

# Saw Mill River and Hudson River Stakeholder Review of 2023



The above photo captures the daylighted segment of the Saw Mill River at Van Der Donck park in downtown Yonkers on the morning of October 30th, 2023. If you take a quick glance, this photo looks of a serene river passing through a metropolitan area. If you trace your line of sight along the edges, you will notice that the river banks are completely engulfed with water. The buffer zone of the river banks are almost non-existent - doing an excellent job of "controlling" the flooding and preventing it from impacting areas of the park dedicated to recreation use. This excessive flooding is the result of 0.94" of rainfall along the southern parts of the Saw Mill River watershed. In natural riverine systems, most rain would be absorbed by natural spaces surrounding the river and prevent a lot of excessive flooding as seen above. The current spaces along the Saw Mill River have been altered for the convenience of human use - including industrial, commercial, and residential. The development along what is considered the Saw Mill River floodplain has left the river system with very few permeable surfaces - fast tracking a lot of the said rainwater directly into the mainstem river.

Excessive rain and a myriad of other technical issues/ailing infrastructure cause a runaway downward spiral, ultimately impacting water quality conditions. On a basic level, this is impacting species that consider the waterway a habitable location. On a broader level, this is impacting communities that are interacting with this waterway in one way, shape or form.

## EXCERPTS FROM DEC WATERBODY SEGMENT ASSESSMENT FACTSHEET

### SMR, UPPER, AND TRIBS CLASSIFICATION: B(T)\*

#### STREAM AND TRIBS, ABOVE WOODLANDS

##### ASSESSMENT OF BEST USE:

FISHING - IMPAIRED

AQUATIC LIFE - STRESSED

RECREATION - STRESSED

[DEC INFO LINK](#)

### SMR, MIDDLE, AND TRIBS CLASSIFICATION: A

#### STREAM AND TRIBS, FROM NEAR YONKERS TO WOODLANDS

##### ASSESSMENT OF BEST USE:

FISHING - IMPAIRED

SECONDARY CONTACT RECREATION -  
IMPAIRED

PRIMARY CONTACT RECREATION -  
IMPAIRED

[DEC INFO LINK](#)

### SMR, LOWER, AND TRIBS CLASSIFICATION: C

#### STREAM, FROM MOUTH TO NEAR YONKERS

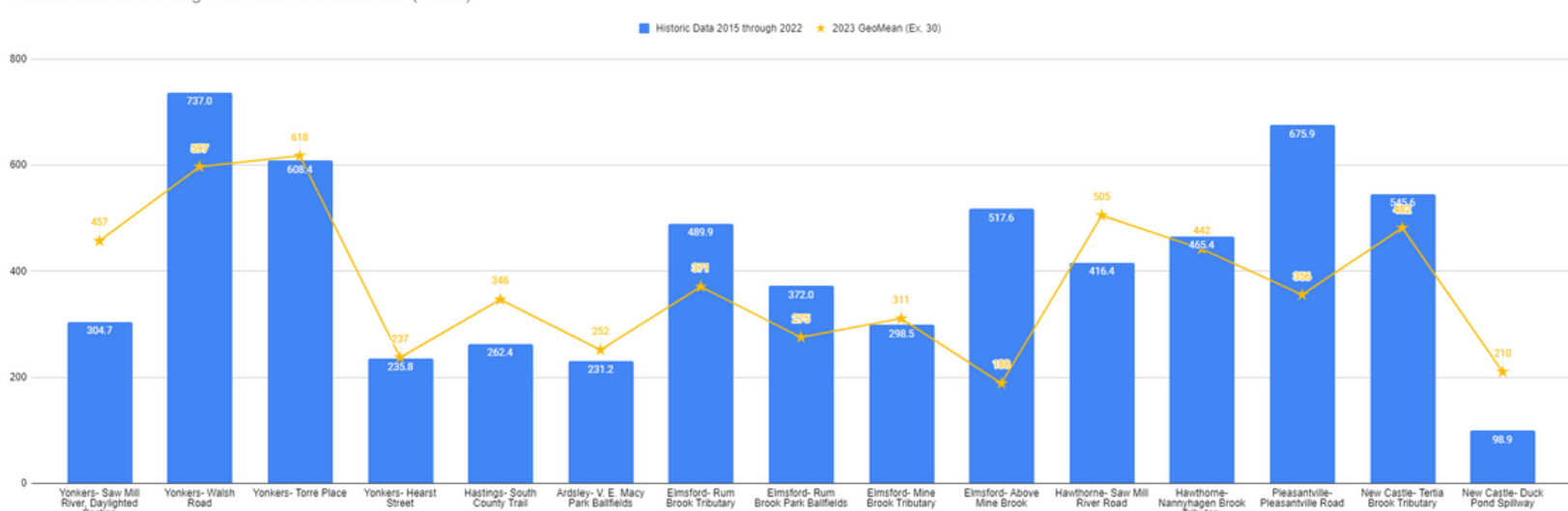
##### ASSESSMENT OF BEST USE:

FISHING - IMPAIRED

SECONDARY CONTACT  
RECREATION - IMPAIRED

[DEC INFO LINK](#)

Historic Data 2015 through 2022 and 2023 GeoMean (Ex. 30)



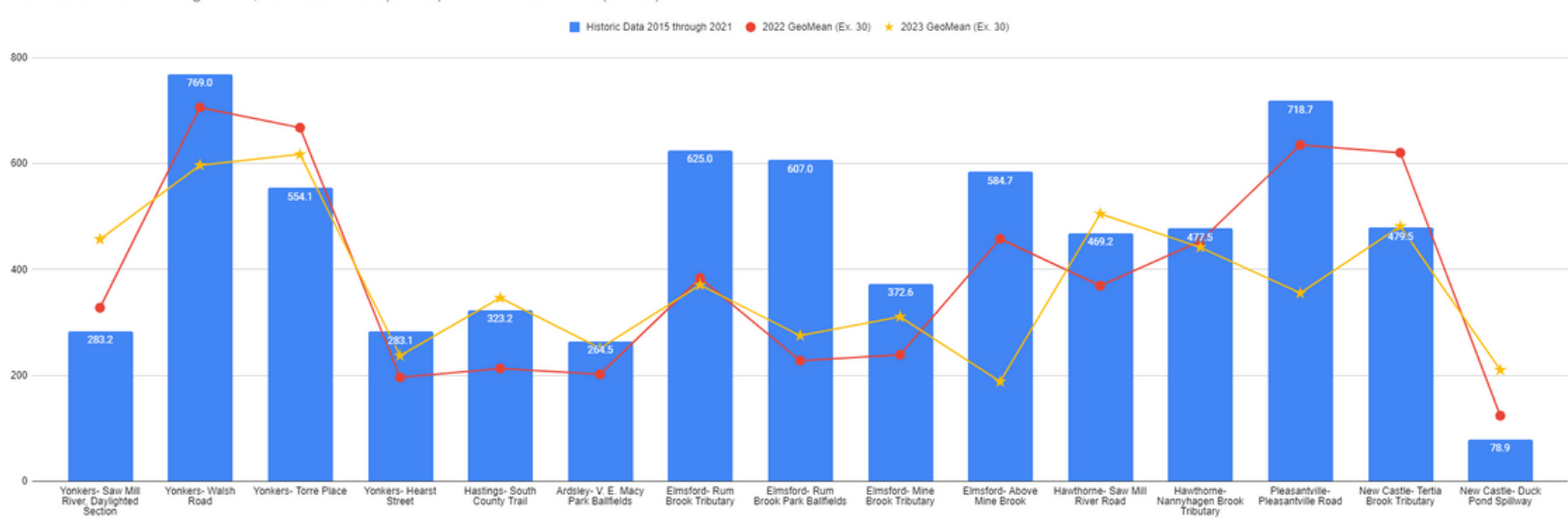
Flooding is fairly synonymous when thinking about the Saw Mill River and I mention rain a lot when speaking about this bacterial sampling program and its connection to water quality. This is not coincidental. We know that rain has some form of impact when thinking about urban environments. Whether on the surface through the process of runoff or the intricacies of Inflow & Infiltration (also referred to as I & I), precipitation does not actively seek out the path to less environmental impact. Rain is part of our earth's systems and we must work around it.

Generally, when we look at years with a dryer sampling season, we can see "better" water quality. I say "better" here because this is comparative to the data collected historically - not against the EPA public safety standards (a geometric mean of 30 cfu/100 mL for a long term data set). In 2022, around 15% of the total samples were collected during rain events\*. This resulted in 73% of of Saw Mill River sites showing lower than the historic geometric mean. In 2023, around 46% of the total samples were collected during rain events\*. This resulted in 40% of Saw Mill River sites showing lower than the historic mean. Although this is not a stark comparison, we are able to determine hot spot sites that have elevated bacterial levels independently of the impacts of rain on the ailing infrastructure.

Notably, most of the same hot spots remain on the watch list; but, more shocking than this is that not one of the Saw Mill River sites calculated a season geometric mean lower than 200 MPN. This is almost 7 times the highest recommended for current water quality criteria for ambient waters. And although the Saw Mill River is not a swimming river, we know that there are all walks of life interacting with this water and deserve to be safe while doing so.

\*Rain events here meaning at least 0.1" of rain recorded within 4 days of sample collection

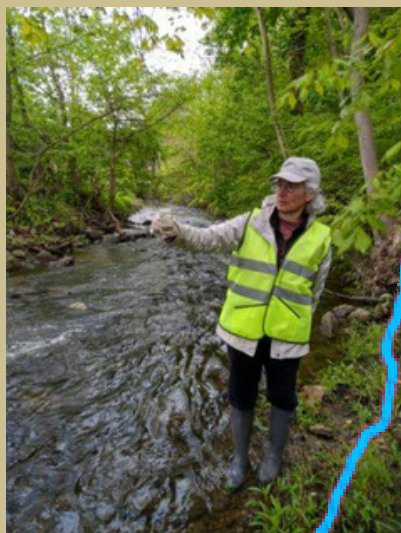
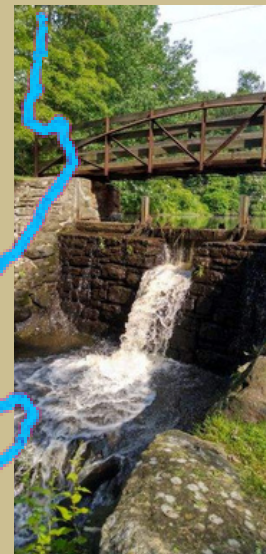
Historic Data 2015 through 2021, 2022 GeoMean (Ex. 30) and 2023 GeoMean (Ex. 30)



# (The Distinguished River): A section of our newsletter dedicated to the great ever changing rivers

This section is dedicated to the amazing Saw Mill River Water Protectors. The volunteer community scientists of the Saw Mill and Hudson Rivers that dedicate time out of their day to collect water from our beloved rivers.

A very special, Thank you!!



Photos from Top, Left to Right:

Artie C., Bill D., Jinette, Rónán S., Katie L., Artie C., John, Helen M., Kirsten A., Sarita E., Roger S., Sophie L., Helen M., Sharon A., Lee W., Helen M., Marcia B., Jay M., Kirsten A. (Missing from photos - Sara H., Dalysa H., Philomena D., Diane M., Marty D., Steve P.)

**(DATA):**

Most Probable Number (MPN) of Colony Forming Enterococcus Bacteria per 100ml sample. EPA recommends public notification and possible temporary beach closure for single Enterococcus samples above **60 cells/100ml**. Samples testing above this threshold appear in **red** on the Riverkeeper website, while those below it appear in **green**. To avoid exposure to chronic contamination, the geometric mean, a weighted 30-day average, should not exceed 30 cells/100ml. To avoid exposure to occasional high levels of contamination, no more than 10% of samples should exceed 110 cells/100ml.

Watershed	River Mile	Site ID	Site Name	Historic Geometric Mean (HGM) 2015-2022	2023 Geometric Mean (Lower than the HGM)
Hudson	-	SMR-HR-20	(YONKERS) JFK Marina Boat Launch	29.4	(20)
Hudson	-	SMR-HR-18.5	(YONKERS) Yonkers Paddling and Rowing Club	46.2	58
Saw Mill	0.19	SMR-0.19	(YONKERS) SMR, Daylighted Section	304.7	457
Saw Mill	1.11	SMR-1.11	(YONKERS) Walsh Road	737	(597)
Saw Mill	2.44	SMR-2.44	(YONKERS) Torre Place	608.4	618
Saw Mill	4.22	SMR-4.22	(YONKERS) Hearst Street	235.8	237
Saw Mill	4.87	SMR-4.87	(HASTINGS) S. County Trail Boat Access at Farragut Avenue	262.4	346
Saw Mill	7.9	SMR-7.9	(ARDSLEY) V.E. Macy Park Ballfields	231.2	252
Saw Mill	10.31	SMR-RB-0.13	(GREENBURG) Rum Brook Tributary	489.9	(371)
Saw Mill	10.41	SMR-10.41	(GREENBURG) Rum Brook Park Ballfields	372	(275)
Saw Mill	11.72	SMR-MB-0.15	(ELMSFORD) Mine Brook Tributary	298.5	311
Saw Mill	11.82	SMR-11.82	(ELMSFORD) Above Mine Brook	517.6	(188)
Saw Mill	14.88	SMR-14.88	(MOUNT PLEASANT) Saw Mill River Road	416.4	505
Saw Mill	17.57	SMR-NB-0.07	(MOUNT PLEASANT) Nannyhagen Brook Tributary	465.4	(442)
Saw Mill	18.84	SMR-18.84	(PLEASANTVILLE) Pleasant Avenue	675.9	(356)
Saw Mill	20.66	SMR-TB-0.34	(NEW CASTLE) Tertia Brook Tributary	545.6	(482)
Saw Mill	21.18	SMR-21.18	(NEW CASTLE) Duck Pond Spillway	98.9	210



## SPECIAL ACKNOWLEDGMENTS

The program is funded in part by ConEdison and is part of the Lower Hudson Urban Waters Collaborative which includes CURB, Riverkeeper, and Bronx River Alliance.



**We also take a moment to thank YOU!**

WE ACKNOWLEDGE YOUR SUPPORT IN HELPING US CREATE A UNIFIED VOICE SURROUNDING OUR LOCAL WATERWAYS THROUGH VOLUNTEERING, RESEARCH, EDUCATION, AND OUTREACH. IF YOU WISH TO BECOME MORE INVOLVED AND LEARN HOW YOU CAN SUPPORT US, VISIT OUR WEBSITE AT

[WWW.CENTERFORTHEURBANRIVER.ORG](http://WWW.CENTERFORTHEURBANRIVER.ORG)

TO ACCESS PAST NEWSLETTERS, VISIT [WWW.CENTERFORTHEURBANRIVER.ORG/RESEARCH/WATER-QUALITY.HTML](http://WWW.CENTERFORTHEURBANRIVER.ORG/RESEARCH/WATER-QUALITY.HTML)