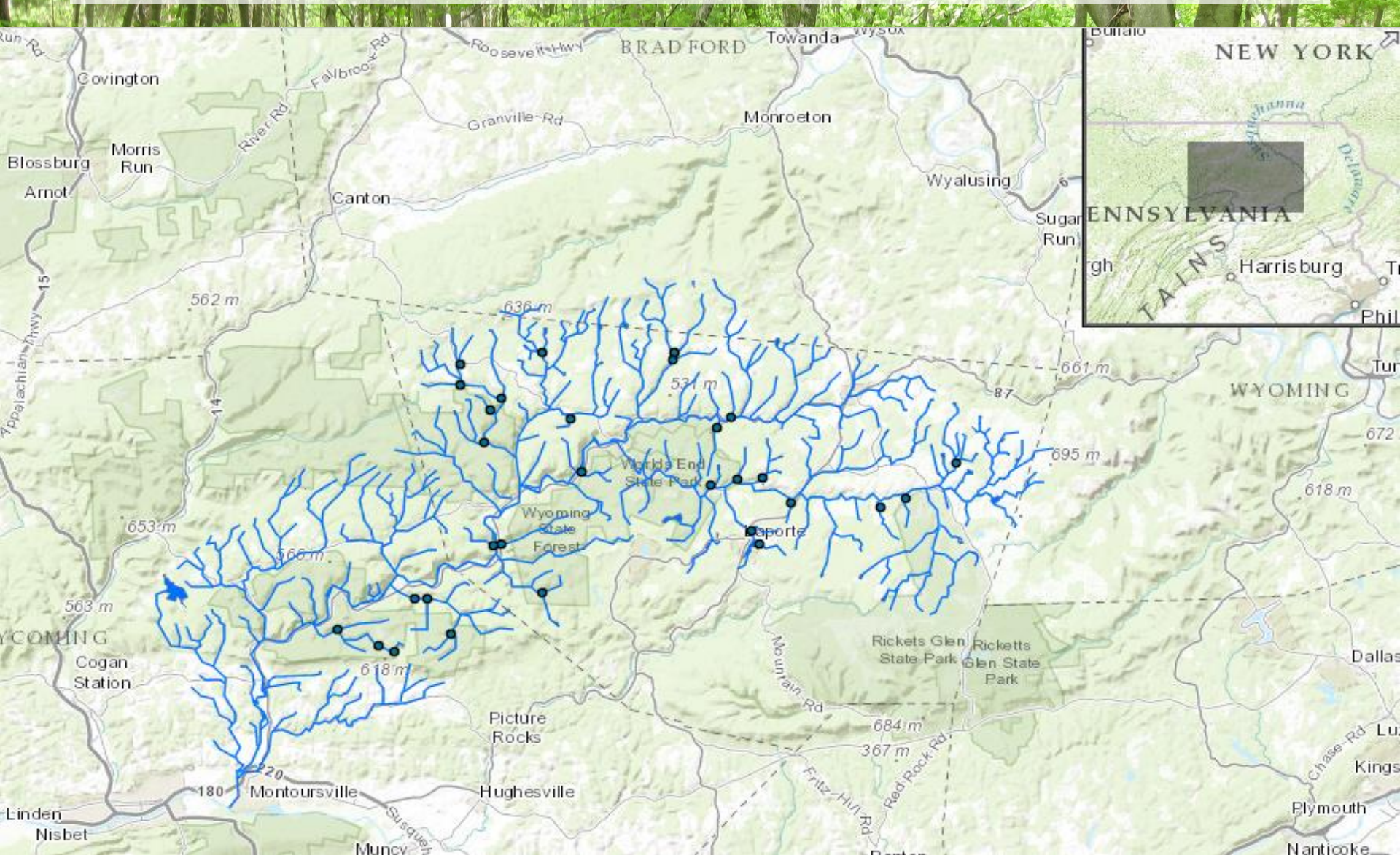


Upstream reference

The background image shows a lush green forest stream. The water is clear and flows over rocks, creating small white rapids. The banks are covered in dense green vegetation, including large-leafed plants in the foreground. Tall trees with green foliage form a canopy over the stream. A semi-transparent white rectangular box is overlaid on the upper half of the image, containing the title text in black.

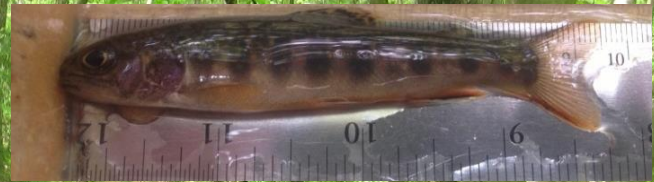
Long-term Brook Trout Population Studies in Loyalsock Creek, Pennsylvania 2011-2020

Study Sites

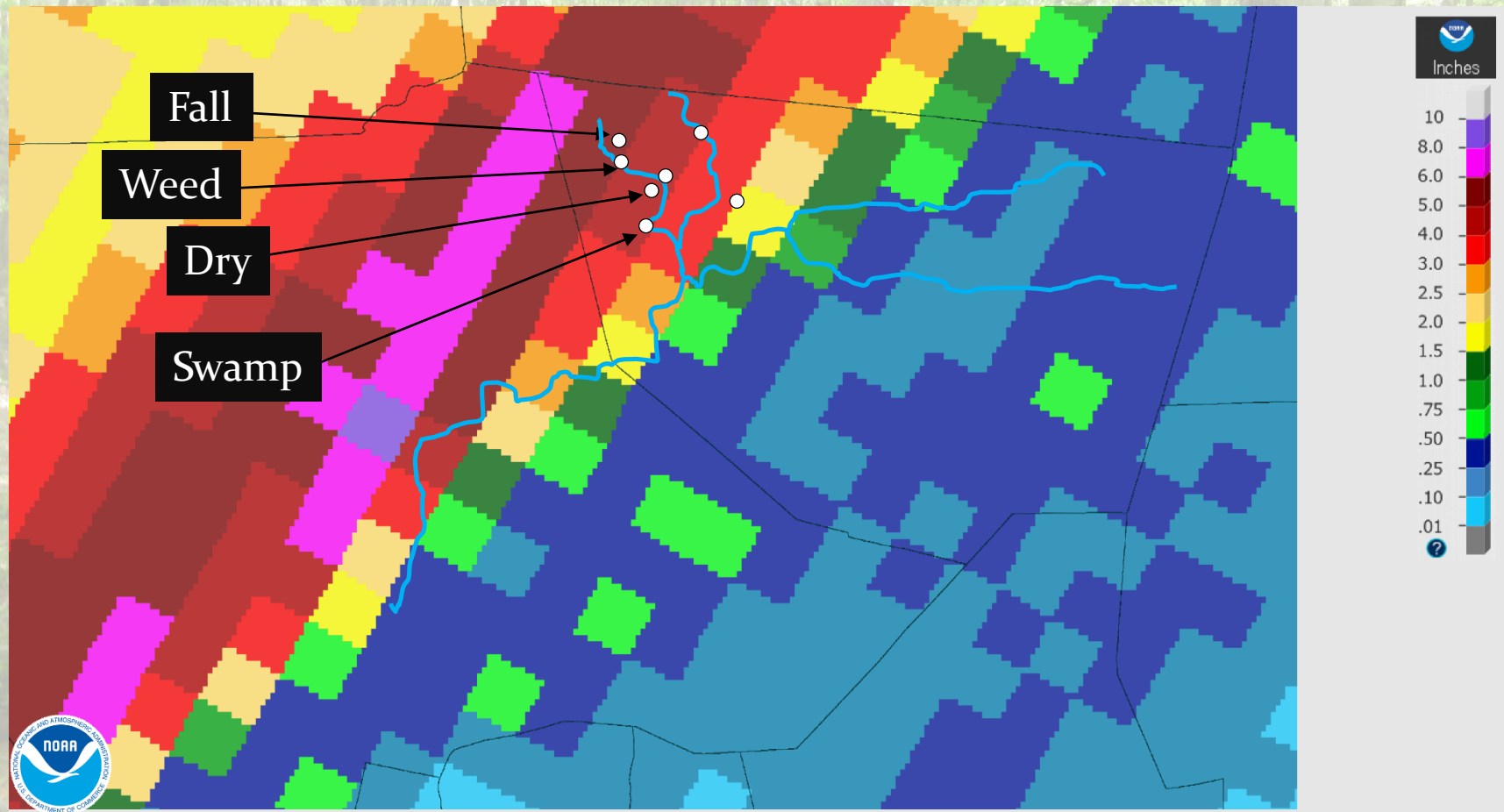


Methods

- 30 sites
- 1st and 2nd order streams
- 100 m length
- Triple pass collection
- Total length (mm)
- Weight (g)

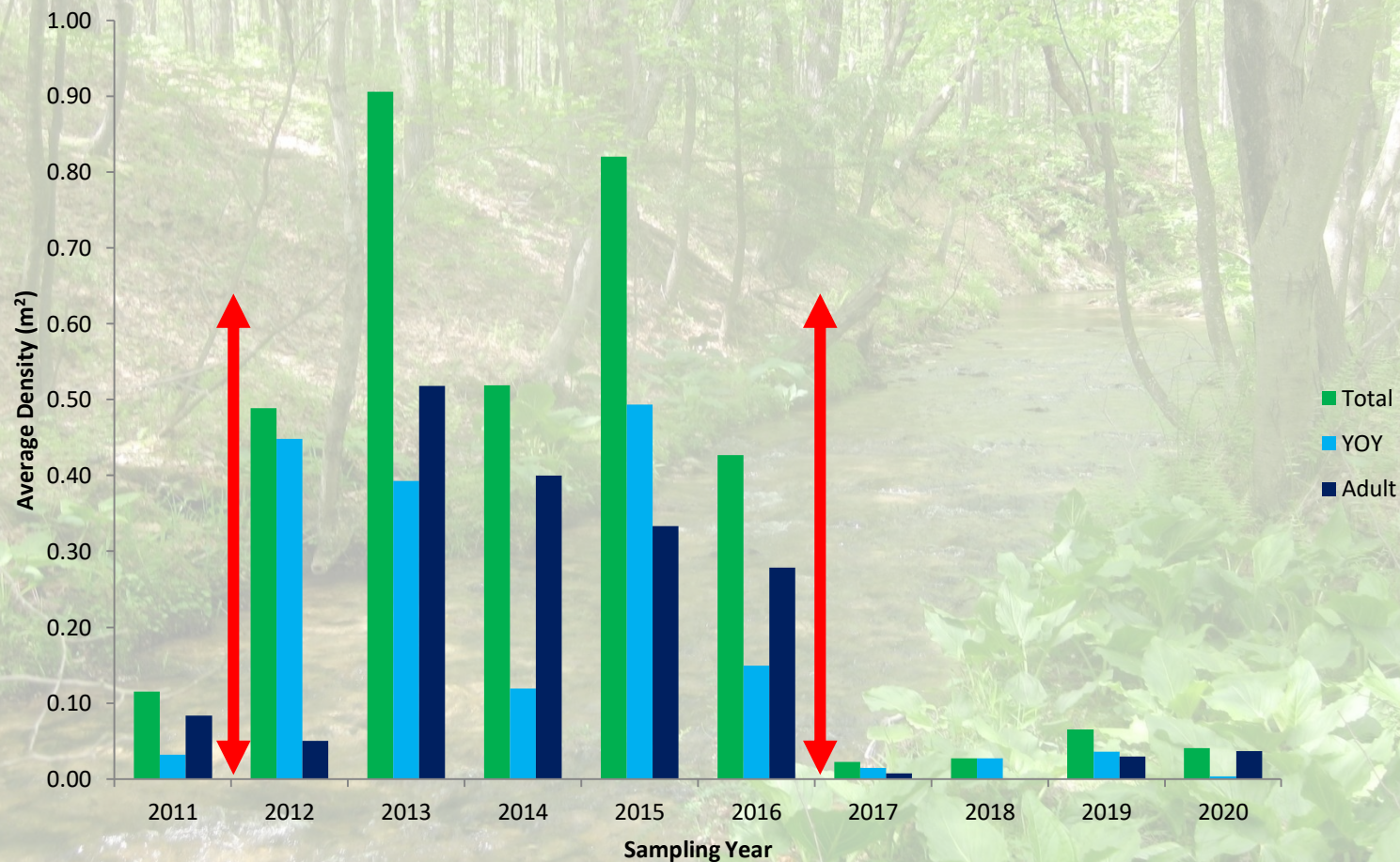


October 2016 Flood



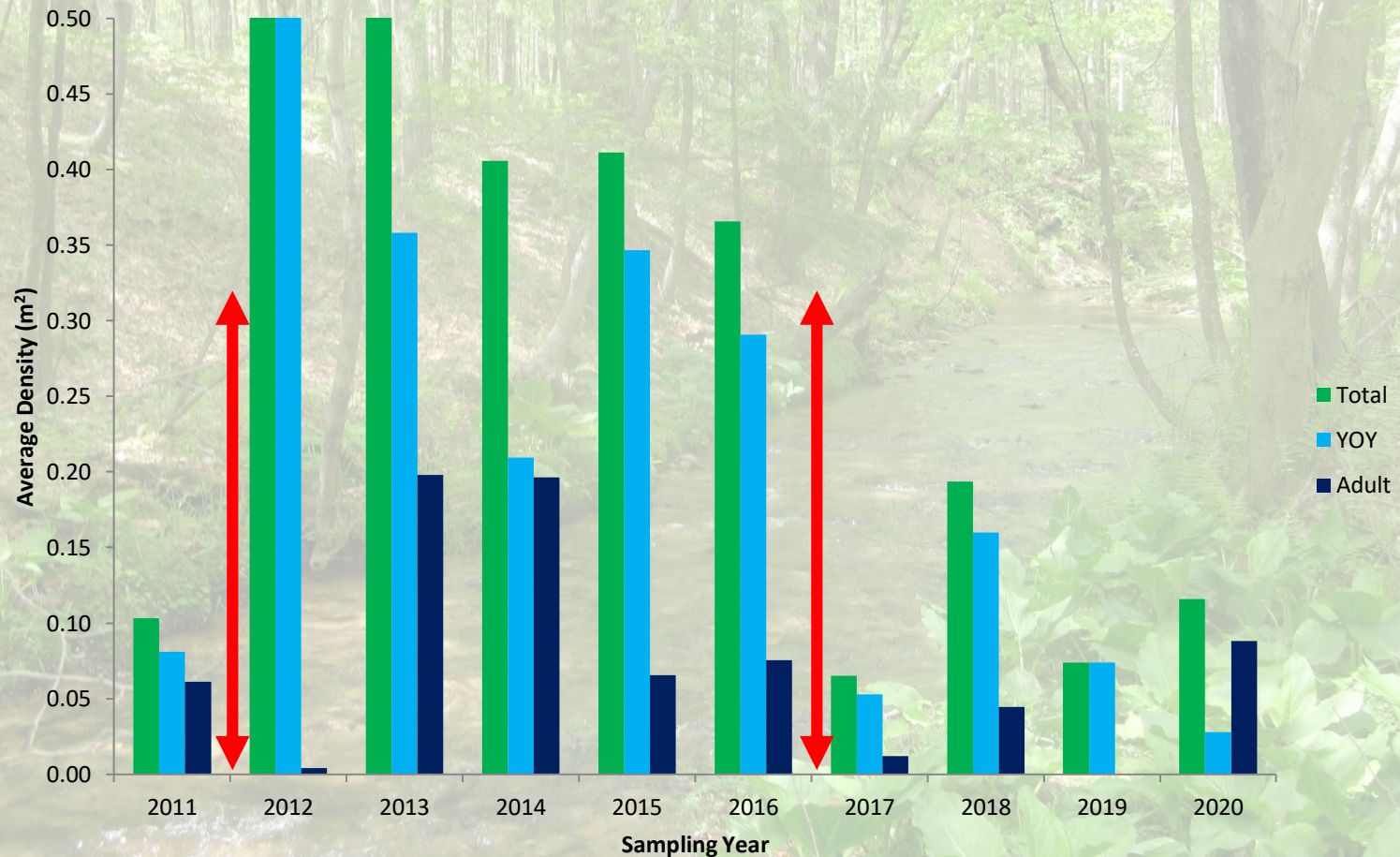
Total precipitation (in) in Loyalsock Creek area on October 21, 2016. (NOAA data). Mainstream Loyalsock Creek in light blue.

Dry Run



Average density: all Brook Trout, young of the year Brook Trout, and adult Brook Trout at Dry Run during summers 2011-2020.

Weed Creek



Average density: all Brook Trout, young of the year Brook Trout, and adult Brook Trout at Weed Creek during summers 2011-2020.

Questions?



@ sufreshwater

