

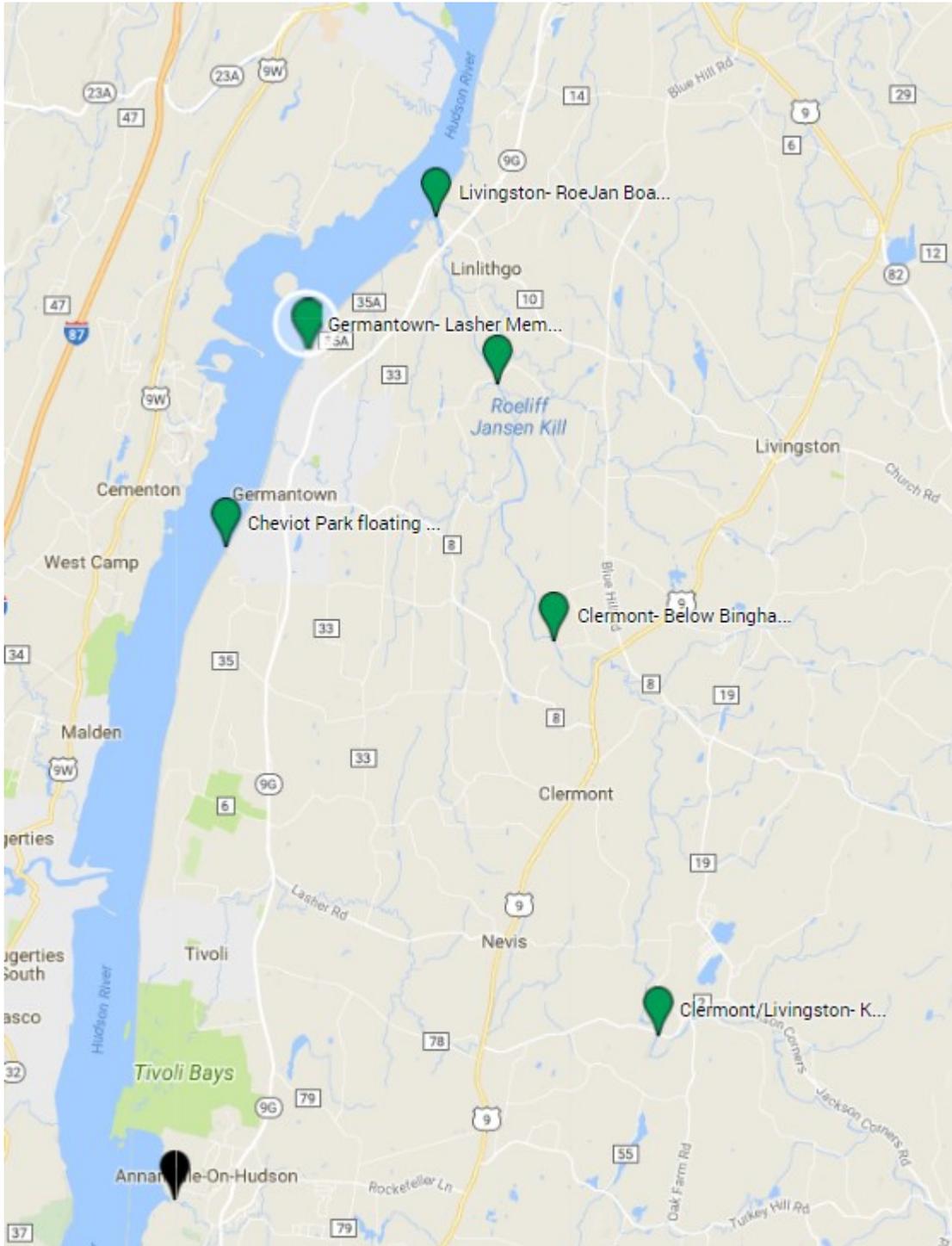


2019

# Downstream Sampling Guide

# ROEJAN WATERSHED AN COMMUNITY

## Downstream Sampling Map



## SUPPLIES AND GEAR

### Sampling Gear:

- In the Kit from Bard:
  - This sampling book
  - 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.)
  - Cooler
  - YSI Sampling meter and probe
  - Dipper, in a protective bag, keep dipper covered when not in use
  - Upstream Only: Bucket (for sampling from a bridge), in a protective bag, keep bucket covered when not in use; put nothing but water in the bucket
  - Upstream Only: 2 Safety vests (for sampling from a bridge)
- You need to supply:
  - Ice for the cooler
  - 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

### 2019 Sampler Names

May 11 <sup>th</sup>		
June 15 <sup>h</sup>		
July 13 <sup>th</sup>		
August 10 <sup>th</sup>		
Sept. 14 <sup>th</sup>		
Oct. 12 <sup>th</sup>		

## 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. Don't use force, it fits together smoothly.
3. Turn on the YSI meter.
4. **Put rubber gloves on both hands at the outset, before handling bottle. Only handle bottle with gloved hands.**
5. No matter how you are sampling, **look for clear moving water, and collect water coming towards you.**

<b>Wade out to moving water</b>	<b>Sample from shore with the Dipper</b>	<b>Sample with the Bucket from a Bridge</b>
Find a safe place to wade into the stream. Try not to disturb sediment, face upstream, wait for sediment to dissipate. Uncap the bottle.	Find good footing on the streambank, within 3-4' of clear running water. Uncap the bottle.	You need 18" or more of depth. If too shallow, sample with dipper or by wading out.
Submerge the bottle upside-down. While still underwater, tilt the bottle upwards until air escapes, with opening facing upstream. Repeat 3X, discarding the first two fills and then keeping the 3rd one.	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.	<u>Both samplers should wear the safety vest.</u> Watch for oncoming traffic. Have your partner slow traffic. Use the line on the handle to raise lower the bucket, and the line on the bottom to tilt. You can see the bucket better on the down-
Leave air in neck of bottle, cap and place on ice.	Leave air in neck of bottle, cap and place on ice.	Rinse bucket in running water. Fill and dump. Fill and bring up, and set it down. Place YSI probe into water to the top of the strain relief, wait for the readings to stabilize, then have partner write conductivity (top) and temperature in the log.
Place YSI probe into water to the top of the strain relief, wait for the reading to stabilize, then have partner write conductivity (top) and temperature in the log.	Lower bucket, rinse again, bring it up again and set it down. Dip bottle in bucket and discard, dip again and discard, dip and keep. <u>Collect from fresh water; do not collect water contaminated by the probe.</u>	Leave air in neck of bottle, cap and place on ice.
Turn off meter. Discard gloves	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 conductivity (top) and temperature in the log.	Turn off meter. Put bucket in protective bag. Discard gloves.
	Turn off meter. Put dipper in protective bag. Discard gloves.	

6. Place your observations in the log book, such as cloudy water, tide ebb/flow on Hudson shoreline sites, or anything else of note.

May 11, 2019	Temp	Conductivity	Time	Notes
RJ-12.76 Elizaville				
RJ-5.76 Bingham				
RJ-2.00 Sportsmen's				
RJ-0.00 RJ Boat Club				
RJ-HR-108.5 Lasher Park				
RJ-HR-106.5 Cheviot Park				

June 15, 2019	Temp	Conductivity	Time	Notes
RJ-12.76 Elizaville				
RJ-5.76 Bingham				
RJ-2.00 Sportsmen's				
RJ-0.00 RJ Boat Club				
RJ-HR-108.5 Lasher Park				
RJ-HR-106.5 Cheviot Park				

July 13, 2019	Temp	Conductivity	Time	Notes
RJ-12.76 Elizaville				
RJ-5.76 Bingham				
RJ-2.00 Sportsmen's				
RJ-0.00 RJ Boat Club				
RJ-HR-108.5 Lasher Park				
RJ-HR-106.5 Cheviot Park				

Aug. 10, 2019	Temp	Conductivity	Time	Notes
RJ-12.76 Elizaville				
RJ-5.76 Bingham				
RJ-2.00 Sportsmen's				
RJ-0.00 RJ Boat Club				
RJ-HR-108.5 Lasher Park				
RJ-HR-106.5 Cheviot Park				

Sept. 14, 2019	Temp	Conductivity	Time	Notes
RJ-12.76 Elizaville				
RJ-5.76 Bingham				
RJ-2.00 Sportsmen's				
RJ-0.00 RJ Boat Club				
RJ-HR-108.5 Lasher Park				
RJ-HR-106.5 Cheviot Park				

Oct. 12, 2019	Temp	Conductivity	Time	Notes
RJ-12.76 Elizaville				
RJ-5.76 Bingham				
RJ-2.00 Sportsmen's				
RJ-0.00 RJ Boat Club				
RJ-HR-108.5 Lasher Park				
RJ-HR-106.5 Cheviot Park				

### 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.



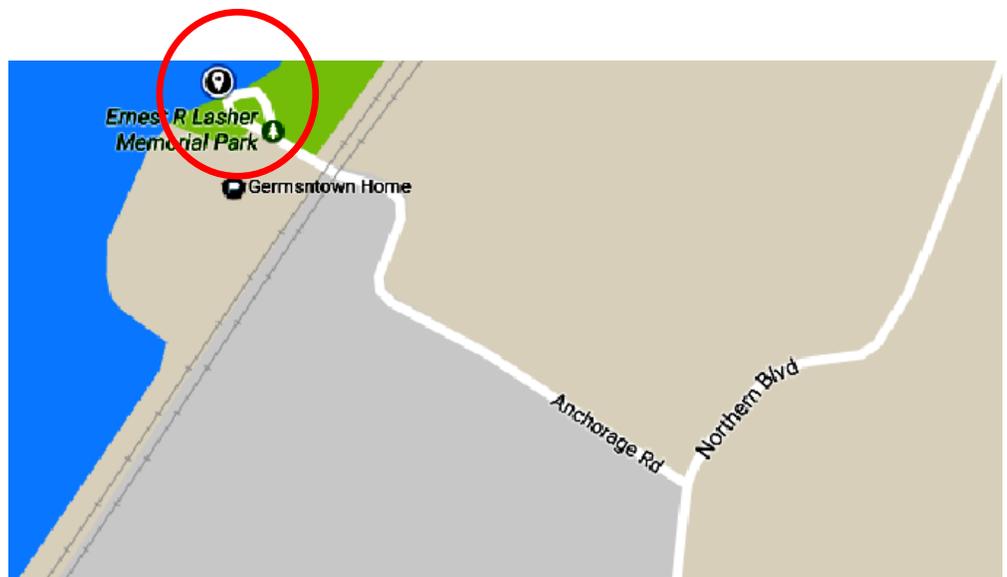
### RJ-HR-108.5 Germantown– Ernest R. Lasher Jr. Mem. Park

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 to the park.

**GPS:** Lasher Park Germantown

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



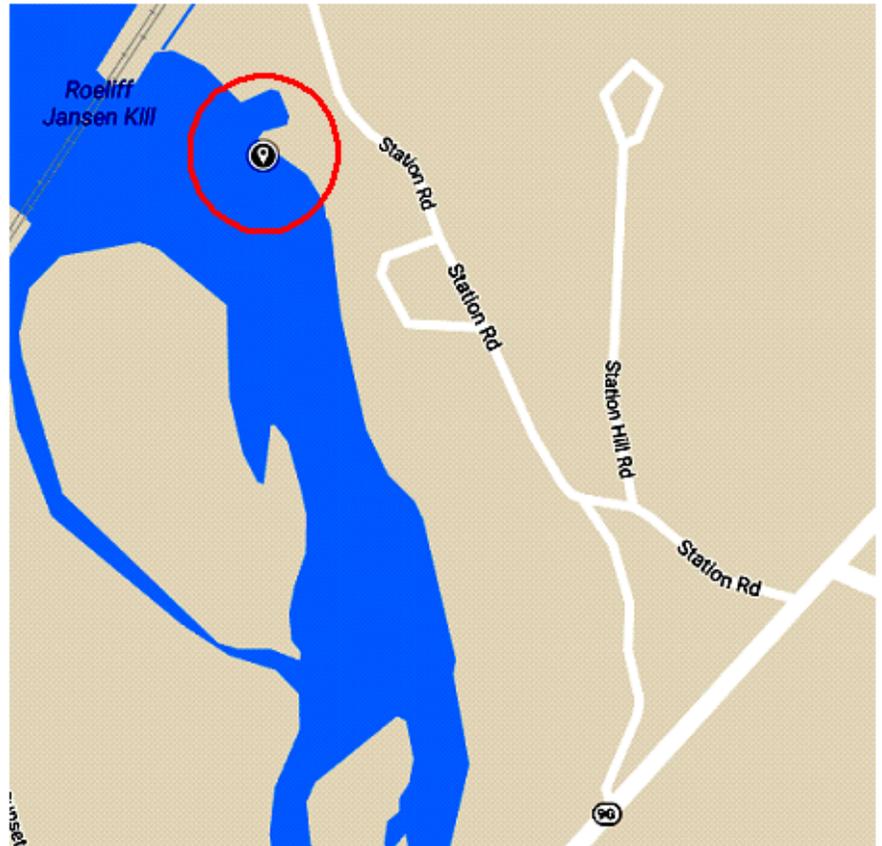
### RJ-0.00 Livingston- RoeJan Boat Club

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 gG over the RJ,. Just N of bridge is Station Rd., follow Station to the club.

**GPS:** "station rd & Rt gG, 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 rocky beach often used as a canoe/kayak launch. We have permission to sample on RJBC property by Chris Delmolino, the Commodore.

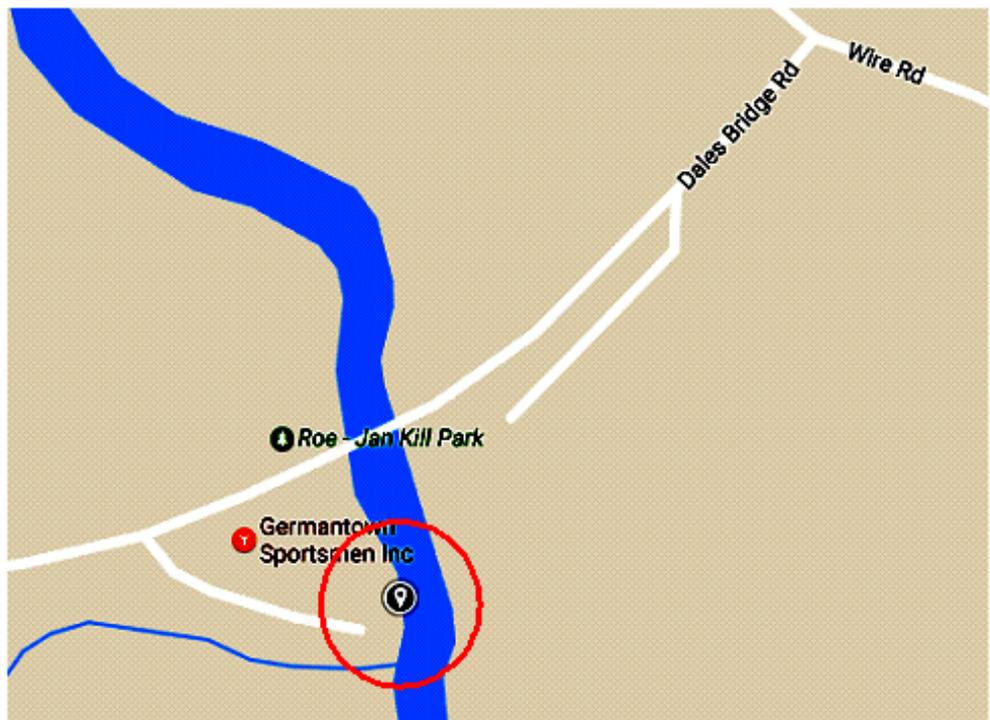


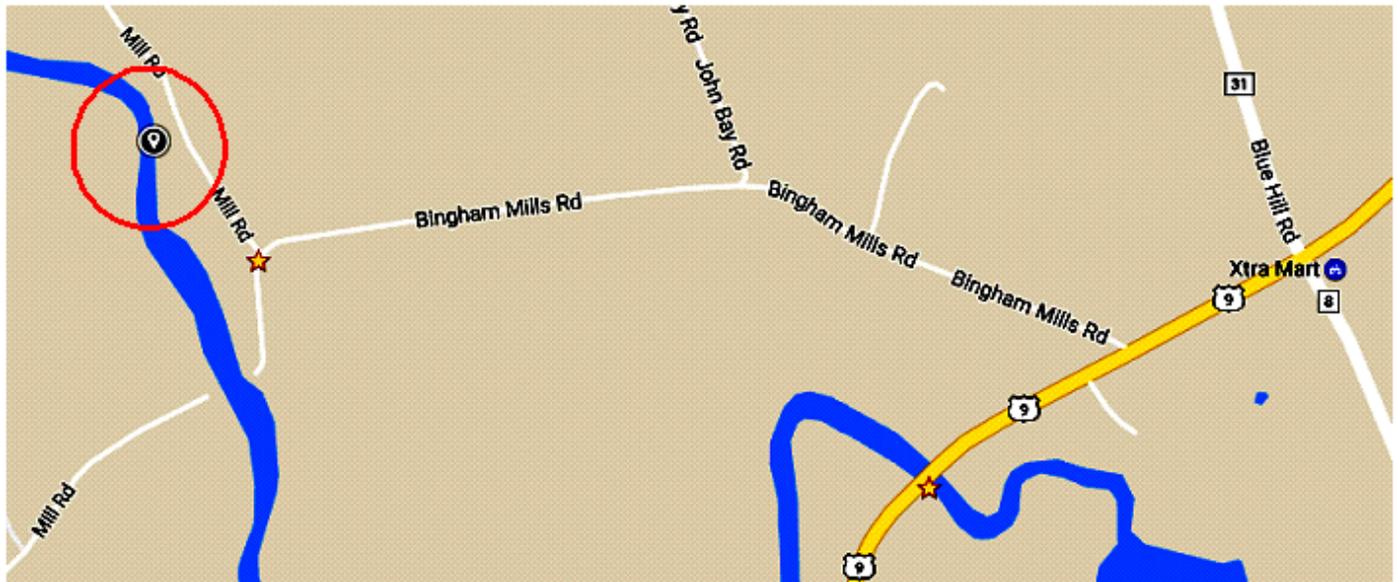
### RJ-2.00 Germantown- Sportsmen's Club

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

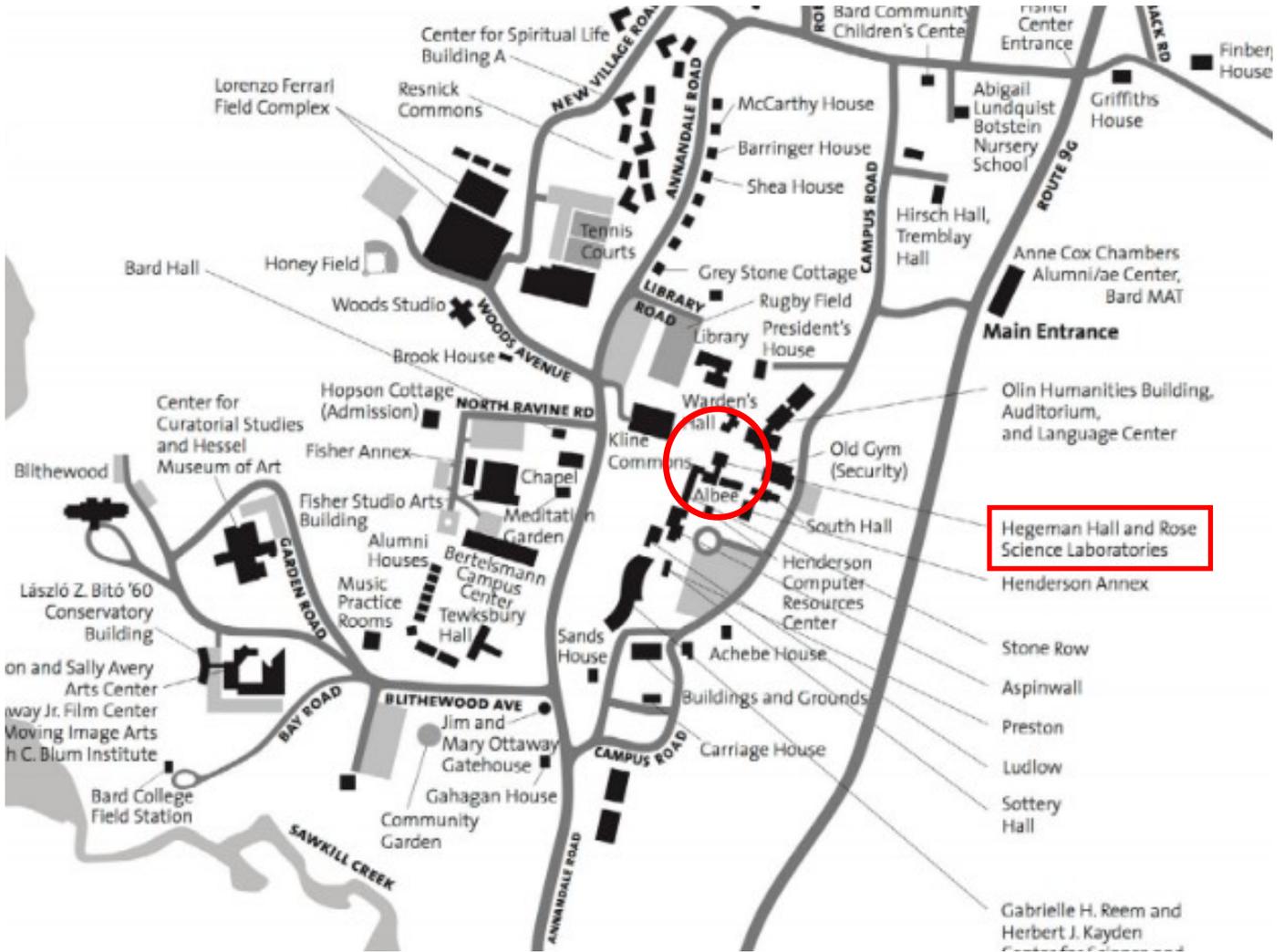
This sample is collected south of the bridge just west of the Elizaville Diner on Kerley Corners road. Fast traffic area, be careful.

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

**Parking:** There is a wide pulloff on the south side of the road just east of the bridge.



**Finish**—Rendezvous with the Upstream sampling crew at Elizaville Diner, and then take their samples and gear to Bard Water Lab. If you are late or have trouble finding the lab, call or text 845-206-8883



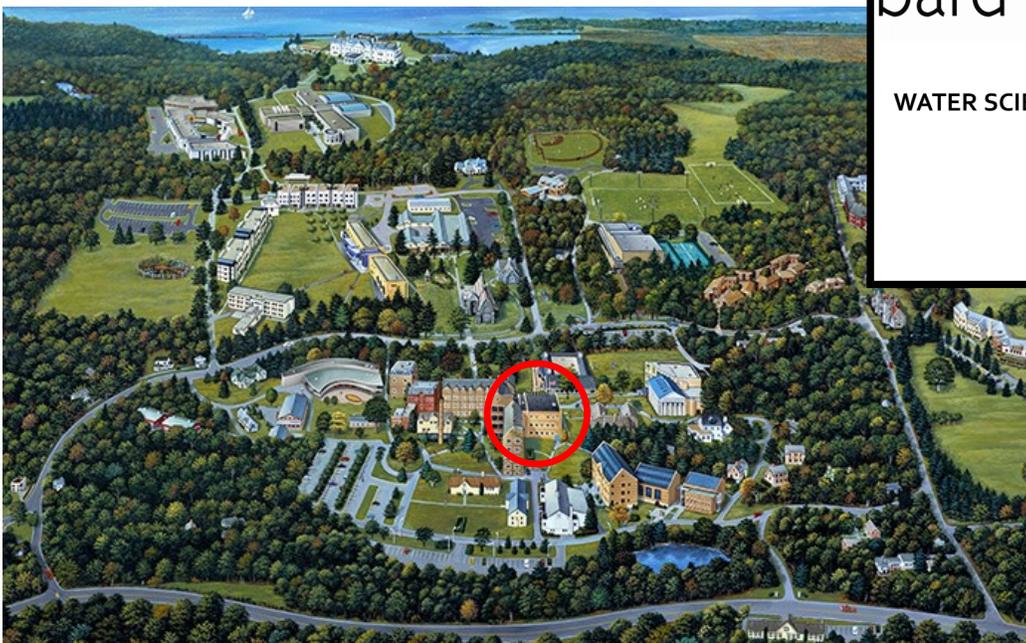
FOLLOW THE SIGNS:

**bard water lab**

WATER SCIENCE FOR WATER COMMUNITIES

**ROSE 306**

CENTER FOR THE STUDY OF LAND, AIR, AND WATER



**SAMPLES ARE DUE AT ROSE HALL ROOM 306 BETWEEN 11AM AND NOON.**