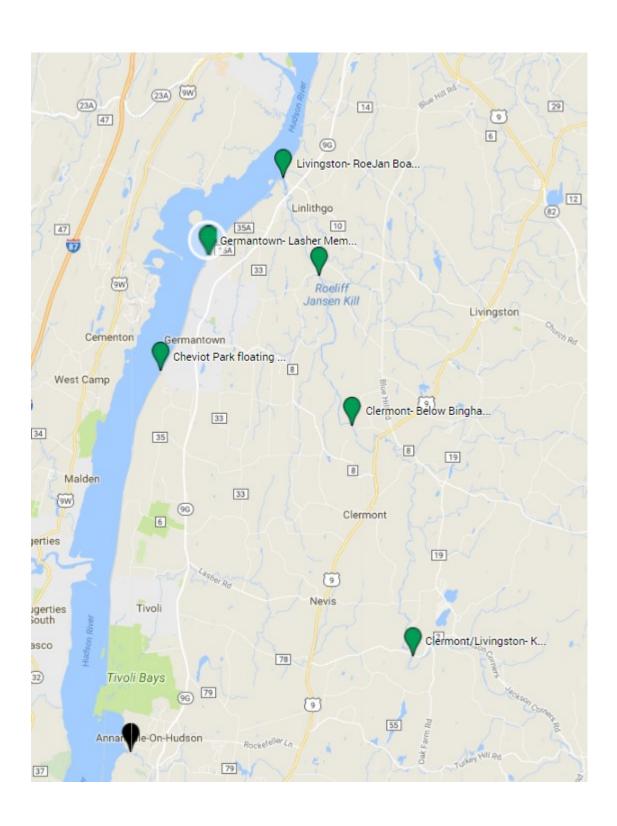


Downstream Sampling Guide



Downstream Sampling Map



SUPPLIES AND GEAR

Sampling Gear:

- In the Kit from Bard:
 - Sterile sample containers, one per site plus a few extra
 - Rubber gloves, a pair per site plus a few extra. (If both team members use gloves at each site, you will run out.)
 - Insulated Backpack. You will also need some reuseable freezer packs, which might be supplied, and which you should put in the freezer before sampling
 - YSI Sampling meter and probe, with probe cover
 - Dipper, in a protective bag, keep dipper covered when not in use
- You need to supply:
 - If not supplied, you will need freezer packs to keep the insulated backpack cool
 - Watch or phone to tell time
 - Smartphone, GPS or Map for navigation
 - Contact info for Upstream Sampling team
- Helpful
 - Permanent marker (sharpie) and good pen
 - Clean cloth or dishtowel to clean up after each collection

Note the upstream kit has a bucket to sample from bridges. There are no bridge sampling sites downstream and the kit does not include a bucket.

Wear comfortable outdoor clothing, light boots for walking on rocks, and be tick-aware.

STEPS TO FOLLOW WHEN COLLECTING WATER

- 1. Write the time in the sampling log
- 2. If not already connected, connect the YSI probe to the meter, ensuring the twist lock is tight. <u>Don't</u> <u>use force, it fits together smoothly.</u>
- 3. Turn on the YSI meter, and remember to remove the rubbery probe covering.
- 4. No matter how you are sampling, **look for clear moving water, and collect water coming to-wards you**.
- 5. Place your observations in the log book, such as cloudy water, tide ebb/flow on Hudson shoreline sites, or anything else of note.

Sample from shore with the Dipper

Put on gloves. Don't touch anything with your gloved hand but the bottle and dipper until collection is complete.

Find good footing on the streambank, within 3-4' of clear running water. Uncap the bottle.

Rinse the dipper at least 3X in the running water. Don't touch the bottom. Dip water from beneath the surface, pour into bottle, and repeat 3X, discarding the first two fills and then keeping the 3rd one.

Leave air in neck of bottle, cap and place in insulated backpack.

Loop YSI cable loosely around hook on the end of the dipper, lower it into the water to the top of the strain relief, wait for the reading to stabilize, then have partner write oxygenation (2 readings), conductivity and temperature in the log.

Turn off meter. Put dipper in protective bag. Discard gloves.

RJ-HR-106.5 Cheviot Park floating dock

This sample is collected at the Hudson River public boating access point at Cheviot Park.

Map: Goto the American Legion on Woods Rd, then down Cheviot Rd. to the Park.

GPS: "Cheviot & Disher, Germantown", then to end across the tracks

Parking & Access: There is a parking lot at the site. Sample from the western floating dock, at the far edge. Note whether the tide is flooding or ebbing.



RJ-HR-108.5 Germantown- Ernest R. Lasher Jr. Memorial Park

This site is at Lasher Park in Germantown, on the shoreline of the Hudson. The sample should be collected at the northern floating dock. Samples from this site, just two miles south of the Roe Jan's mouth, help us learn how far into the Hudson the Roe Jan's influence extends, and under what conditions.

Map: Find intersection of

Northern Blvd. and Anchorage Rd. Drive down Anchorage Rd. to the park.

GPS: Lasher Park Germantown



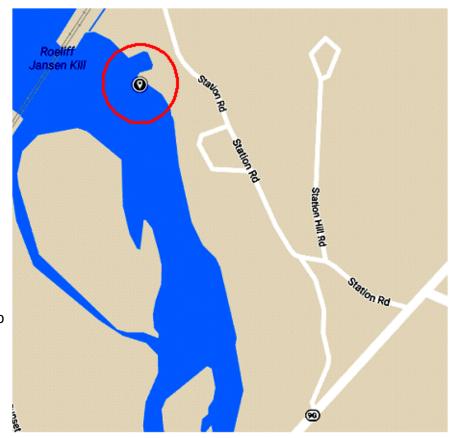
RJ-0.00 Livingston- RoeJan Boat Club

This location is in the mouth of the Roe Jan, where there is tidal influence. Directly upstream from here, the Roe Jan flows through a forested riparian zone for about two miles, until the next sampling site at the Sportsman's Club.

Map: Go to the bridge on 9G over the RJ,. Just N of bridge is Station Rd., follow Station to the club.

GPS: "station rd & Rt 9G, Livingston", then down Station Rd till you see the yellow gate and fence and the boat club on the left.

Parking & Access: There is a parking lot across the road from the boat club. It is marked "Members Only" but we have permission. Alternately, park



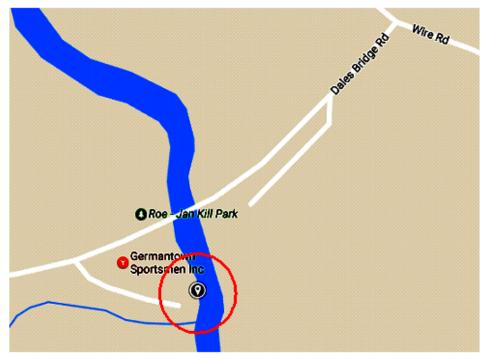
along the roadside. Sample just to the left (south) of the boat basin area, on a small canoe/kayak launch. We have permission to sample on RJBC property by Chris Delmolino, the Commodore.

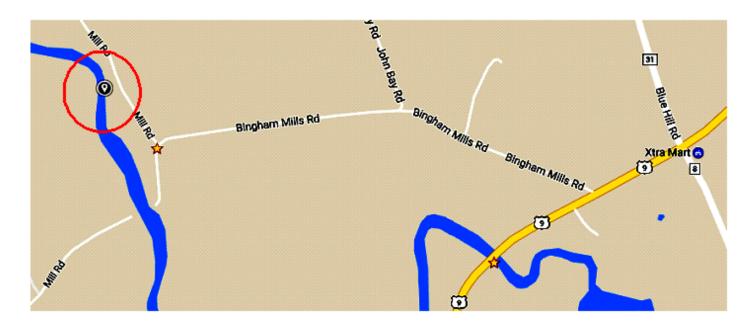
RJ-2.00 Germantown-Sportsmen's Club

This sampling site is located at the Sportsmen's Club on Dale's Bridge Road, where there is easy access to the stream. Upstream from here, agricultural land use begins to be more prominent in the watershed.

GPS: Germantown Sportsmen's Club

Parking & Access: Park in the lower lot, across from the Roe Jan Kill Park picnic area. Walk down the dirt road at the far south end of the parking lot to the grassy lawn along the river, and sample where the bank makes it easy to get to the river.





RJ-5.76 Livingston- Below Bingham Mills Dam

This sample is collected just downstream of the Bingham Mills Dam, which is the first dam on the main stem of the Roe Jan upstream of the Hudson River.

Map: Goto the Xtra Mart on Rt 9 in Livingston, south a few hundred yards to Bingham Mills Rd, then right on Mill Rd. half way down the hill to pullout on the left marked private, where you may see a yellow chain.

GPS: "206 Mill Road, Livingston", which will take you to a brick building near the dam, and then continue downhill to a small pullout on the left marked private, where you may see a yellow chain.

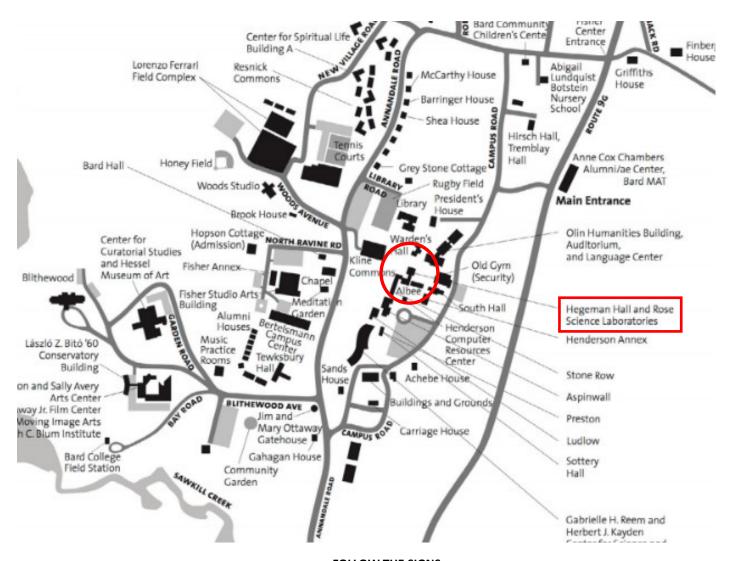
Parking: We have permission from owner Michael Hamilton to park by the yellow chain and access the stream. Walk upstream on the dirt road about 50ft past the yellow chain to access the river from a steep, but short, bank. Be careful, as there may be a strong current.

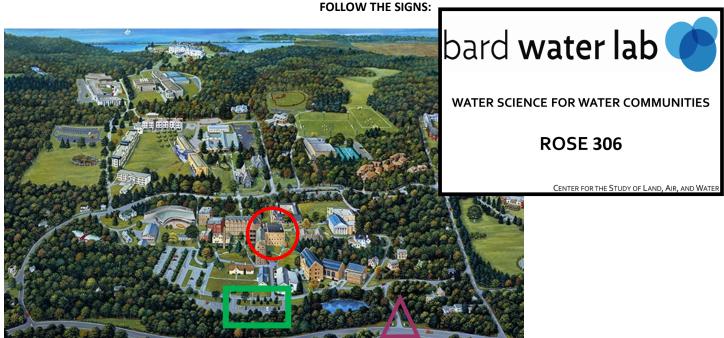
RJ-12.76 Clermont/Livingston-Kerley Corners Rd. Bridge

This sample is collected south of the bridge just west of the Elizaville Diner on Kerley Corners road. Fast traffic area, be careful.



Map or GPS: Elizaville Diner, then west to the bridge.





Purple triangle—Campus entrance from 9G

Green Square—Parking Red circle—Rose Hall