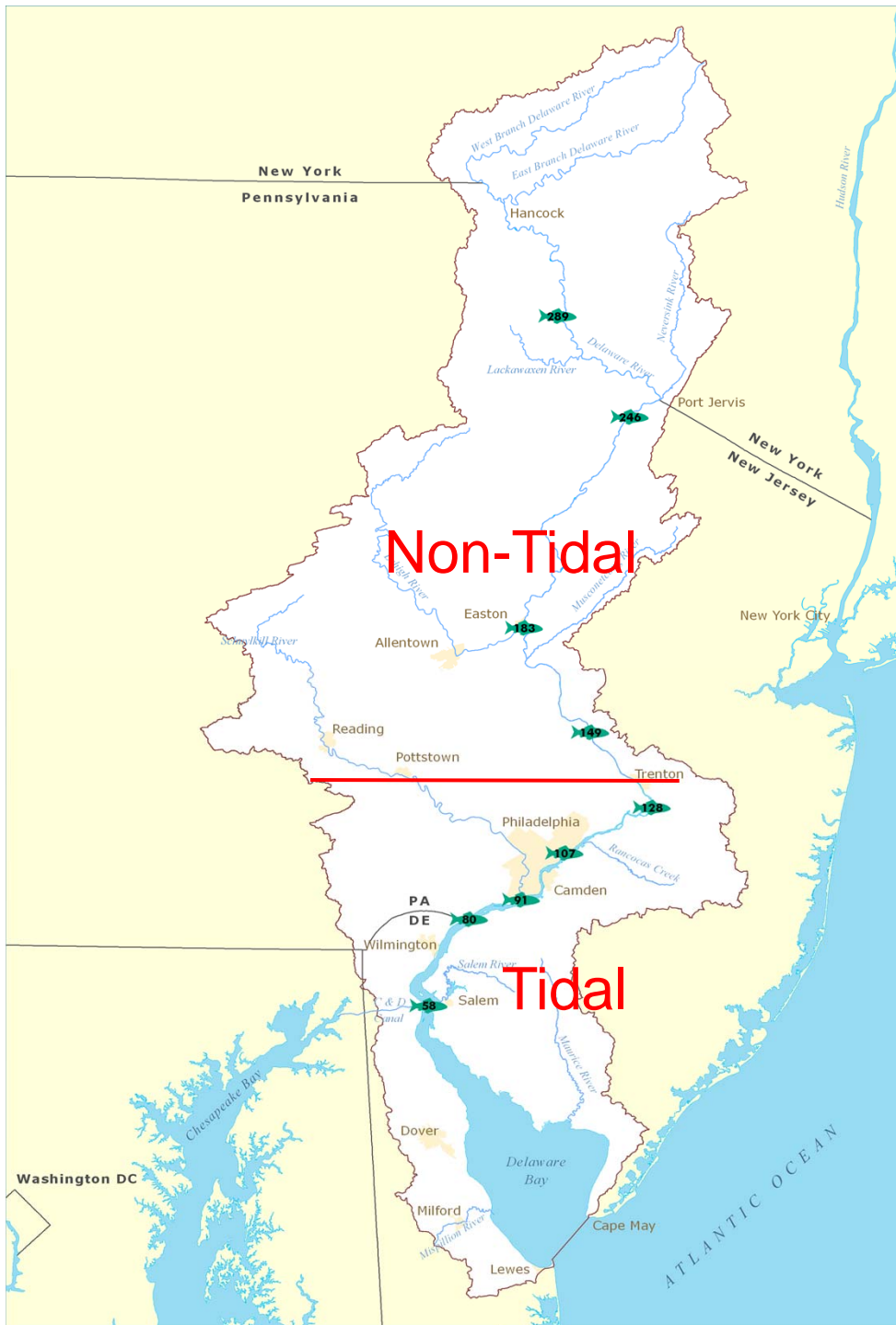


Fish Tissue Monitoring in the Main Stem Delaware River



Sampling Design

- ❑ Fish samples are collected from 8 sites in both the tidal (5 sites) and non-tidal (3 sites) portions of the Delaware River.
- ❑ Frequency: Yearly 2000 - 2007, 2010, 2012, and 2015 (planned)
- ❑ Two species of fish are collected at each site representing resident benthic and pelagic trophic levels.
 - Tidal species: white perch, channel catfish
 - Non-tidal species: smallmouth bass, white sucker
- ❑ Samples are collected by electrofishing or hook & line.



Sampling Locations 2004 to 2007, 2010, 2012, 2015

Non-Tidal Locations

Narrowsburg, NY	RM 290
Milford, PA	RM 246
Easton, PA	RM 183
Lambertville, NJ	RM 149

Tidal Locations

Crosswicks Creek	RM 128
Tacony-Palmyra Br.	RM 107
Woodbury Creek	RM 91
Raccoon Creek	RM 80
Salem River	RM 58

Analytical Parameters

- ❑ Samples are analyzed for PCBs, chlorinated pesticides, dioxins/furans, flame retardants, perfluorinated chemicals, mercury, and other metals.
- ❑ Data are used to track the progress of PCB TMDLs and to identify chemical compounds that may pose a risk to human health through fish consumption.
- ❑ Data are shared with the state agencies to their use in establishing fish consumption advisories for fish caught in the Delaware River.

Analytical Methods

- ❑ Samples are composites of standard fillets. and consist of a composite of 4 to 5 fish of similar size and weight.
- ❑ Analytical Methods:
 - Mercury: Method 1631 Appendix A – Cold Vapor AFS
 - Methylmercury: Method 1630 – Cold Vapor AFS
 - Detection Limit - ~2 ng/gram (ppb)
 - Analysis by Brooks Rand under contract to Axys Analytical LTD