Continuous Monitoring Dissolved Oxygen Criteria Assessment

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Condensed version of presentation shown To a June 2005 TMAW workshop

Data Analysis

- 7-day or 30-day moving window conducted on a daily basis
- Examined percent failure within each 7-day or 30-day period. If 10% or more of the data were less than the criteria, it was listed as 'failing'.
- Data not used if an equivalent of 2 or more days missing (192 out of 672 total) for the 7-day. Data not used for 30-day window if greater than 25% was missing.

<u>1 2 3 4 5 6 7</u> 8 9 10

June 1

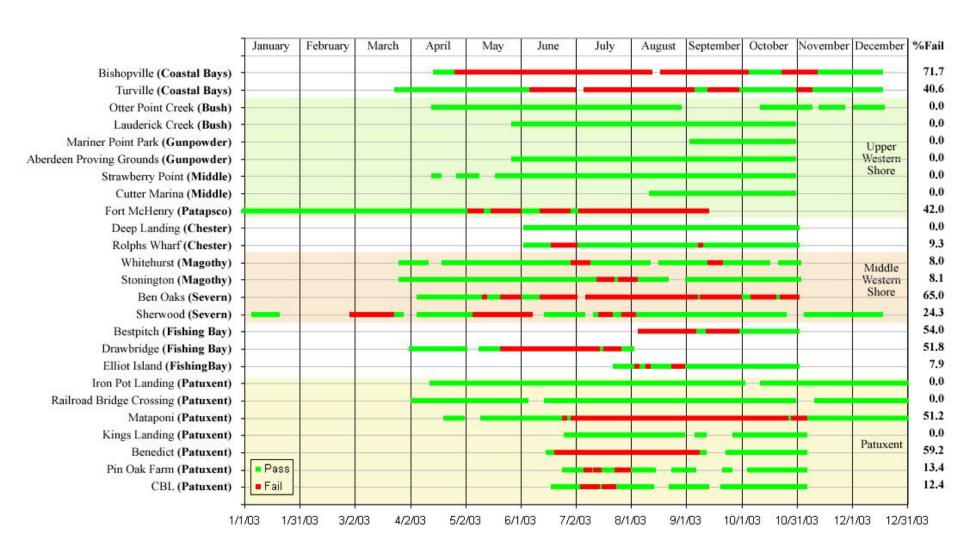
-Up to 96 readings/day-Collected every 15 minutes-1.3 MILLION Data Points Used

June 2
1 2 3 4 5 6 7 8 9 10

June 3
1 2 <u>3 4 5 6 7 8 9</u> 10

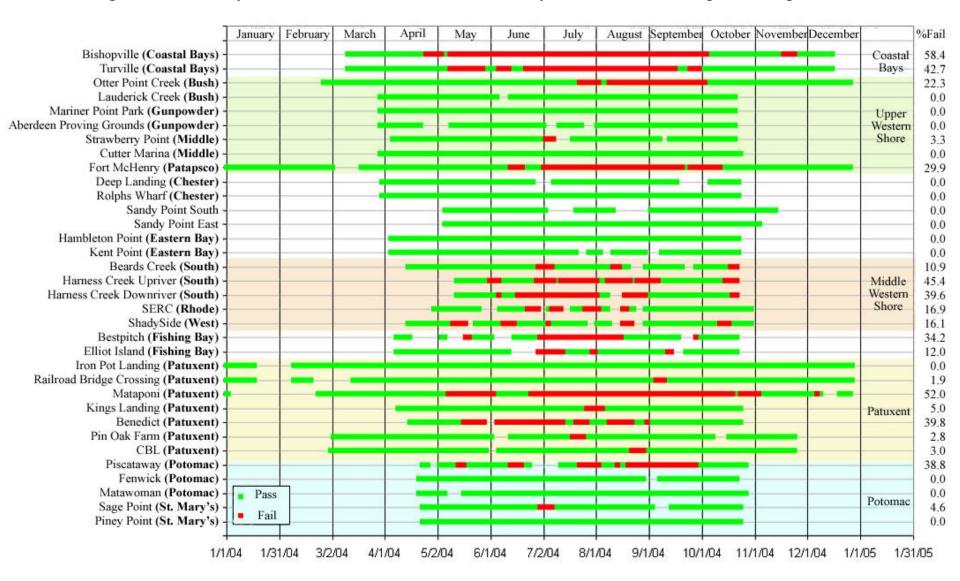
2003 7-day Dissolved Oxygen Criteria

Failing determined by at least 10% of data within a 7-day window exceeding the 4 mg/l threshold



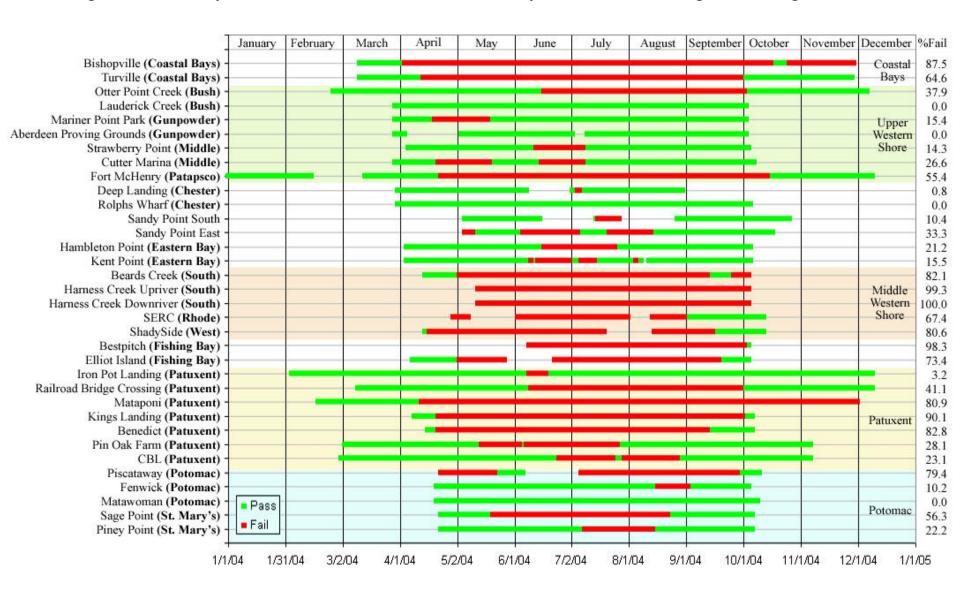
2004 7-day Dissolved Oxygen Criteria

Failing determined by at least 10% of data within a 7-day window exceeding the 4 mg/l threshold

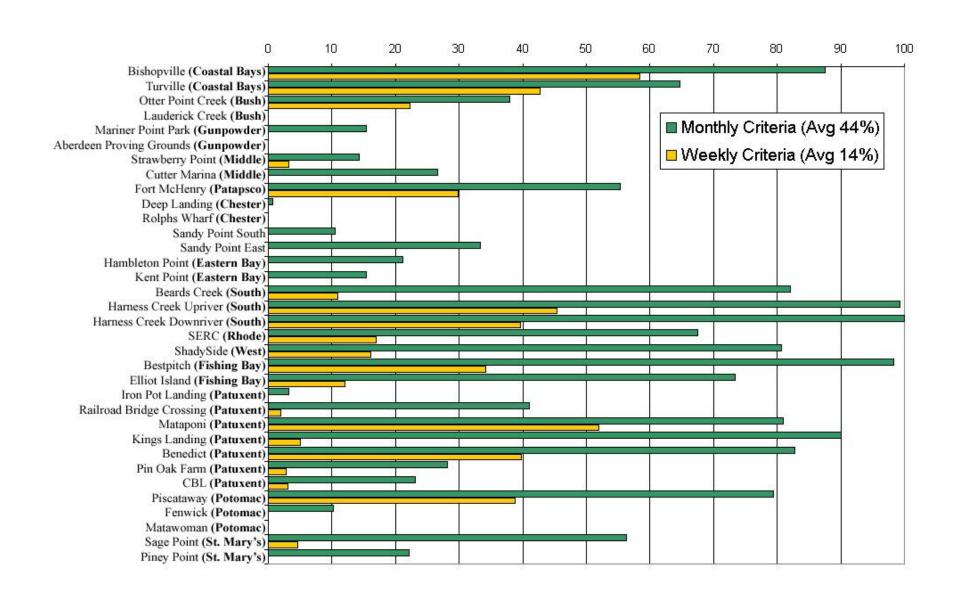


2004 30-Day Dissolved Oxygen Criteria

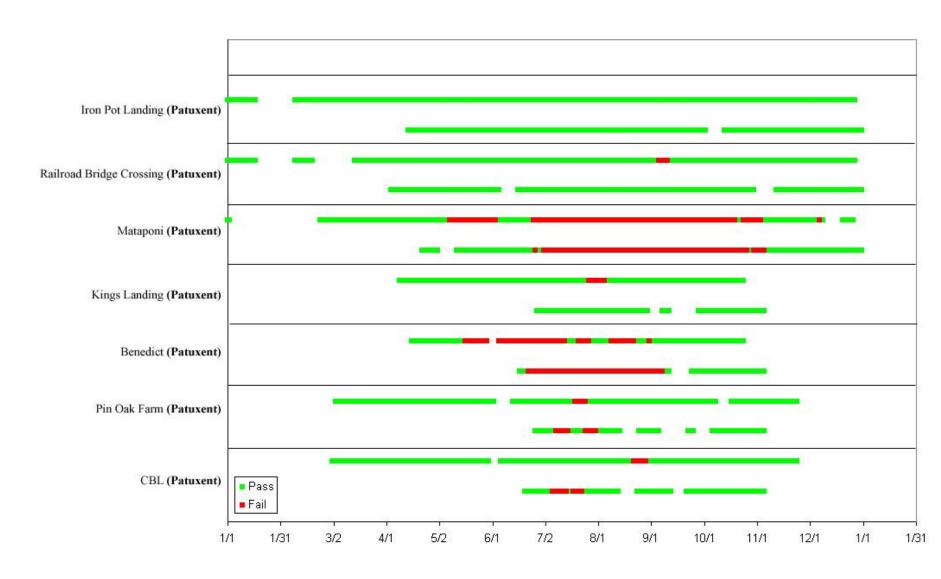
Failing determined by at least 10% of data within a 30-day window exceeding the 5.5 mg/l threshold



7-day and 30-day Criteria Comparison



Comparison of 2003 and 2004 Patuxent River 7-day Criteria



Instantaneous Dissolved Oxygen Criteria

Percent of all values for a station within a year failing the 3 mg/l threshold

