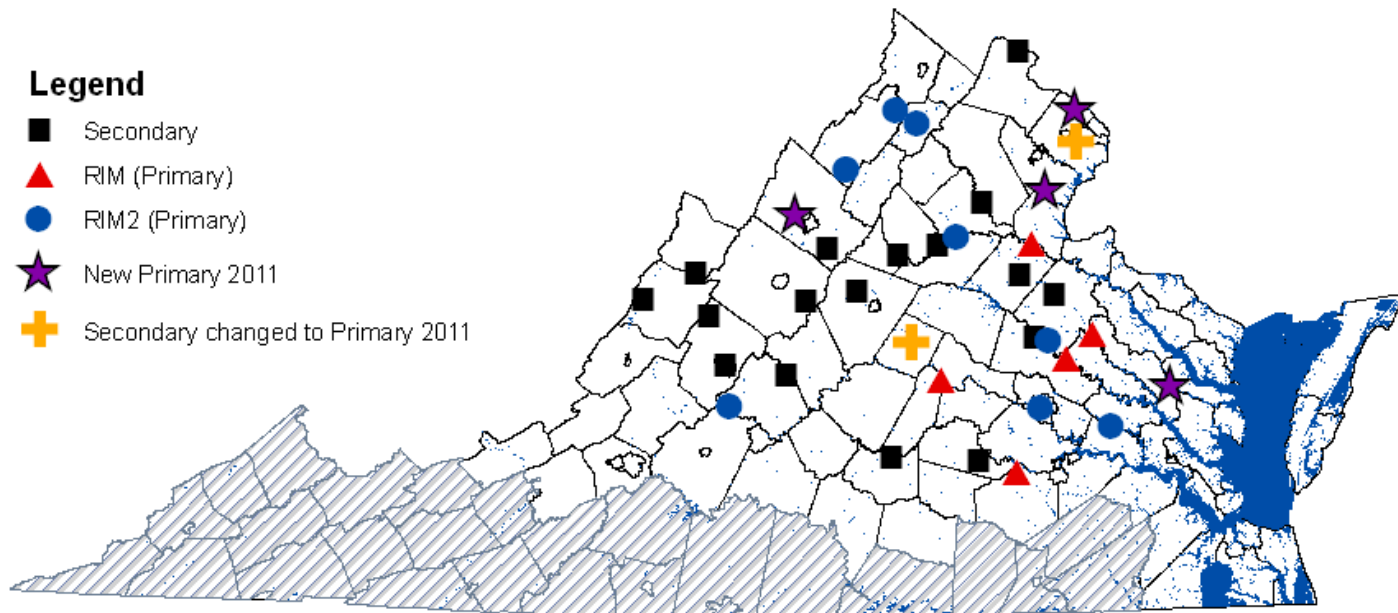


***Virginia CBP Non-tidal Network: 2011
Status Update***

Site Locations



Shaded area = Counties that do not drain into the Chesapeake Bay Watershed Basin

Primary Sites

- 19 sites (5 RIM, 14 RIM₂)
 - 16 sampled by USGS only
 - 3 sampled DEQ interval/USGS storm events
 - All sites collected via CBP methods

RIM Primary Site Analytical Parameters

Total Nitrogen

Particulate Nitrogen

Total Dissolved Nitrogen

Dissolved Nitrate-Nitrite

Dissolved Nitrite

Dissolved Nitrate

Dissolved Ammonium

Dissolved Organic Carbon

Particulate Inorganic Carbon

Particulate Organic Carbon

Total Suspended Sediment Conc.
(USGS KY Sed. Lab)

% Fine Particles <0.062 um (USGS
KY Sed. Lab)

Total Phosphorus

Dissolved Orthophosphorus

Total Dissolved Phosphorus

Particulate Phosphorus

Particulate Inorganic Phos.

Dissolved Silica

Total Suspended Solids

Fixed Suspended Solids

Volatile Suspended Solids

Lab Turbidity

Chlorophyll a

RIM2 Primary Site Analytical Parameters

Total Nitrogen

Total Nitrate-Nitrite

Total Ammonium

Total Phosphorus

Dissolved

Orthophosphorus

Total Suspended Solids

Fixed Suspended Solids

Total Kjeldahl Nitrogen

(DEQ samples only)

Total Suspended Sediment

Concentration & Fine

Particles <0.062 um

(Storm events only)

Secondary Sites

■ 16 Secondary Sites (Sampled BY DEQ Only)

Parameters collected:

- Total Nitrogen
- Total Nitrate-Nitrite
- Total Ammonium
- Total Phosphorus
- Dissolved Orthophosphorus
- Total Kjeldahl Nitrogen
- Total Suspended Solids
- Fixed Suspended Solids

Sample Collection Summaries for Primary Sites CY2011

Waterbody	DEQ Sta ID	GAGE	Source	Interval		Storm		QA/QC	Total	Method
				Interval	expected	Storm	expected			
Appomattox	2-APP016.38	2041650	USGS	12	12	10	8	3	25	HIV
James	2-JMS157.28	2035000	USGS	12	12	7	8	2	21	HIV
Mattaponi	8-MPN054.17	1674500	USGS	12	12	11	8	3	26	HIV
Pamunkey	8-PMK082.34	1673000	USGS	12	12	11	8	3	26	HIV
Rappahannock	3-RPP113.37	1668000	USGS	12	12	8	8	3	23	HIV
NF Shenandoah	1BNFS010.34	1634000	USGS	12	12	7	8	3	22	HIV
SF Shenandoah	1BSSF003.56	1631000	USGS	12	12	8	8	3	23	HIV
Rapidan	3-RAP030.21	1667500	USGS	12	12	10	8	4	26	HIV
James River at Richmond	2-JMS113.20	2037500	USGS	12	12	10	8	3	25	HIV
James River at Blue Ridge	2-JMS279.41	2024752	DEQ/SCRO	12	12	0	0	3	15	HIV
James River at Blue Ridge	2-JMS279.41	2024752	USGS	0	0	7	8	2	9	HIV
North Anna River	8-NAR005.42	2042500	USGS	12	12	12	8	4	28	HIV
Chickahominey River	2-CHK035.26	1671020	USGS	11	12	9	8	3	23	HIV
Smith Creek	1BSMT004.60	1632900	USGS	13	5	9	8	3	25	HIV
Sampled as Primary 2011 (New Site or Secondary Site moved to Primary status)										
Difficult Run	1ADIF000.86	1646000	USGS	6	6	5	3	2	13	HIV
Dragon Swamp	7-DRN010.48	1669520	USGS	3	3	3	3	1	7	HIV
Accotink Creek	1AACO014.57	1654000	USGS	0	0	3	3		3	HIV
Accotink Creek	1AACO014.57	1654000	DEQ/NRO	12	12	0	0		12	HIV
S.F. Quantico Creek	1ASOQ006.73	1658500	USGS	3	3	3	3	1	7	HIV
Muddy Creek	1BMDD005.81	1621050	USGS	3	3	3	3	1	7	HIV
Rivanna River	2-RVN015.97	2034000	USGS	0	0	10	8	1	11	HIV
Rivanna River	2-RVN015.97	2034000	DEQ/VRO	12	12	0	0	1	13	HIV
Totals CY11				183	176	136	119	47	366	

Sample Collection Summaries for Secondary Sites

Waterbody	DEQ Sta ID	GAGE	Source	Interval	Expected	Storm Targeted	Storm Expected	QA/QC	Total	Method	Comments
Catoctin Cr.	1ACAX004.57	1638480	DEQ/NRO	12	12	0	0	1	13	Integrated	HIV
Shenandoah R.	1BSSF100.10	1628500	DEQ/VRO	12	12	0	0	1	13	Integrated	HIV
South River	1BSTH027.85	1626000	DEQ/VRO	12	12	0	0	1	13	Integrated	HIV
Appomattox R.	2-APP110.93	2039500	DEQ/SCRO	12	12	0	0	2	14	Integrated	HIV
Back Creek	2-BCC004.71	2011500	DEQ/VRO	12	12	0	0	2	14	Integrated	HIV
Bullpasture R.	2-BLP000.79	2015700	DEQ/VRO	12	12	0	0	2	14	Integrated	HIV
Calfpasture R.	2-CFP004.67	2020500	DEQ/VRO	12	12	0	0	1	13	Integrated	HIV
Deep Cr.	2-DPC005.20	2041000	DEQ/PRO	12	12	0	0	0	12	Integrated	HIV
Mechums River	2-MCM005.12	2031000	DEQ/VRO	12	12	0	0	4	16	Integrated	HIV
Maury River	2-MRY014.78	2024000	DEQ/VRO	12	12	0	0	1	13	Integrated	HIV
Piney River	2-PNY005.29	2027500	DEQ/VRO						0	Integrated	Site dropped for Rivanna River.
Rapidan River	3-RAP066.54	1665500	DEQ/NRO	12	12	0	0	1	13	Integrated	HIV
Robinson River	3-ROB001.90	1666500	DEQ/NRO	12	12	0	0	0	12	Integrated	HIV
Rappahannock R.	3-RPP147.49	1664000	DEQ/NRO	12	12	0	0	1	13	Integrated	HIV
Little River	8-LTL009.54	1671100	DEQ/PRO	12	12	0	0	0	12	Integrated	HIV
Mattaponi River	8-MPN094.94	1674000	DEQ/NRO	11	12	0	0	1	12	Integrated	HIV
Po River	8-POR008.97	1673800	DEQ/NRO	11	12	0	0	0	11	Integrated	HIV
Totals CY11				190	192			18	208		

Non-tidal Network Sampling Changes Since 2011

- 5 Primary sites initiated.
- 2 Secondary sites, Accotink Creek and the Rivanna River, changed from secondary sites to primary sites.
- Implemented Equal Width Depth Integrated sampling on remaining 3 secondary sites.

2012 Challenges

- DEQ Staffing level reductions in several regional offices. Not hiring field staff replacements.
- Decreased funding/staff will result in a reduction of gages VADEQ will be able to maintain.
- New gage required at proposed new network site (primary).
- Upgrade 4 stations from secondary to primary site.
- As we expand our NTNW the coordination of storm targeted sampling of the small watersheds may pose significant challenges due to their flashy nature and the need to mobilize quickly.

Funding Sources

- Existing State funding level seems mostly stable (staff attrition and general “hiring freeze” at DEQ is problem)
- Hopeful for increased funding from EPA beginning 7/1/2012
 - 1 new network station (primary station)
 - Upgrade 4 secondary sites to primary
- Possible increased future USGS Joint funding for program enhancements