



Quick Overview of Maryland's Intensive/Shallow Water Monitoring Programs

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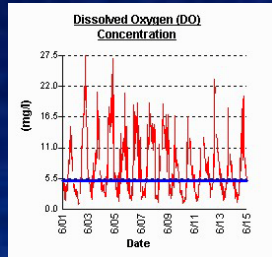
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Maryland DNR Water Quality Monitoring Programs



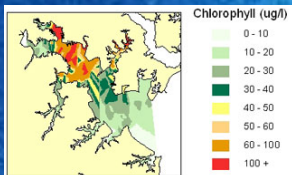
Continuous *In Situ* Monitoring

- 30 - 50 Monitors Annually
- Some at 1m below surface, others 0.3 m off bottom
- Additionally servicing 5 NOAA buoys and 1 joint DNR/NOAA buoy
- Data collected every 15 minutes
- Sonde Parameters: D.O., Turbidity, Chlorophyll W.Temp, Salinity, pH, Depth (at bottom sites)
- In Situ Calibration Data Every 2 weeks
 - Before 2010 all stations had full suites of nutrients, sediment, chl, Kd, profiles
 - Now most stations eliminated nutrient sampling



Water Quality Mapping

- 7 Monthly cruises Apr.-Oct over large areas/Bay segments.
- Data collected every 4 seconds in transit
- Parameters: D.O., Turbidity, Chlorophyll W.Temp, Salinity, pH, Water Depth
- Calibration Data at ~5 Sites each Cruise with similar samples/procedures as continuous monitoring



Points of Interest

- **Most sites have three consecutive years of data for water quality criteria assessment purposes**
- **Numerous 'sentinel' sites have more years, with the most being 13yrs.**
- **Some sites deployed for special studies or purposes**
 - **upstream and downstream of oyster restoration project**
 - **inside and outside of an SAV bed**
 - **sites on east/west sides of the Bay in segment 3**
 - **some sites in proximity of buoys in open water**
 - **sites traversing the length of major rivers (Potomac, Patuxent)**
 - **in 2001 and 2012, water quality mapping collected twice monthly in Severn and Magothy**
 - **sites run the range of urban to rural/ag dominated watersheds, tidal fresh to mesohaline**



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- DNR said: Nominate individuals, civic, community, and NP groups that have enhanced MD's environment for the Tawes Award. [View](#) 1 hr ago
- DNR said: News of jellyfish taking over the ocean ecosystems is unfounded. [View](#) Or Rob Condon former [DNR](#) now [DNR](#) 2 hrs ago
- DNR said: Hurricane Irene and TS Lee may have killed off some of the stink bugs. At least there was something positive. [View](#) 21 hrs ago

Click a station for more info and data

Monitoring Types & Stations

- [Water Quality Mapping](#)
- [Continuous Monitoring](#)
- [Long-Term Monitoring](#)
- [Partners/Other Data Providers](#)

-Click Arrow to Expand Legend
-Checkbox Removes/Adds Layer
-Link Returns Program Info

Select Another Year for Map Display:

2011

Station Legend

- Long-Term Fixed Station
- ★ Dataflow / Water Quality Mapping Segment
- Continuous Monitoring Station with Real-time Telemetry
- Continuous Monitoring Station without Telemetry

Center: 38.78000,-76.23000

Map based on tools provided by [GPSVisualizer.com](#)
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