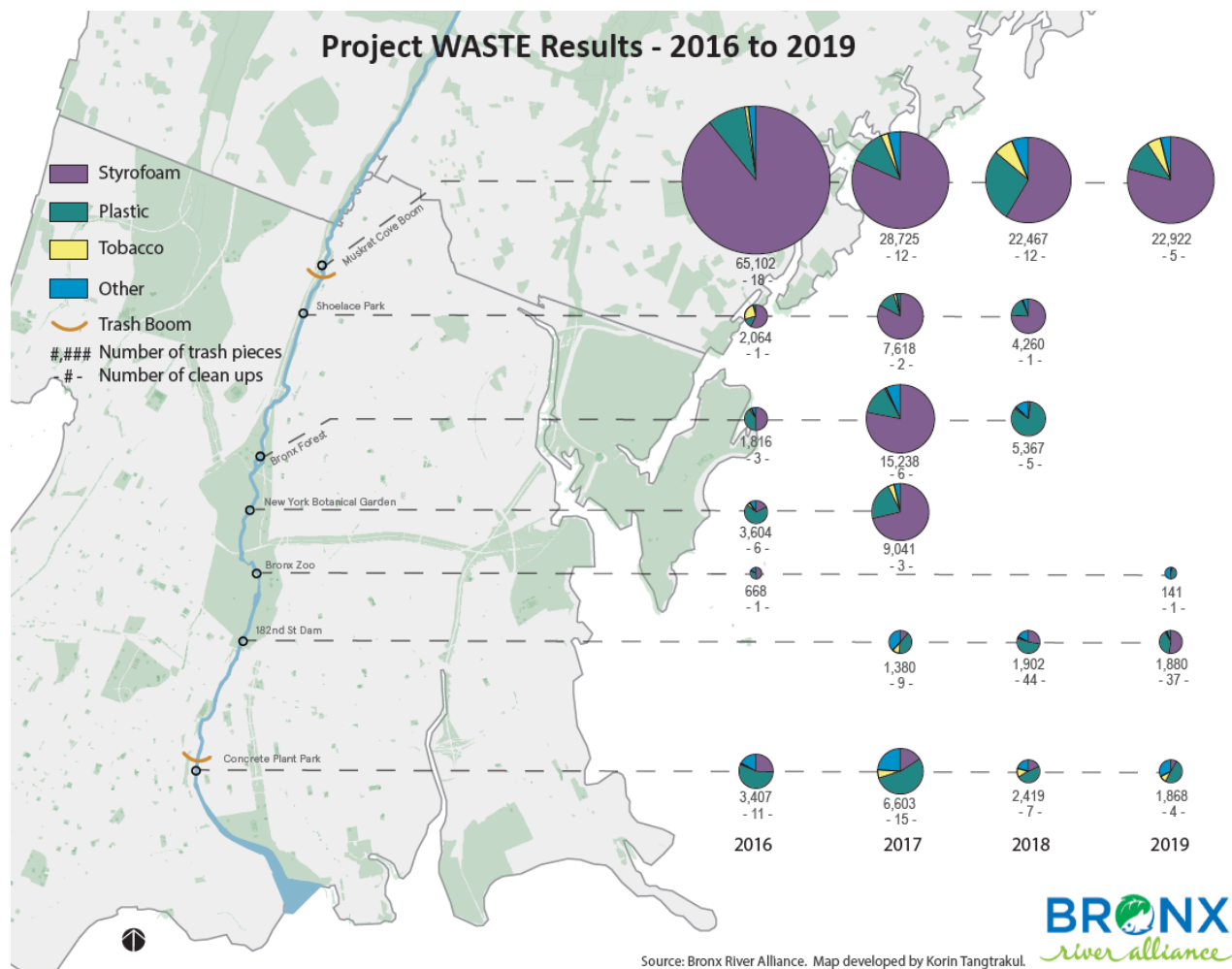The results are in! We now have several years of water quality data that help paint a picture of the Bronx River's health. Let's take a look at how our findings from 2019 compare to other years.

In 2019, Project WASTE (Waterway And Street Trash Elimination) was expanded with the addition of the Street Trash Surveys, which surveyed sidewalks on the streets adjacent to the Bronx River in both Westchester and the Bronx. A total of *17,792 items* were counted during these surveys, with 69% coming from Bronx streets. These new data helped us to see how litter moves from the street to the river, and which litter moves the most.

In total, *26,811 items* were removed from the Bronx River in 2019. Of that, **16,273** Styrofoam pieces and **2,860** Styrofoam packing pellets were removed, making up **71%** of all trash removed. As the map below clearly shows, Styrofoam waste (purple) dominates the trash in the upper river, while there isn't much of it in the lower river. This means that these massive amounts of Styrofoam are mostly coming from Westchester. We will need to focus our efforts in Westchester to understand where this pollution is originating and what we can do to stop it.

Project WASTE Results - 2016 to 2019

Legend:
- Styrofoam
- Plastic
- Tobacco
- Other
- Trash Boom
- #,### Number of trash pieces
- - # - Number of clean ups

Map labels: Muskrat Cove Boom, Shoelace Park, Bronx Forest, New York Botanical Garden, Bronx Zoo, 182nd St Dam, Concrete Plant Park

Data points:
- 65,102 - 18 -
- 28,725 - 12 -
- 22,467 - 12 -
- 22,922 - 5 -
- 2,064 - 1 -
- 7,618 - 2 -
- 4,260 - 1 -
- 1,816 - 3 -
- 15,238 - 6 -
- 5,367 - 5 -
- 3,604 - 6 -
- 9,041 - 3 -
- 668 - 1 -
- 141 - 1 -
- 1,380 - 9 -
- 1,902 - 44 -
- 1,880 - 37 -
- 3,407 - 11 -
- 6,603 - 15 -
- 2,419 - 7 -
- 1,868 - 4 -

2016   2017   2018   2019

Source: Bronx River Alliance. Map developed by Korin Tangtrakul.

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Project Water DROP:

The data from Project Water DROP (Detecting River Outfalls and Pollutants) show that last spring and summer's above-average rainfall and flooding had a dramatic effect on water quality. Fecal indicator bacterial counts throughout the 2019 monitoring season were much higher than average – almost twice as high as usual in some locations. A total of 14 samples had bacterial counts that were off the chart. The only sampling site that didn't see above average bacterial counts was at Burke Bridge in the Bronx River Forest. We continue to see dangerously high levels of fecal indicator bacteria in Westchester where illegal sewage discharges and broken infrastructure are prevalent. Focusing our efforts in Westchester will help us identify the sources of this pollution and determine ways to stop it.

Bronx River Enterococcus Sampling 2017 - 2019

inches of rain in Harrison (May – October)
2017 — 17.9
2018 — 29.2
2019 — 21.5

Recreational Water Quality Standards
% Acceptable
% Unacceptable
# number of samples that exceeded the maximum number of bacteria colonies that can be counted

Outfalls
Stormwater (MS4)
Combined (CSO)

WESTCHESTER
BRONX

MS4
CSO

inches of rain in NYC – LaGuardia airport (May – October)
2017 — 21.7
2018 — 27.2
2019 — 26.6

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