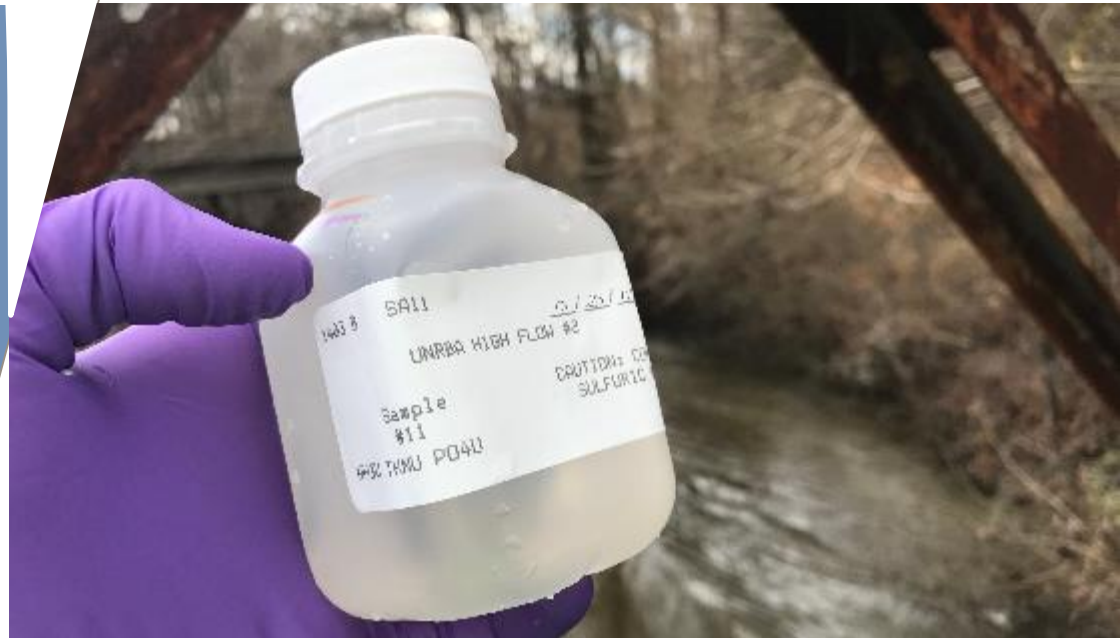


Monitoring Program Update

Path Forward Committee Meeting

January 2017





Routine Monitoring – Data generation status

Date	Sample Collection	Sample Analysis	Data Review	Posted to Database
Aug-Dec 2014	✓	✓	✓	✓
Jan-Dec 2015	✓	✓	✓	✓
Jan-2016	✓	✓	✓	✓
Feb-2016	✓	✓	✓	✓
Mar-2016	✓	✓	✓	✓
Apr-2016	✓	✓	✓	✓
May-2016	✓	✓	✓	✓
Jun-2016	✓	✓	✓	✓
Jul-2016	✓	✓	✓	✓
Aug-2016	✓	✓	✓	✓
Sep-2016	✓	✓	✓	✓
Oct-2016	✓	✓	✓	✓
Nov-2016	✓	✓		
Dec-2016	✓	✓		
Jan-2017	✓			



Special Studies Updates



High Flow Sampling

- Collect water quality data when inflows to Falls Lake are high
- No samples collected in November or December (no high flow events)
 - below average rainfall
 - precipitation occurred in small amounts which did not produce significant runoff events

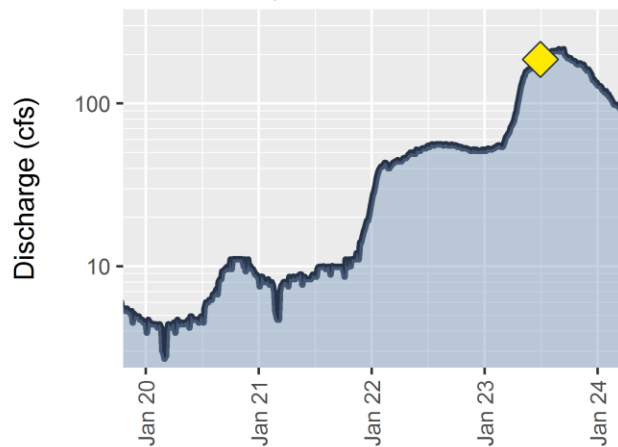
	November	December
Average Precipitation	3.1 inches	3.1 inches
2016 Precipitation	0.6 inches	1.5 inches

Average Precipitation is 30 year average from weather.gov for RDU.

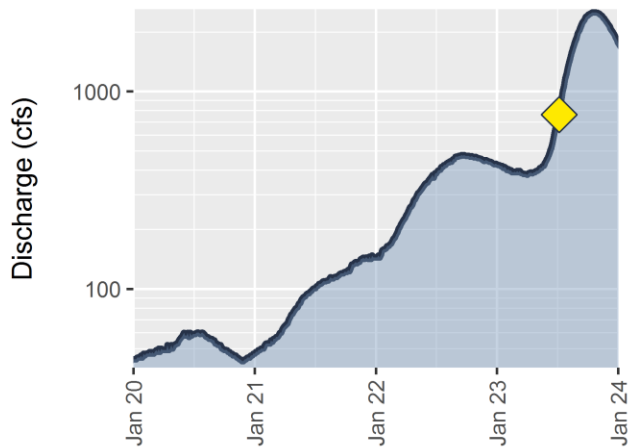
2016 Precipitation values are averages from USGS rain gages within the basin.



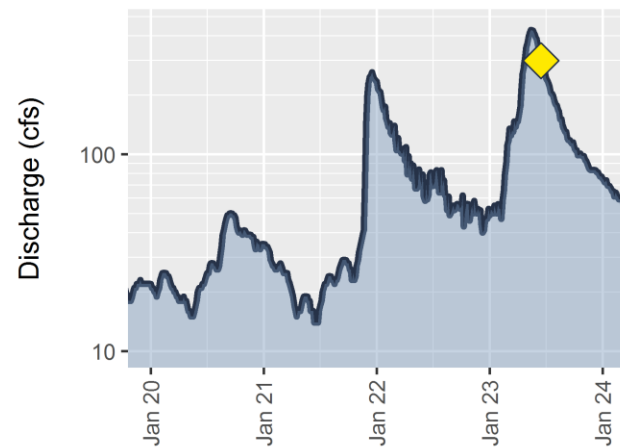
Knap of Reeds Creek



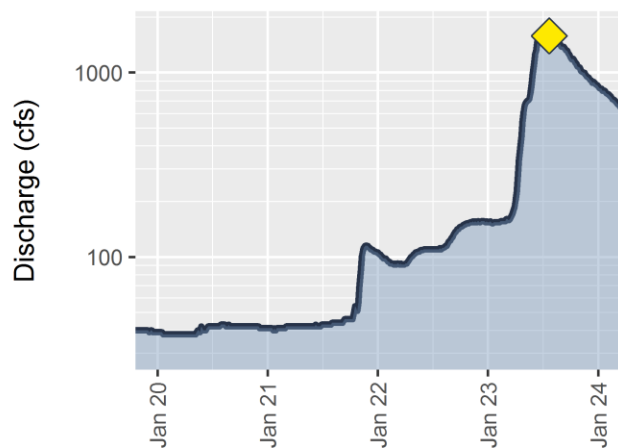
Flat River



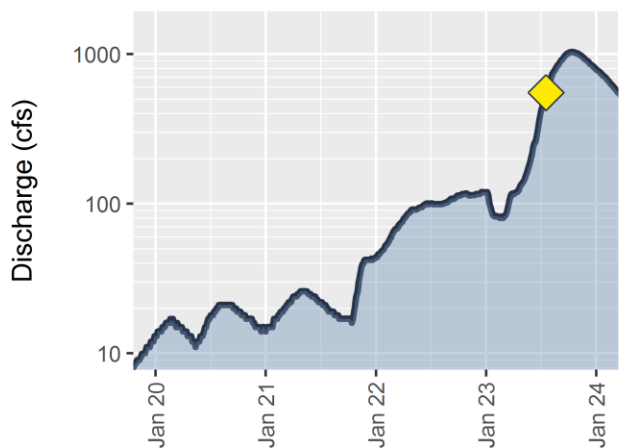
Ellerbe Creek



Eno River



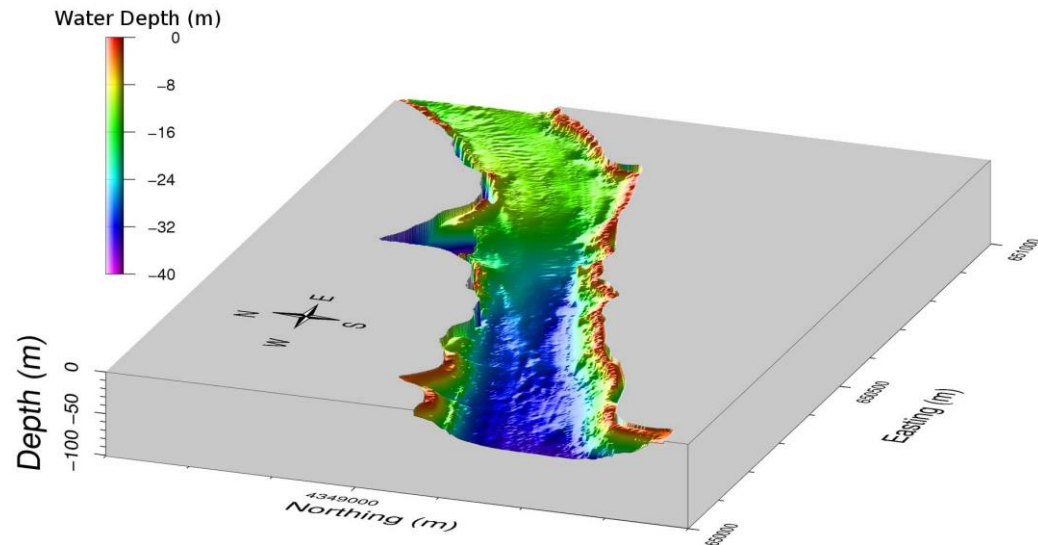
Little River





Bathymetry and Sediment Mapping

- Map the underwater topography for improved modeling of the retention and movement of water through the reservoir.
- Planned for Spring 2017
- Study plan is complete and will be posted online.

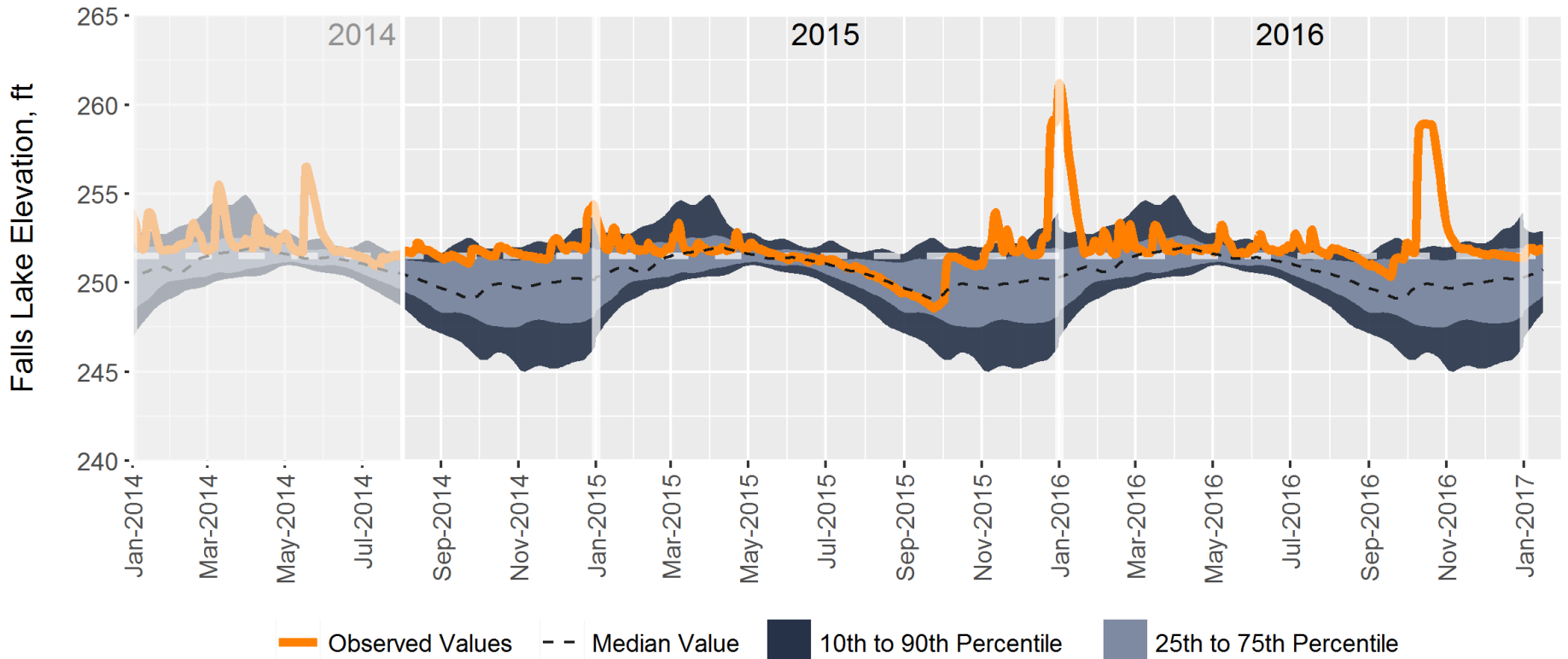


(example of a bathymetric map of a reservoir segment, USGS)



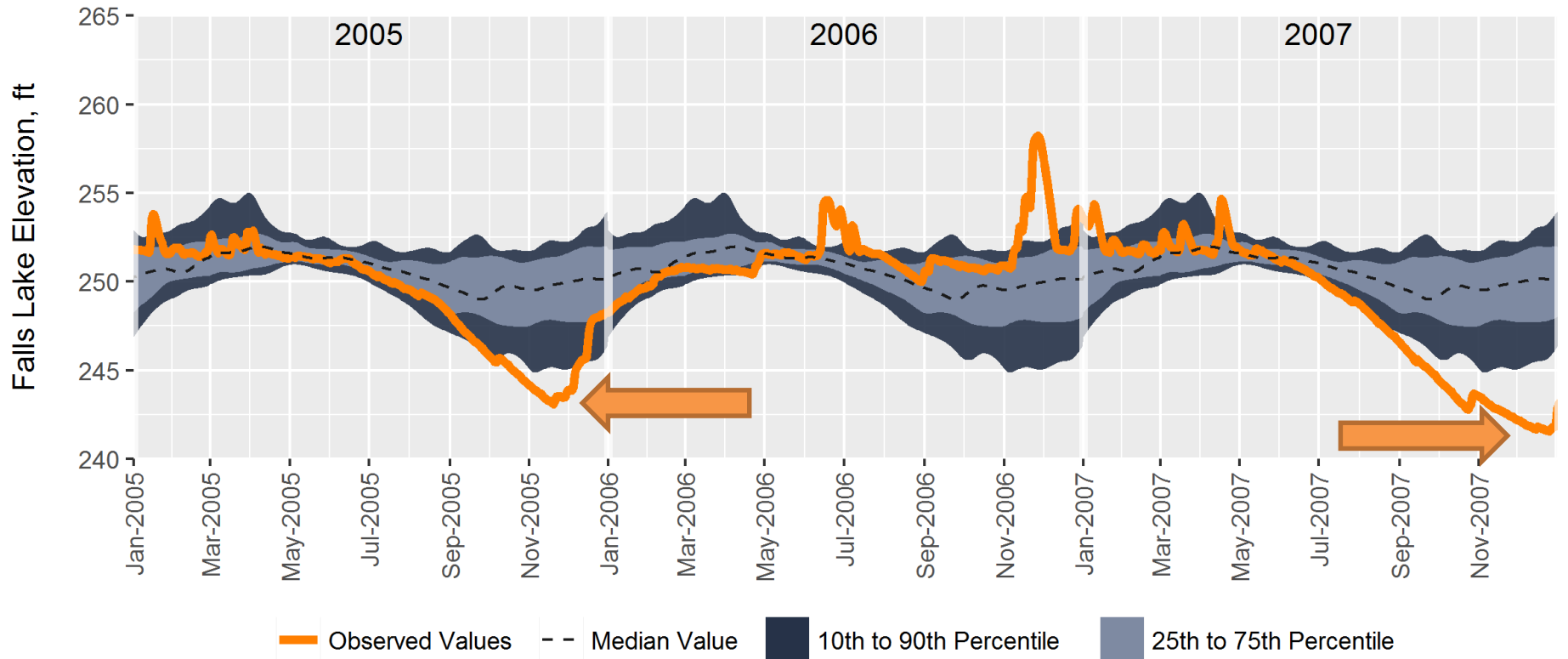


Lake Level – UNRBA Monitoring Program



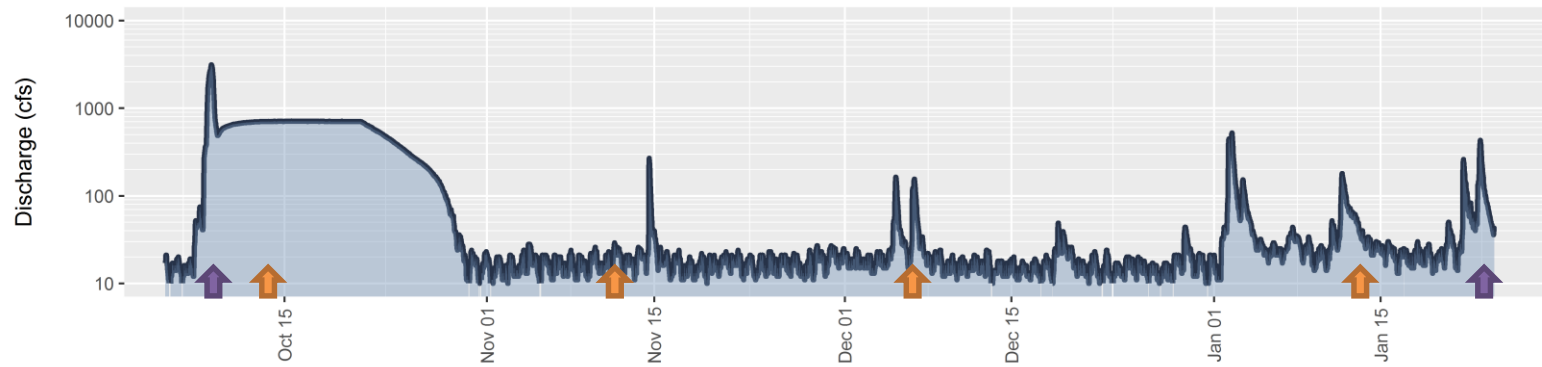


Lake Level - Model baseline years

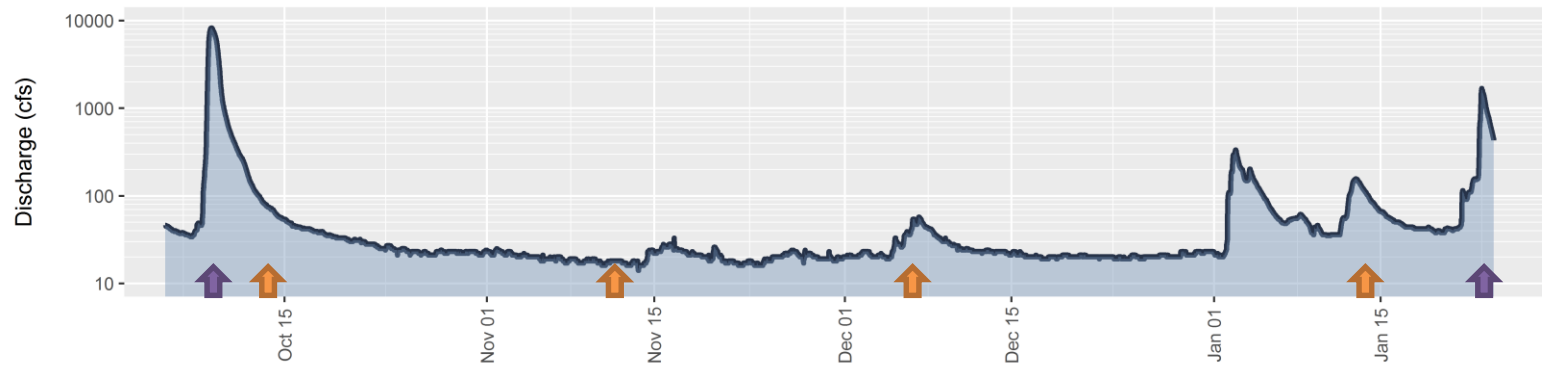




Ellerbe Creek



Eno River

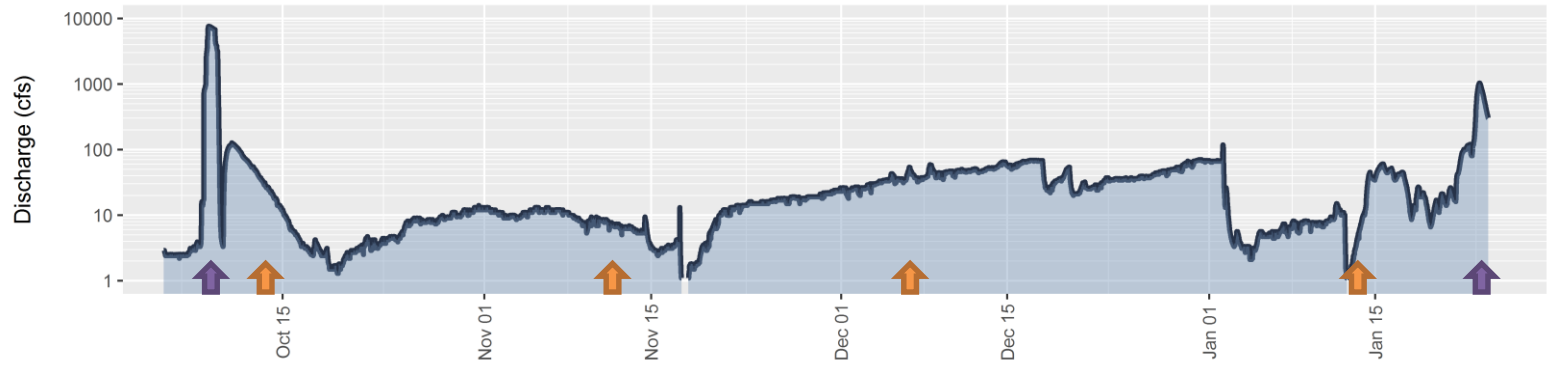


↑ Routine monitoring event

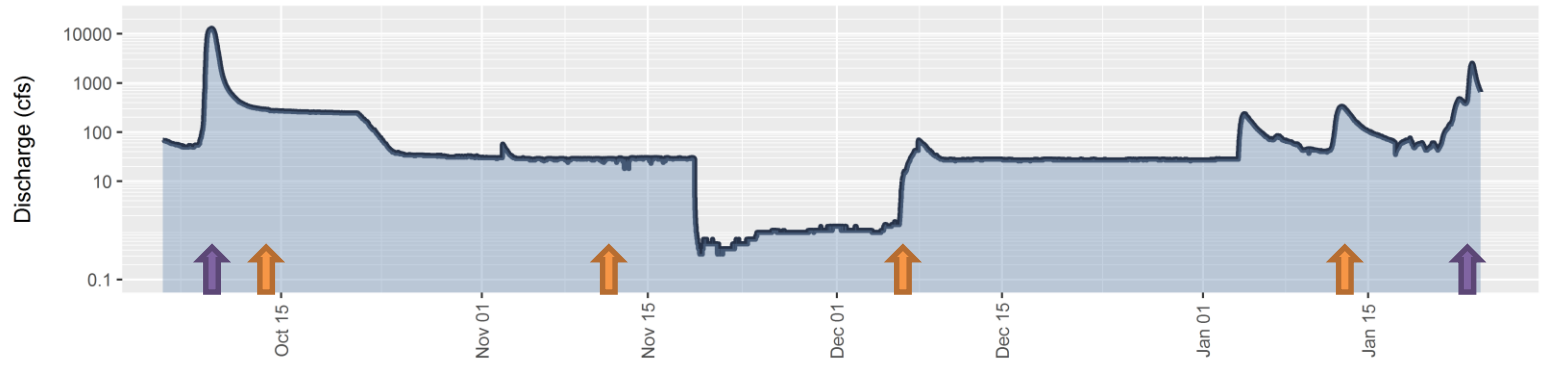
↑ High Flow sampling event





Little River



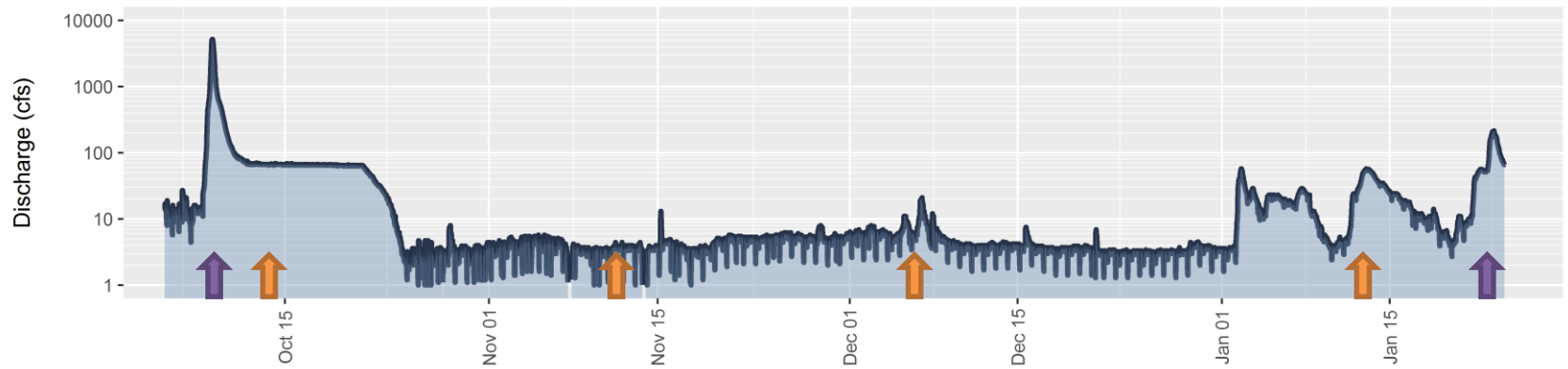
Flat River



-  Routine monitoring event
-  High Flow sampling event



Knap of Reeds Creek



↑ Routine monitoring event

↑ High Flow sampling event

