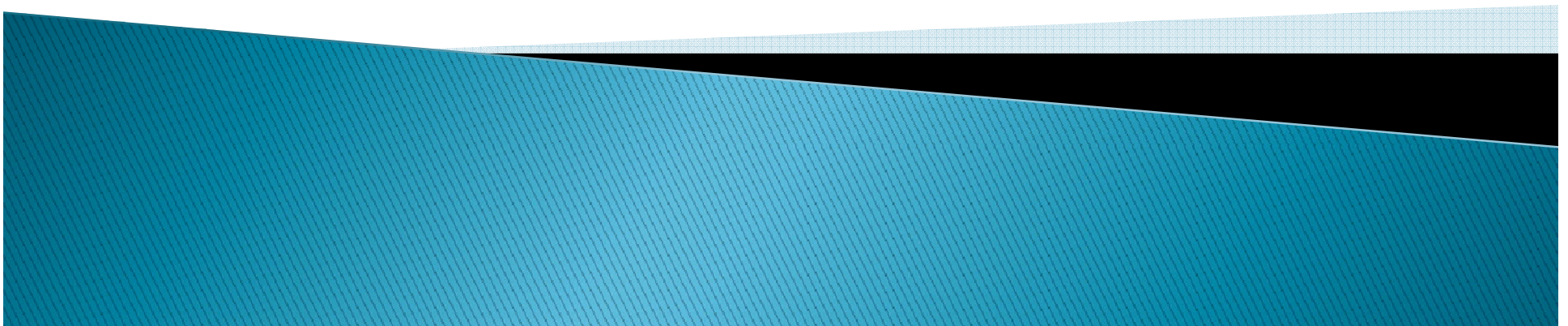


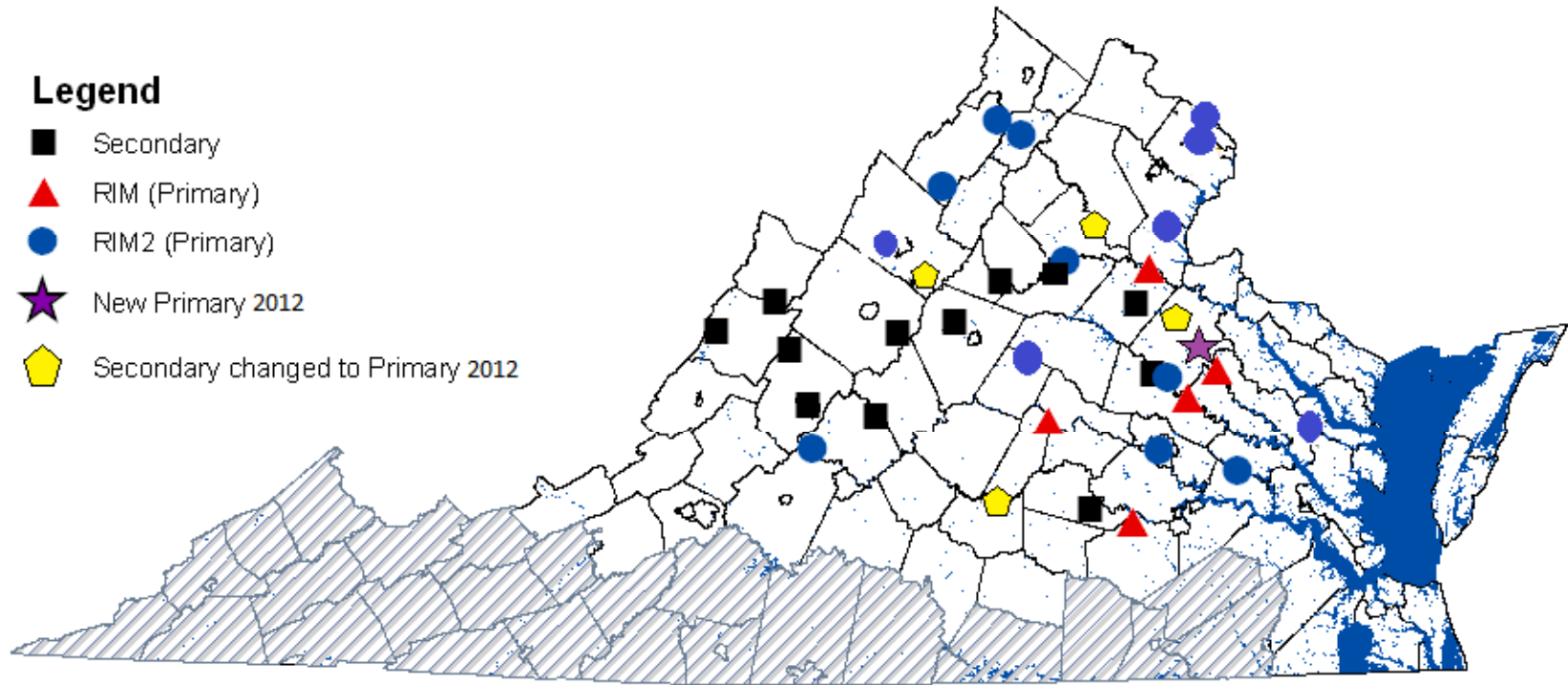
VIRGINIA CHESAPEAKE BAY PROGRAM
NON-TIDAL NETWORK:
2012 STATUS UPDATE



Site Locations

Legend

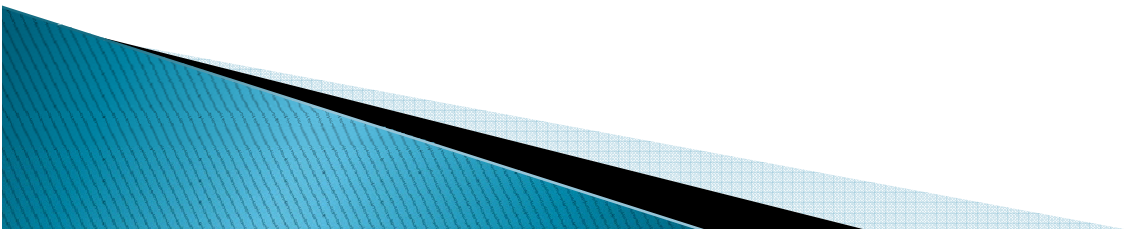
- Secondary
- ▲ RIM (Primary)
- RIM2 (Primary)
- ★ New Primary 2012
- ◆ Secondary changed to Primary 2012



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

Primary Sites

- ❖ 24 sites (6 RIM– Extended, 18 RIM2–Basic)
 - ❖ 17 sampled by USGS only
 - ❖ 7 sampled DEQ routine/USGS storm events
 - ❖ All sites collected via approved Chesapeake Bay Program methods



RIM Primary Site Analytical Parameters

Total Nitrogen
Particulate Nitrogen
Total Dissolved Nitrogen
Total Nitrate–Nitrite
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 μm
(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
Total Ammonia

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 μm
(Storm events only)

Secondary Sites

❖ 12 Secondary Sites (Sampled BY DEQ Only)

Analytical Parameters collected:

Total Nitrogen

Total Nitrate–Nitrite

Total Ammonium

Total Phosphorus

Dissolved Orthophosphate

Total Kjeldahl Nitrogen

Total Suspended Solids

Fixed Suspended Solids

Sample Collection Summaries for Primary Sites CY2012

Waterbody	DEQ Sta ID	GAGE	Source	Interval	Interval expected	Storm	Storm expected	QA/QC	Total	Method
Appomattox	2-APP016.38	2041650	USGS	12	12	5	8	3	20	HIV
James	2-JMS157.28	2035000	USGS	12	12	5	8	3	20	HIV
Mattaponi	8-MPN054.17	1674500	USGS	12	12	4	8	3	19	HIV
Pamunkey	8-PMK082.34	1673000	USGS	12	12	5	8	3	20	HIV
Rappahannock	3-RPP113.37	1668000	USGS	12	12	8	8	4	24	HIV
NF Shenandoah	1BNFS010.34	1634000	USGS	12	12	8	8	3	23	HIV
SF Shenandoah	1BSSF003.56	1631000	USGS	12	12	7	8	3	22	HIV
Rapidan	3-RAP030.21	1667500	USGS	12	12	8	8	3	23	HIV
James River at Richmond	2-JMS113.20	2037500	USGS	12	12	3	8	2	17	HIV
James River at Blue Ridge	2-JMS279.41	2024752	DEQ/SCRO	12	12	0	0	2	14	HIV
James River at Blue Ridge	2-JMS279.41	2024752	USGS	0	0	6	8	2	8	HIV
North Anna River	8-NAR005.42	2042500	USGS	12	12	4	8	2	18	HIV
Chickahominey River	2-CHK035.26	1671020	USGS	12	12	8	8	3	23	HIV
Smith Creek	1BSMT004.60	1632900	USGS	12	12	6	8	3	21	HIV
Difficult Run	1ADIF000.86	1646000	USGS	12	12	8	8	4	24	HIV
Dragon Swamp	7-DRN010.48	1669520	USGS	12	12	10	8	3	25	HIV
Accotink Creek	1AACO014.57	1654000	USGS	0	0	11	8	2	13	HIV
Accotink Creek	1AACO014.57	1654000	DEQ/NRO	9	12	0	0	0	9	HIV
S.F. Quantico Creek	1ASOQ006.73	1658500	USGS	12	12	8	8	4	24	HIV
Muddy Creek	1BMDD005.81	1621050	USGS	12	12	6	8	3	21	HIV
Rivanna River	2-RVN015.97	2034000	USGS	0	0	6	8	2	8	HIV
Rivanna River	2-RVN015.97	2034000	DEQ/VRO	12	12	0	0	2	14	HIV
Sampled as Primary in 2012 (New Site or Secondary Site converted to Primary status)										
Appomattox R.	2-APP110.93	2039500	USGS	0	0	2	4	1	3	HIV
Appomattox R.	2-APP110.93	2039500	DEQ/SCRO	12	12	0	0	6	18	HIV
Mattaponi River	8-MPN094.94	1674000	USGS	0	0	2	4	1	3	HIV
Mattaponi River	8-MPN094.94	1674000	DEQ/NRO	12	12	0	0	2	14	HIV
Rappahannock R.	3-RPP147.49	1664000	USGS	0	0	5	4	1	6	HIV
Rappahannock R.	3-RPP147.49	1664000	DEQ/NRO	12	12	0	0	2	14	HIV
Shenandoah R.	1BSSF100.10	1628500	USGS	0	0	3	4	1	4	HIV
Shenandoah R.	1BSSF100.10	1628500	DEQ/VRO	12	12	0	0	2	14	HIV
Polecat Creek	8-PCT000.76	1674182	USGS	3	6	2	2	1	6	HIV
Totals 2012				276	282	140	170	76	492	

Sample Collection Summaries for Secondary Sites CY2012

Waterbody	DEQ Sta ID	GAGE	Source	Interval	Expected	Storm Targeted	Storm Expected	QA/QC	Total	Method
Catoctin Cr.	1ACAX004.57	1638480	DEQ/NRO	9	12	0	0	0	9	HIV
South River	1BSTH027.85	1626000	DEQ/VRO	12	12	0	0	6	18	HIV
Back Creek	2-BCC004.71	2011500	DEQ/VRO	12	12	0	0	2	14	HIV
Bullpasture R.	2-BLP000.79	2015700	DEQ/VRO	12	12	0	0	4	16	HIV
Calfpasture R.	2-CFP004.67	2020500	DEQ/VRO	12	12	0	0	2	14	HIV
Deep Cr.	2-DPC005.20	2041000	DEQ/PRO	12	12	0	0	0	12	HIV
Mechums River	2-MCM005.12	2031000	DEQ/VRO	12	12	0	0	2	14	HIV
Maury River	2-MRY014.78	2024000	DEQ/VRO	12	12	0	0	4	16	HIV
Rapidan River	3-RAP066.54	1665500	DEQ/NRO	12	12	0	0	2	14	HIV
Robinson River	3-ROB001.90	1666500	DEQ/NRO	12	12	0	0	2	14	HIV
Little River	8-LTL009.54	1671100	DEQ/PRO	12	12	0	0	2	14	HIV
Po River	8-POR008.97	1673800	DEQ/NRO	12	12	0	0	2	14	HIV
Totals 2012				141	144			28	169	

Non-tidal Network Sampling Changes in 2012

- Sampling initiated at one new primary site in October 2012 (Polecat Creek)
- 4 Secondary sites changed from secondary sites to primary sites beginning in July 2012 (2–APP110.93, 8–MPN094.94, 3–RPP147.49, and 1BSSF100.10)
- 2 primary sites dropped from baseflow by VADEQ as they are sampled or were initiated by Maryland DNR/USGS. Samples are collected using NTN protocols and data will be provided to CIMS by the collecting agencies. Storm samples still collected by USGSVA.



Funding Sources

- ▶ Funding for gages provided through a partnering of multiple sources/grants –
 - USGS (Chesapeake Bay, National Streamflow Information, Cooperative Water and National Water–Quality Assessment Programs)
 - US Army Corps of Engineers
 - City of Newport News
 - VADEQ (106 grant, general funds and CB program)
 - EPA/CBP

- ▶ Existing State funding level seems mostly stable

