A satellite image of Hurricane Irene, showing a well-defined eye and a dense, swirling cloud structure over the Atlantic Ocean. The hurricane is positioned in the lower right quadrant of the frame, with the eastern coast of North America visible on the left. The text "Hurricane Irene" and "August 27/28, 2011" is overlaid on the left side of the image.

Hurricane Irene

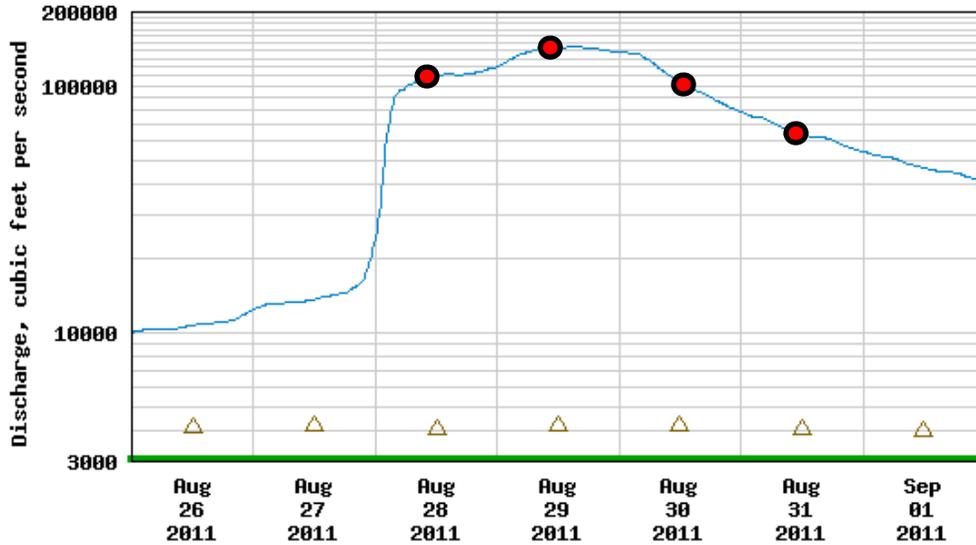
August 27/28, 2011

Presented by: Jeff Fischer, USGS NJWSC
NJ Water Monitoring Council Meeting
May 30, 2012

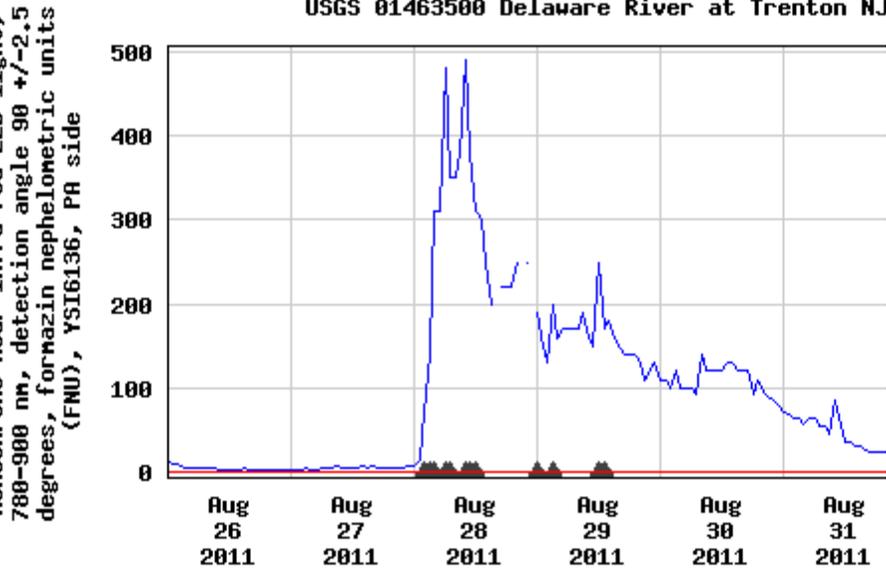
Hurricane Sampling

- Delaware@Trenton and Raritan@Queens Br
 - 4 days, 8/28 - 8/31
 - Major Ions, Nutrients, Sediment, Bacteria
- Added Raritan at Manville (last two days)
 - 2 days, 8/30 - 8/31
 - VOCs and metals
- Passaic River Basin
 - 2 days, 8/31 – 9/1
 - Bacteria (one VOC)

USGS 01463500 Delaware River at Trenton NJ



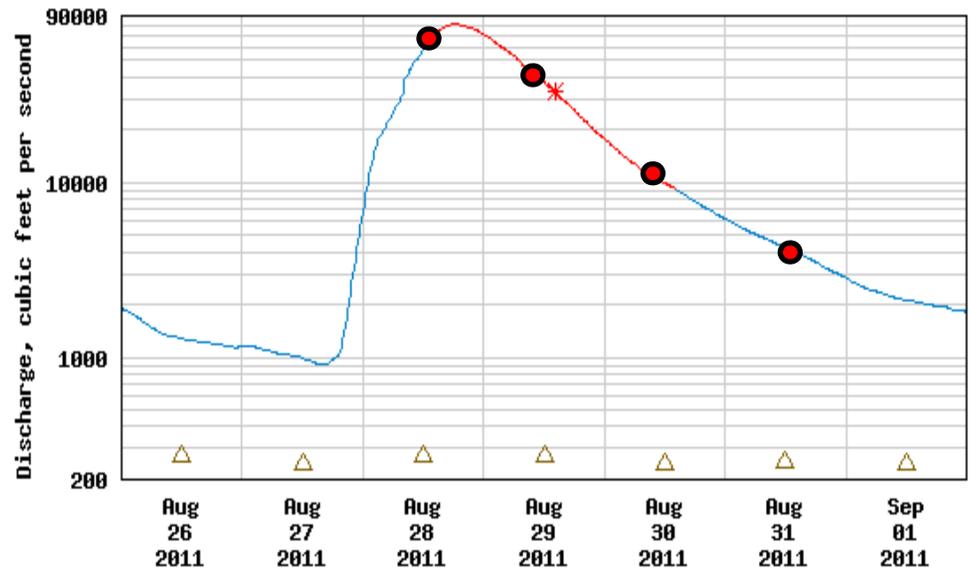
USGS 01463500 Delaware River at Trenton NJ



---- Provisional Data Subject to Revision --

- Turbidity
- ▲ Value exceeds "standard difference" thresh
- Values less than 0.5 are approximate

USGS 01403060 Raritan River below Calco Dam at Bound Brook NJ

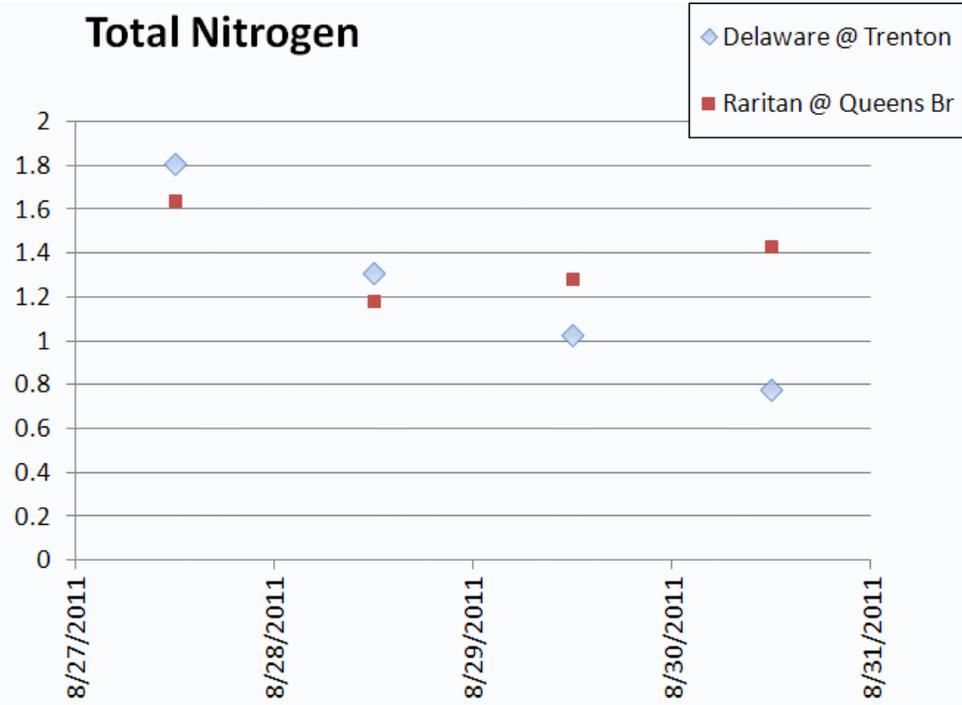


---- Provisional Data Subject to Revision ----

- ▲ Median daily statistic (71 years)
- Discharge
- Estimated discharge
- * Measured discharge

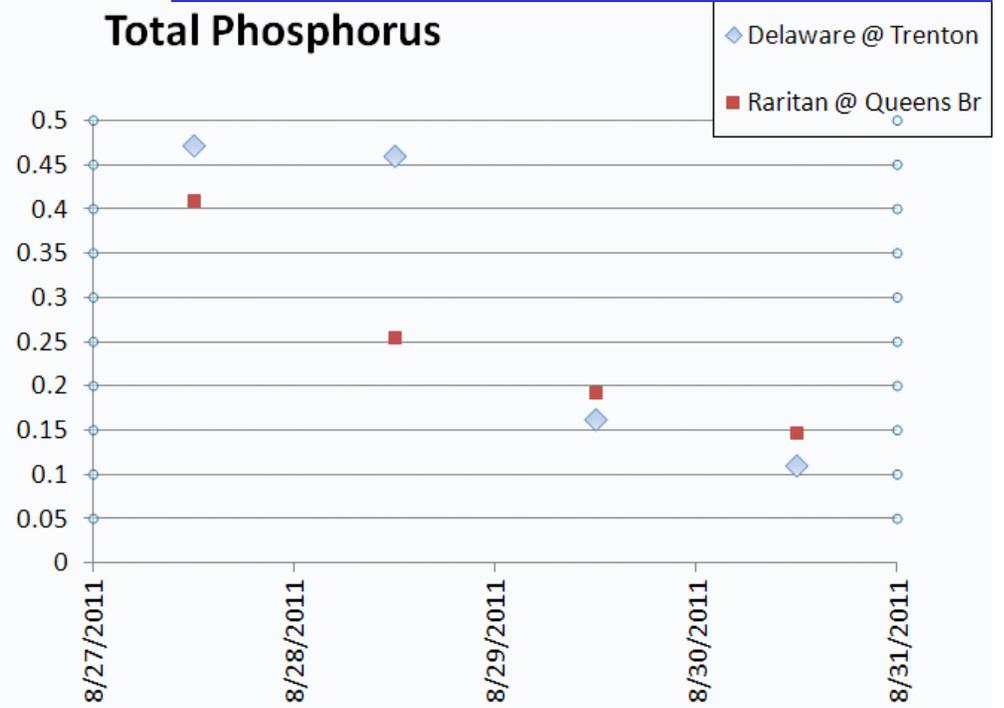
Total Nitrogen

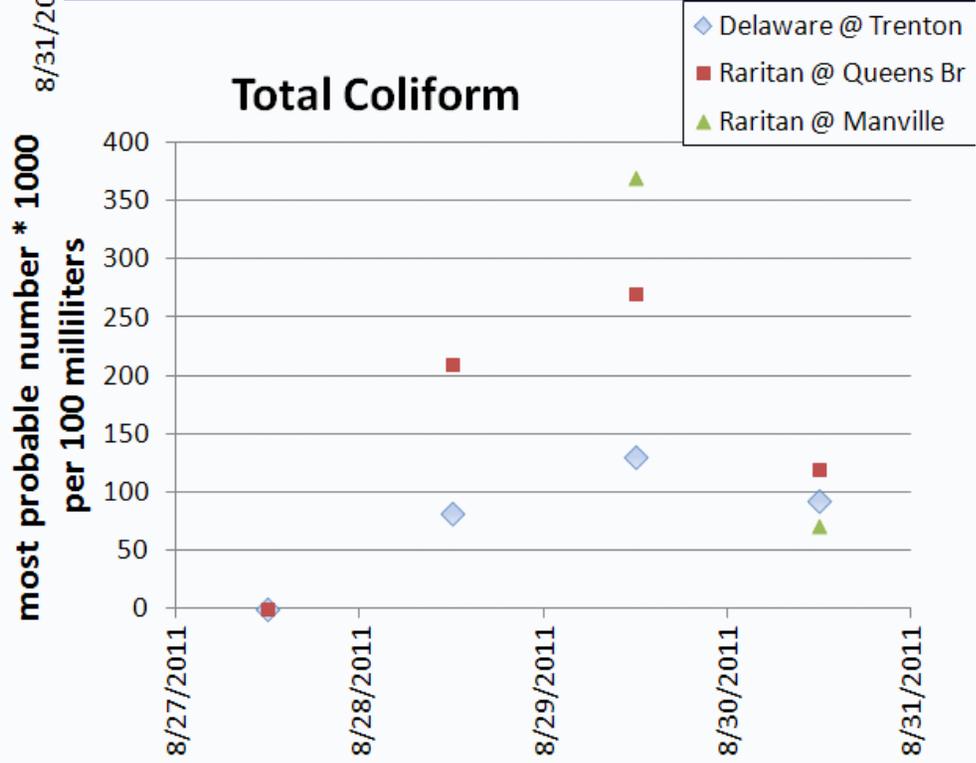
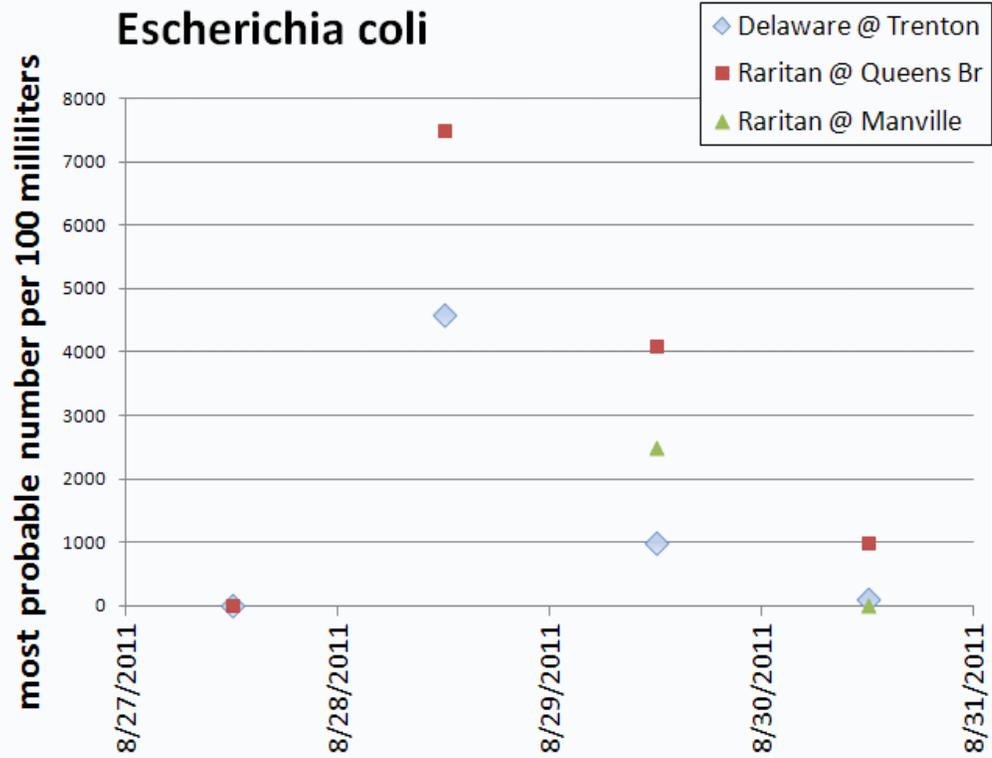
Total Nitrogen (as N) mg/L

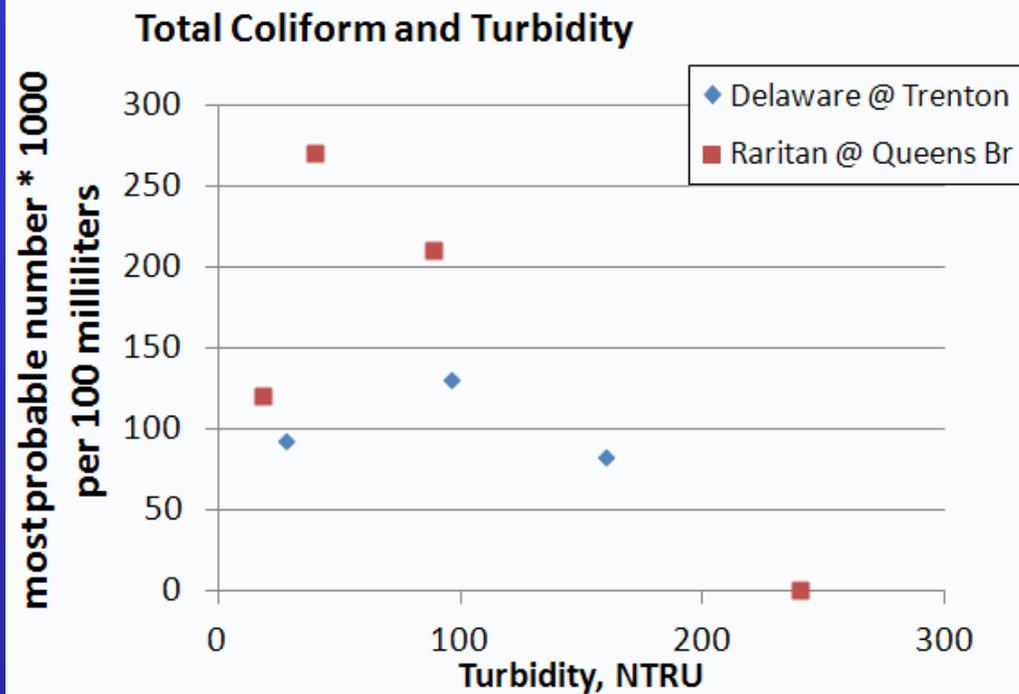
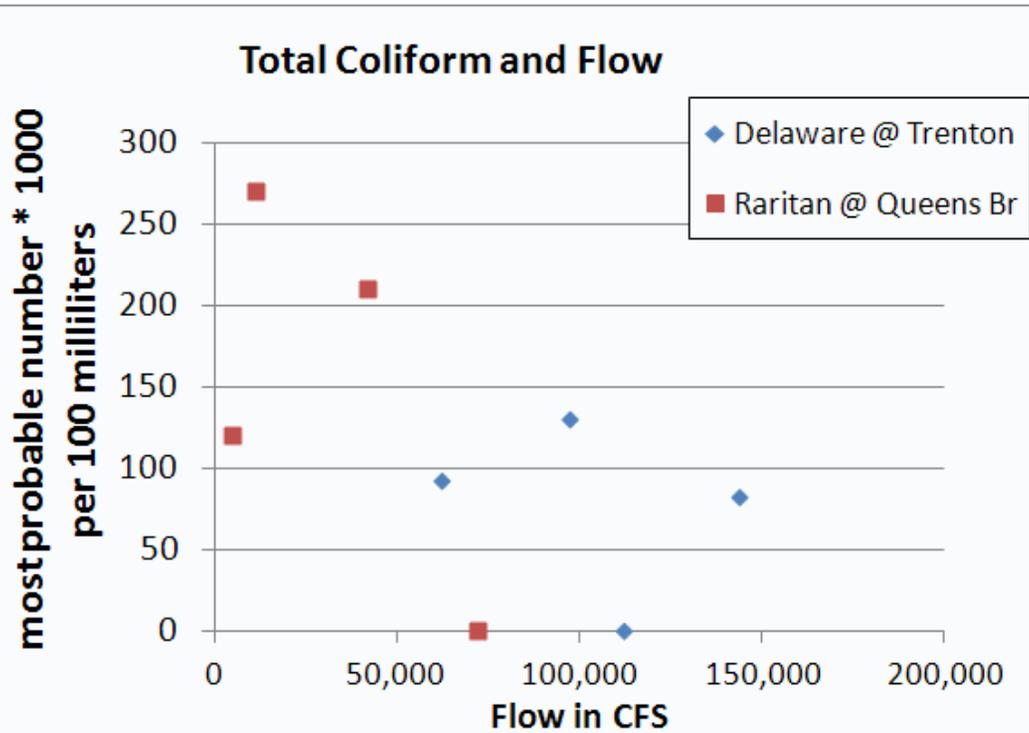


Total Phosphorus

Phosphorus (mg/L)







Passaic Basin Microbiology

	E-coli		Total Coliform	
	colonies/ 100 mL		MPN/ 100 mL	
Date	8/31/2011	9/1/2011	8/31/2011	9/1/2011
Passaic River @ Pine Brook	1,000	1,100	4,900	7,000
Passaic River @ Little Falls	1,000	300	35,000	2,400
Passaic River @ Elmwood Park	5,000	14,000	92,000	>160,000
Ramapo River @ Pompton Lakes	<1,000	70	2,300	7,900
Pompton River @ Pompton	2,000	160	17,000	4,600
Saddle River @ Lodi	4,000	1,800	17,000	35,000
Raritan River @ Bound Brook	1,000	max = 7500	120,000	max = 270,000
Delaware River @ Trenton	100	max = 4600	92,000	max = 130,000

Raritan River USEPA sampling

	Barium	Copper	Iron	Mercury	Zinc	
	ug/L	ug/L	ug/L	ug/L	ug/L	
8/30/2011	36.2	2.4	838	< .005	5	Raritan River at Manville NJ
8/31/2011	35.9	1.8	644	0.005	3.5	
8/30/2011	34	4.1	1,350	0.011	9.2	Raritan River at Queens Bridge
8/31/2011	35.6	3.4	859	0.008	7.1	

VOC sampling