



# SCIENCE ON THE FLY







# For Healthy Rivers!

**Science on the Fly seeks to further our understanding of changing watersheds around the world through long term, world-class river science. With a growing list of partners and supporters, we aim to bridge the gap between science and public policy, and to activate and inspire a broad community of river stewards to take ownership of that process.**



# About Us



**Science on the Fly was founded by the Woodwell Climate Research Center (formerly Woods Hole Research Center) and Fishpond. Individually we're leaders in climate change science and fly fishing gear design. Together, along with a growing list of partners, we strive for clean rivers, healthy watersheds, abundant fish, and a bright future. We follow our passion and we give a damn.**

- **Founded by Woodwell Climate Research Center and Fishpond in 2019**
- **Citizen Scientist Volunteers- a group of passionate anglers and water enthusiasts**
- **Volunteers collect water samples from designated locations 1x per month and ship to WCRC**
- **WCRC analyzes samples for nutrients and organic compounds (Nitrate, ammonium, total dissolved nitrogen, phosphate, silica, dissolved organic carbon and more.)**
- **SOTF adds to the dataset of important climate science on our river systems.**
- **SOTF will use the data to help in creating and/or enforcing policies.**



# The Team



**Dr. Max Holmes, Acting President and Executive Director of Woodwell Climate Research Center.**



**John Land Le Coq, Founder and CEO of Fishpond. On the Board of Directors for Woodwell Climate Research Center**



**Allie Cunningham**  
Director of Science on the Fly



**Lindsay Scott**  
Lab Manager & Research Assistant at WHRC



**Anya Suslova**  
Research Assistant WHRC



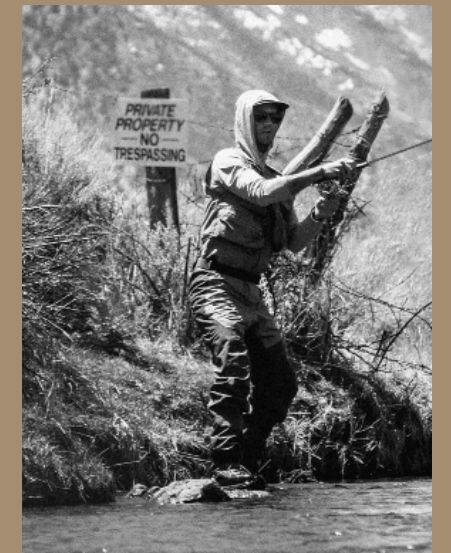
**Greg Fiske**  
Senior Geospatial Analyst at WHRC



**Jack Reis**  
Director of Marketing at Fishpond



**Stash Wilslocki**  
Film Director and Producer



**Stephen Rockwood**  
Graphic Designer at Patagonia





# The Problem

**#1**

**Dr. Max Holmes wanted to study more rivers around the world and add to the climate science dataset. He didn't have enough hands to do it with his small team at Woodwell Climate Research Center.**

**#2**

**Anglers are always looking at ways to give back to their watershed.**

# The Solution

**Through citizen scientists, we are able to collect more continuous water samples from hundreds of river sites and use this data to see how our rivers are changing over time due to climate change and other human influences. Science on the Fly adds to the data set of rivers AND involves passionate anglers that have been looking for ways to give back to their watershed.**







# Findings

**We have already started to analyze the samples from our volunteers. From just a couple samples, here are some things we are observing:**

**San Miguel River, Telluride, CO- Relatively low concentrations, except High Nitrate and Phosphate on the San Miguel River Above Confluence with South Fork (Wastewater Treatment )**

**Brushy Creek, Round Rock, TX- High Nitrate and Phosphate in 2/5 locations, (WWTF, Golf Clubs, Agricultural farms)**

**Upper Delaware River- Higher Nitrate on the West Branch of Delaware River compared to other sections of the watershed.**

**Our data is public and available on our website [www.scienceonthefly.org/therivers](http://www.scienceonthefly.org/therivers)**

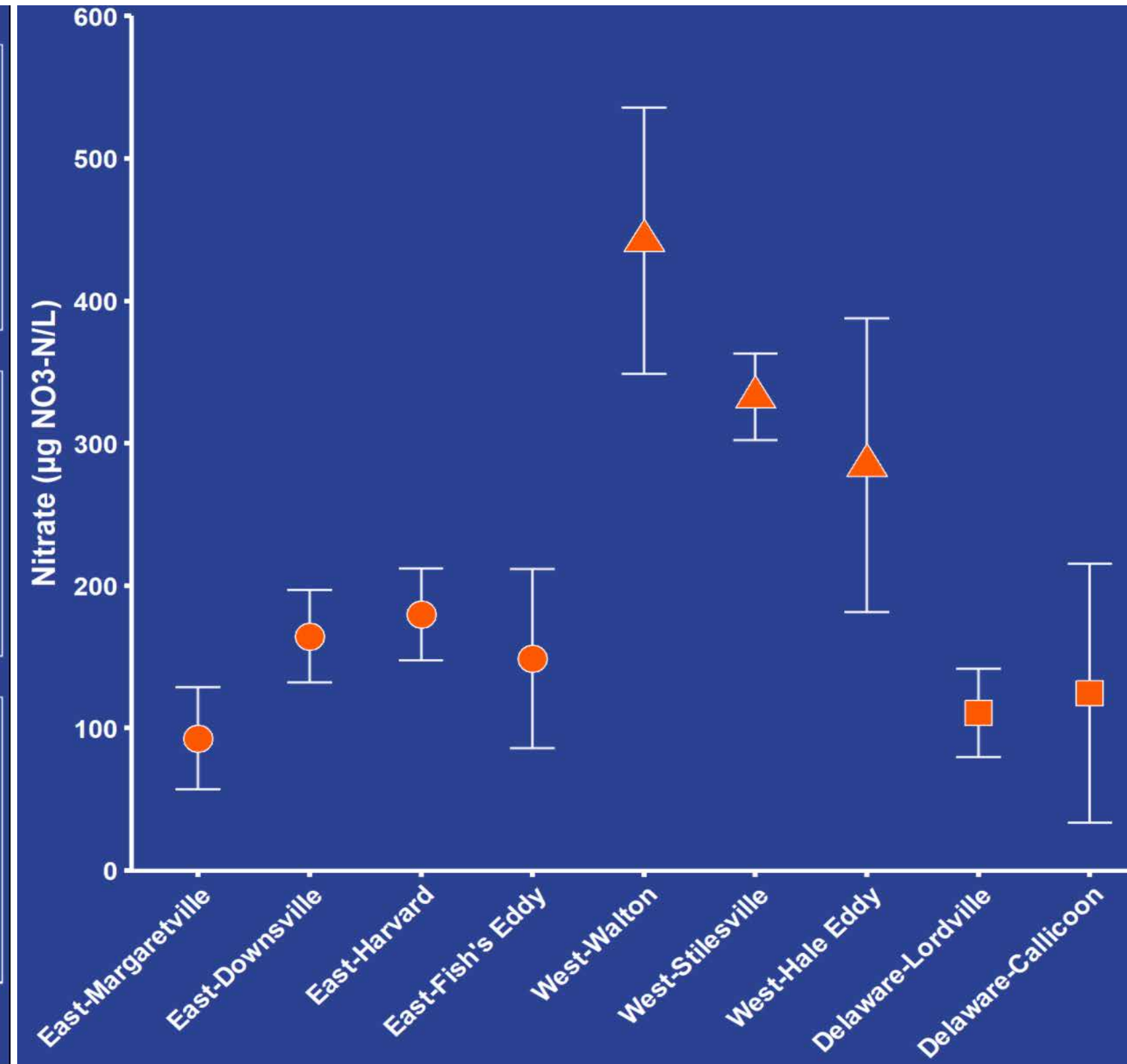
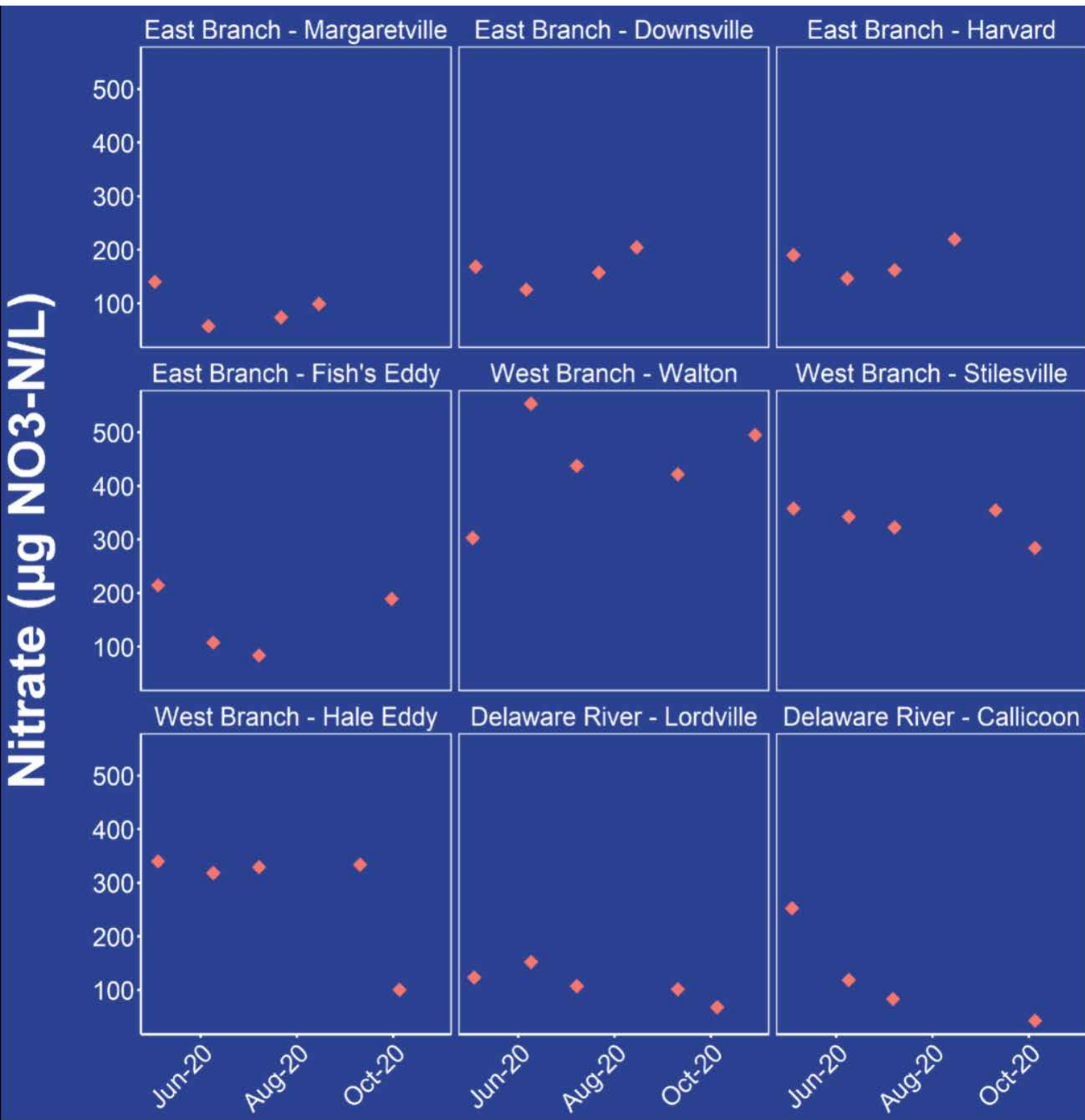


# Upper Delaware River Sites



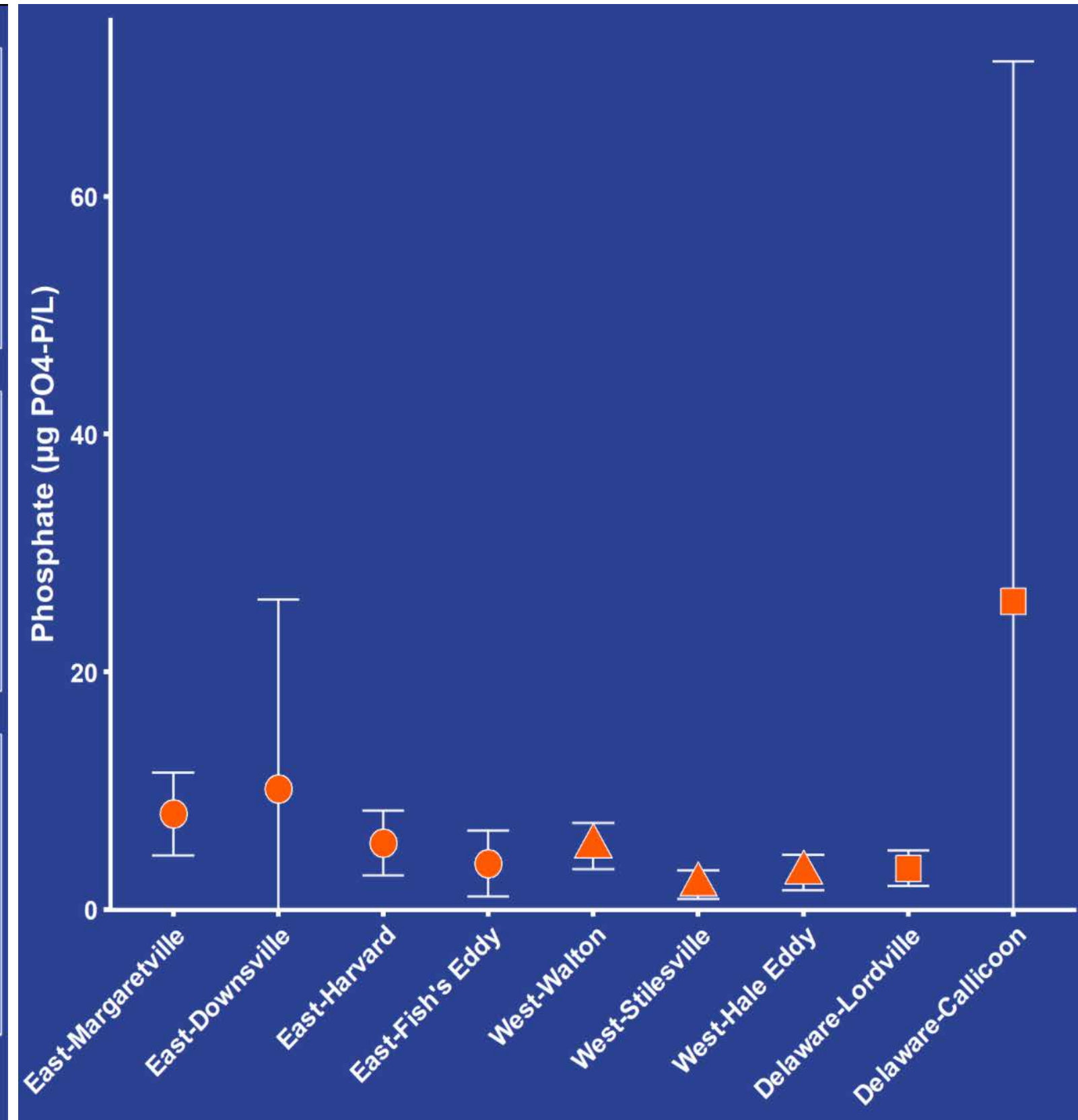
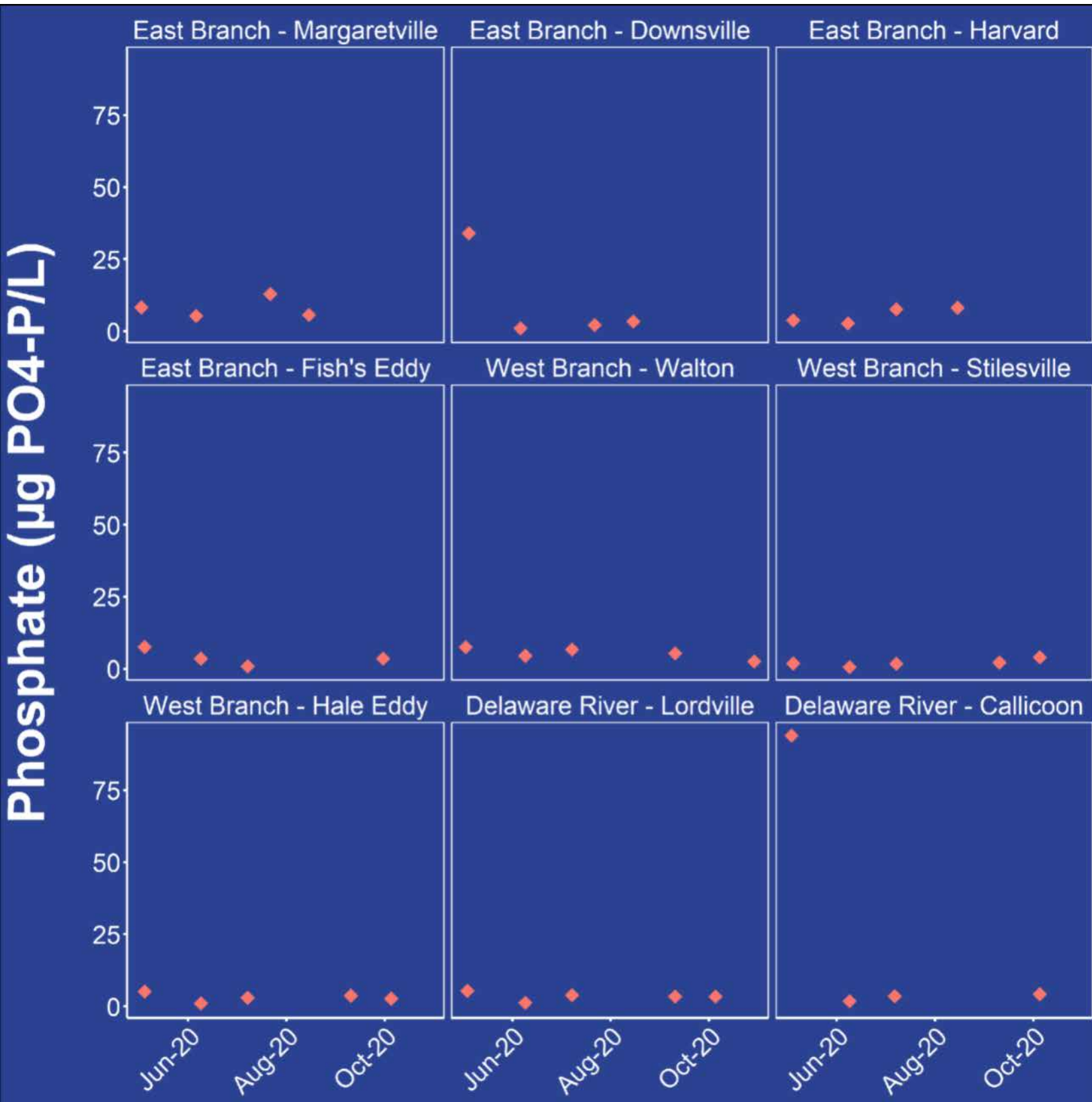


# Nitrate in UDR





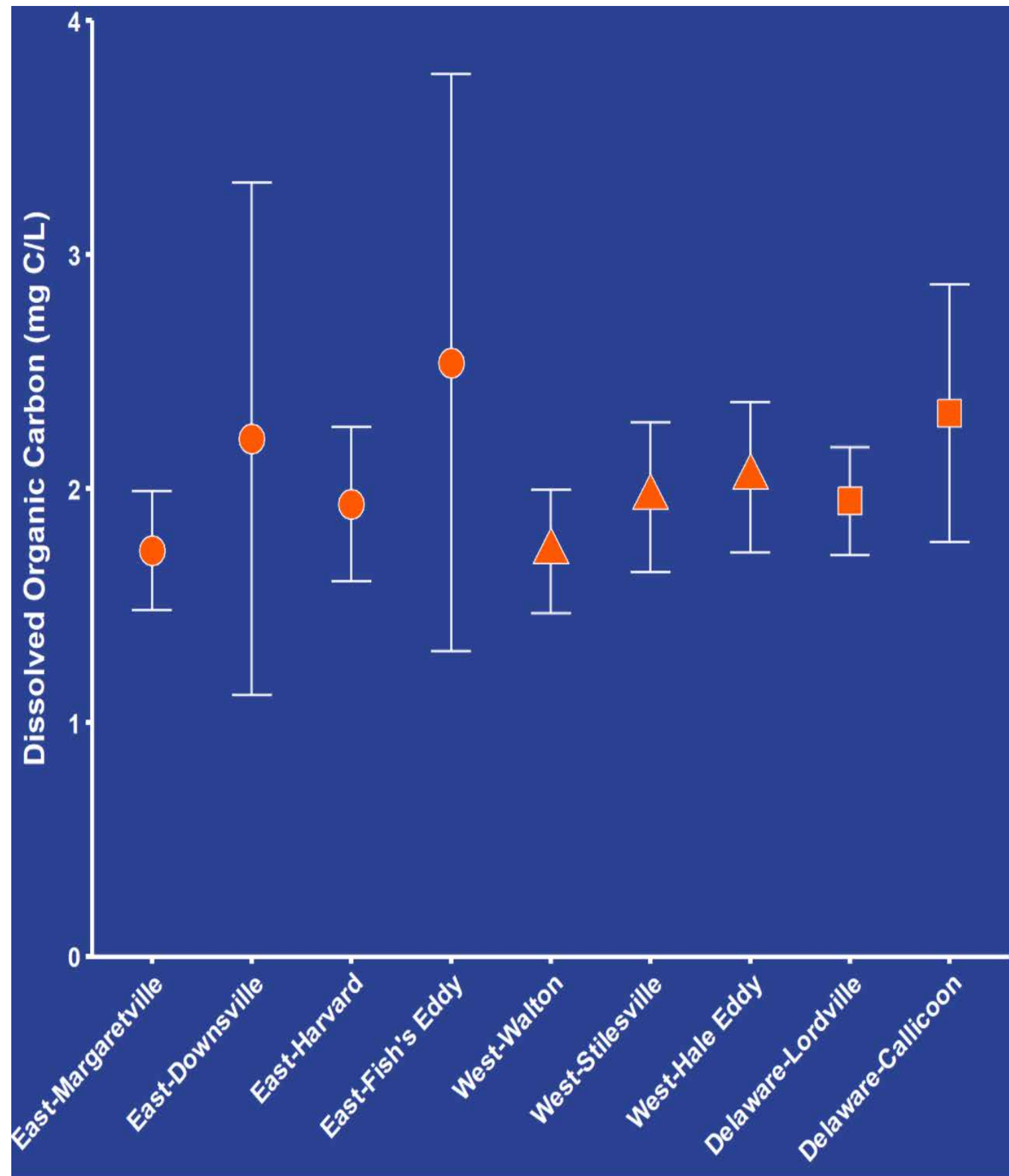
# Phosphate in UDR





# Dissolved Organic Carbon in UDR

Dissolved Organic Carbon (mg C/L)





# Goals for 2021

- 1) Have Volunteers/Sampling in All 50 States (Current: 39)**
- 2) Add Temperature data loggers at 10% of locations**
- 3) Analyze 1500 samples (Current: 1330 Samples)**
- 4) Help more volunteers and organizations understand and utilize their data**
- 5) Focus on sustainability of Science on the Fly**
  - Sponsor a River**
  - Partnerships with organizations to add more research to their watersheds.**







**SCIENCE  
ON THE FLY**

**THANK YOU!**

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