



UNRBA Monitoring  
Program  
BOD Meeting  
January 21, 2015



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# Update on the Monitoring Program

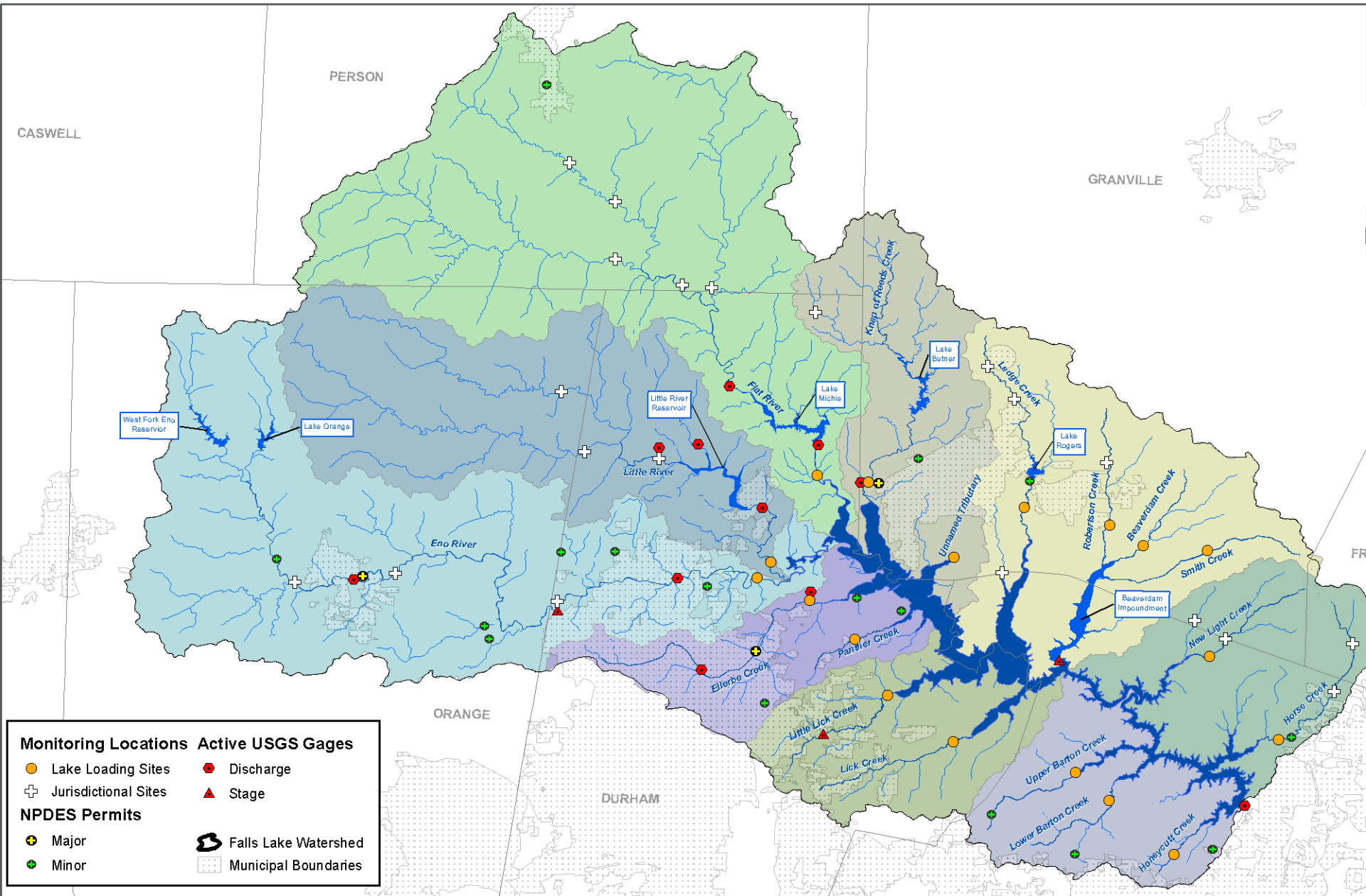
January 2015





## Monitoring Program Summary

- Stream Monitoring Data collected since August
- Additional Lake Monitoring collected since October
- New special studies reviewed with PFC in November
- UNRBA Database and Interface software updates to provide increased security



**Monitoring Locations Active USGS Gages**

- Lake Loading Sites
- Discharge
- ⊕ Jurisdictional Sites
- ▲ Stage

**NPDES Permits**

- ⊕ Major
- Minor
- 🌊 Falls Lake Watershed
- ▨ Municipal Boundaries

0 1 2 3 4 Miles  
0 1 2 3 4 5 6 7 Kilometers

(Rev. October 2014)

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# UNRBA Monitoring Locations

## Upper Neuse River Basin Association

### North Carolina

5400 Glenwood Ave, Suite G-03, Raleigh  
Phone (+1) 919-239-8900 Fax (+1) 919-239-8901  
www.cardnoentrix.com



## Monitoring Program Progress

- Stream Monitoring – the UNRBA monitoring program has collected over 4000 measurements to date
  - 20 Jurisdictional Stations sampled monthly
  - 18 Lake Loading stations sampled monthly with the “big 5” sampled twice a month
- Falls Lake Monitoring
  - At UNRBA’s request DWR began monitoring an additional station in Falls Lake bringing the total number of stations monitored monthly to 12
  - Also at UNRBA’s request DWR added 4 analyses to their Falls Lake Monitoring program and is providing field filtered samples for analysis by the UNRBA’s contract lab





## Monitoring Program Progress

- **Stream Monitoring**
  - Revisions to data collection protocols based on observed conditions
  - Adjustments to a few sampling locations
  - The lab has provided August through October data with November expected shortly
  - Over 2000 data points have been reviewed and evaluated against UNRBA QAPP and uploaded to database
- Discussions held with EPA and DWR regarding request for EPA to collect benthic nutrient flux data in Falls Lake
- WRC agreed to begin collecting fish data at additional station near I-85



## Monitoring Program Progress

- New special studies reviewed with PFC in November
  - High flow monitoring at 8 stations (2 events)
    - Sample collection and analysis reviewed with lab
  - Additional stormwater data collection
    - Draft protocols developed
    - “On-call” staffing calendar
  - Benthic nutrient data collection – UNC Chapel Hill
    - Met with Dr. Alperin in December
  - Work with PFC to prepare for meetings with EPA and DWR to discuss alternative regulatory development and associated data needs

# Stream Monitoring Results

Lake Loading and Jurisdictional Stations





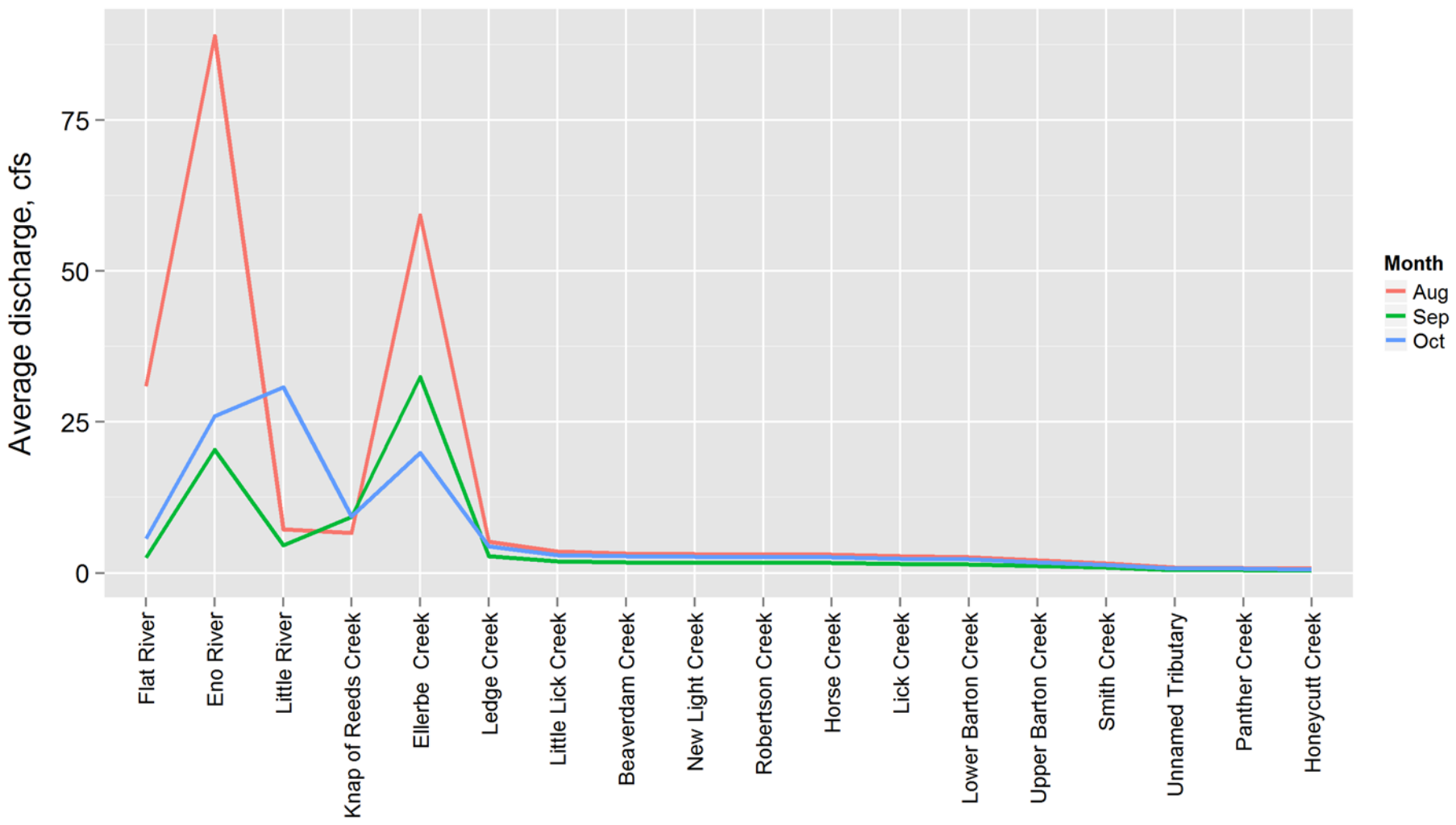


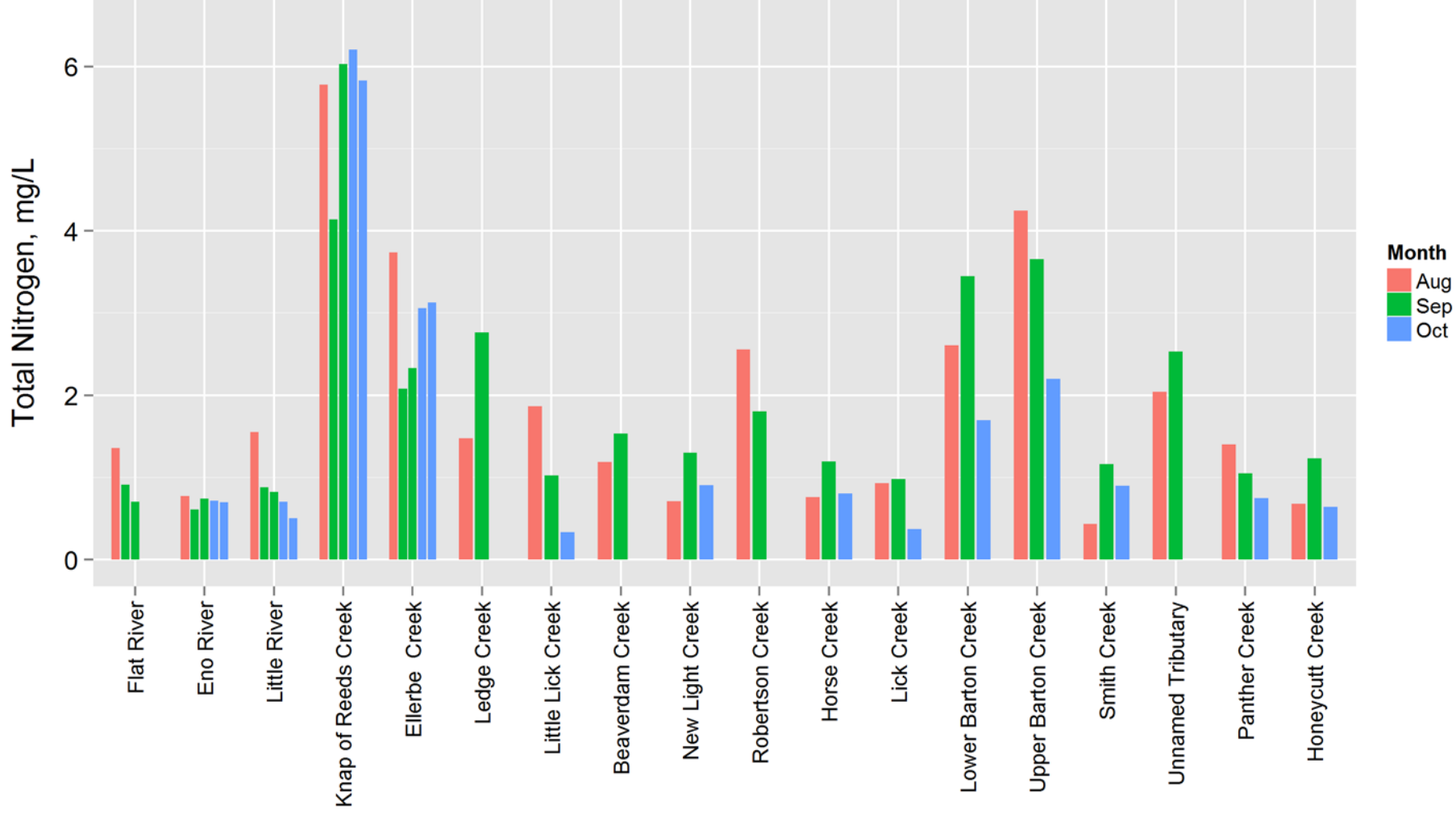
## TN, TP and TOC data – Lake Loading Stations

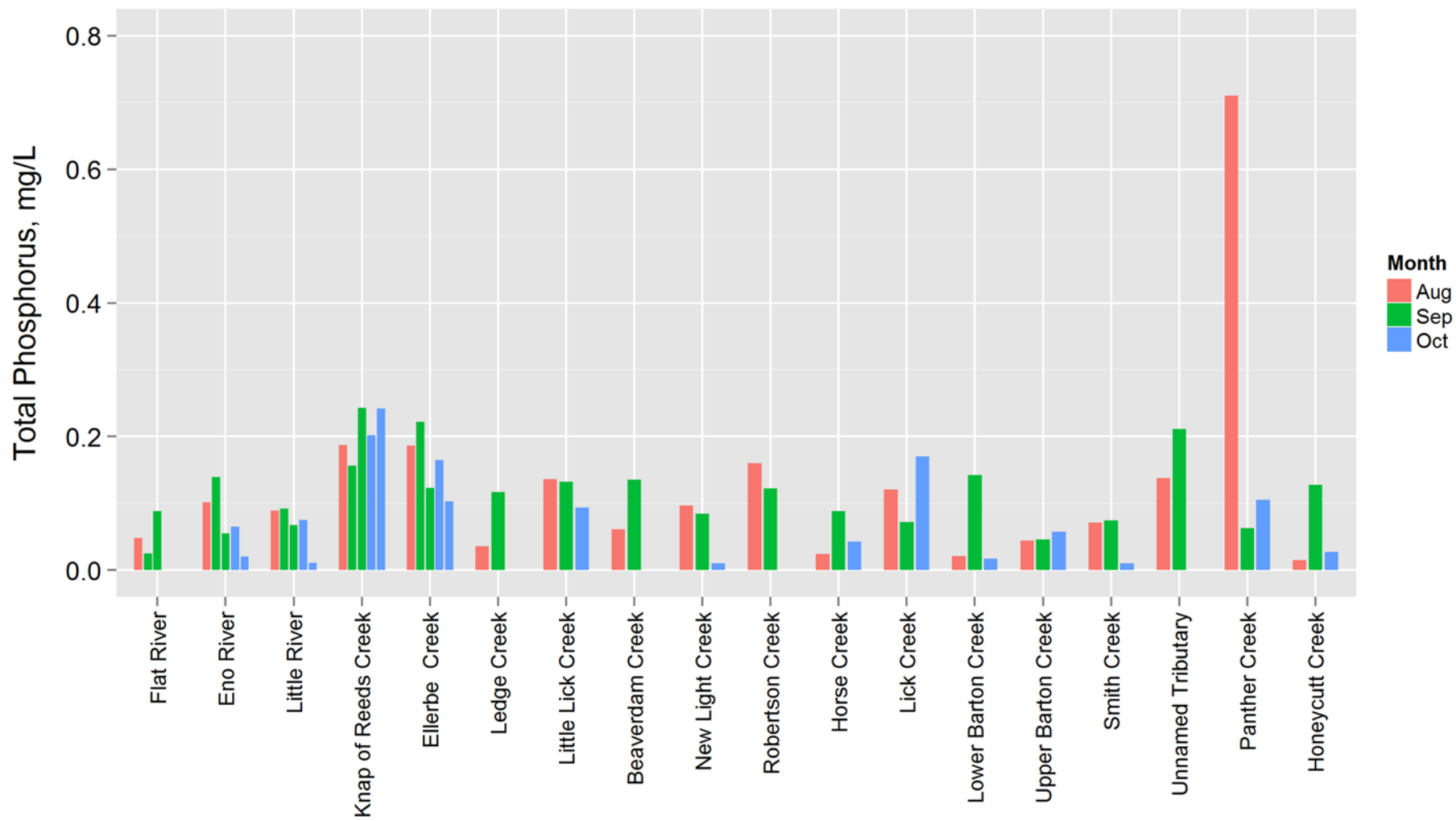
# Lake Loading Stations



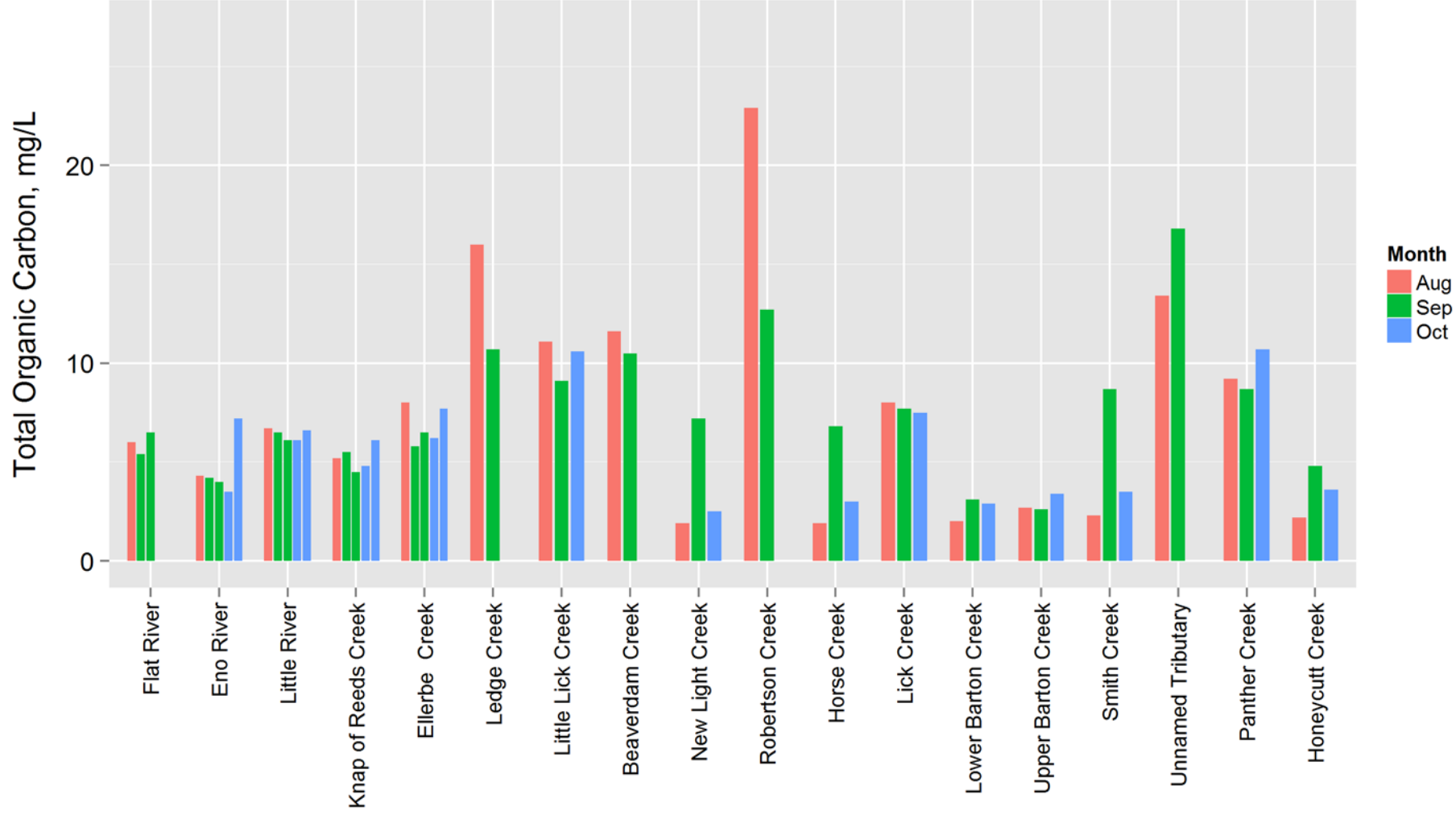
Plan ID	Station ID	Waterbody Name	Location
LL01	KRC-4.5	Knap of Reeds Creek	at SGWASA WWTP
LL02	FLR-5.0	Flat River	at Old Oxford Highway
LL03	LTR-1.9	Little River	at Old Oxford Highway
LL04	ENR-8.3	Eno River	at Old Oxford Highway
LL05	ELC-3.1	Ellerbe Creek	at Glenn Road
LL06	PAC-4.0	Panther Creek	at end of Cooksbury Drive
LL07	LLC-1.8	Little Lick Creek	at Patterson Road
LL08	LKC-2.0	Lick Creek	at Southview Rd south of Hwy 98
LL09	UNT-0.7	Unnamed Tributary	at Northside Road
LL10	LGE-5.1	Ledge Creek	at Highway 15
LL11	ROB-2.8	Robertson Creek	at Brassfield Road
LL12	BDC-2.0	Beaverdam Creek	at Horseshoe Road
LL13	SMC-6.2	Smith Creek	at Lawrence Road
LL14	NLC-2.3	New Light Creek	at Mangum Dairy Road
LL15	HSE-1.7	Horse Creek	at Thompson Mill Road
LL16	UBC-1.4	Upper Barton Creek	at Mt Vernon Church Road
LL17	LBC-2.1	Lower Barton Creek	at Norwood Road
LL18	HCC-2.9	Honeycutt Creek	at Honeycutt Road















## TN, TP and TOC data – Jurisdictional Stations



# Juris- dictional Stations



Plan ID	Station ID	Waterbody Name	Location
JB01	ENR-49	Eno River	at Dimmocks Mill Road
JB02	ENR-41	Eno River	at Hwy 70 and Riverside Drive
JB03	ENR-23	Eno River	at Cole Mill Road
JB04	NLR-27	North Fork Little River	at New Sharon Church Road
JB05	SLR-22	South Fork Little River	at Guess Road (Hwy 157)
JB06	LTR-16	Little River	at Johnson Mill Road
JB07	NFR-37	North Flat River	at Highway 57
JB08	NFR-32	North Flat River	at Helena-Moriah Road
JB09	SFR-30	South Flat River	at Highway 57
JB10	FLR-25	Flat River	at Moores Mill Road
JB11	DPC-23	Deep Creek	at Smith Road
JB12	CMP-23	Camp Creek	at Range Road (SR 1610)
JB13	LLG-0.9	Little Ledge Creek	at Old Weaver Trail
JB14	LGE-17	Ledge Creek	at Old Route 75
JB15	LGE-13	Ledge Creek	at W Lyon Station Road
JB16	ROB-7.2	Robertson Creek	at Sam Moss Hayes Road
JB17	BUC-3.6	Buckhorn Creek	at Buckhorn Lane
JB18	NLC-3.8	New Light Creek	at Bold Run Hill Road
JB20	HSE-7.3	Horse Creek	at Purnell Road
JB21	HSE-11	Horse Creek	at Green Road



