

Oregon Harmful Algae Bloom Program

2013 Bloom Season Recap

The future of the program:

The OHA Harmful Algae Bloom (HABs) program was funded through a 5-year grant from the Centers for Disease Control and Prevention (CDC). That funding ceased on September 30, 2013. Future goals include; issuing and lifting of advisories based on sampling data received, maintenance of the HABs website, and continued collection of illness reports. Most other activities at the program level have been discontinued.

Highlights this year:

- Successes realized in 2012 using toxin based monitoring (TBM) encouraged other waterbody (WB) managers to implement TBM in 2013. Three lakes and one additional manager were added.
- Advisories were avoided on 7 lakes where TBM was implemented, reducing the number of advisories from a potential of 19 to an actual of 12.
- Updated sampling guidance to encourage expedited toxin analysis (3 business days), increased the level of protection from time of sampling to advisory issuance.
- Streamlined advisory process to reduce staff time on future unfunded work while continuing to alert the public about HABs.
- Integrated HABs data as an ongoing health/environmental indicator in the OHA Environmental Public Health Tracking System. This provides a sustainable way of storing and using past and future data.
- Trained staff to address calls related to HAB exposure and potential illnesses through OHA's Tox Call system. All other calls to be referred to appropriate WB managers.

Figure 1. 2013 Advisories, numbered chronologically

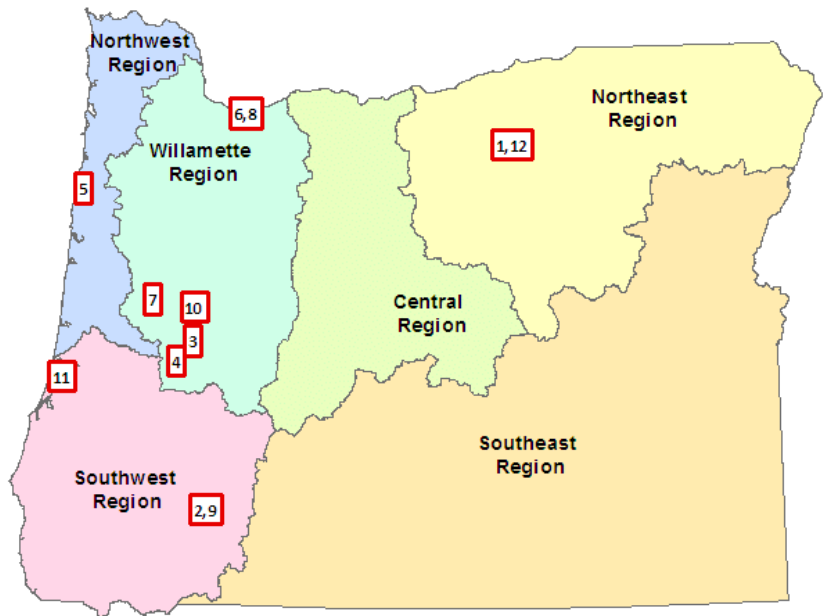
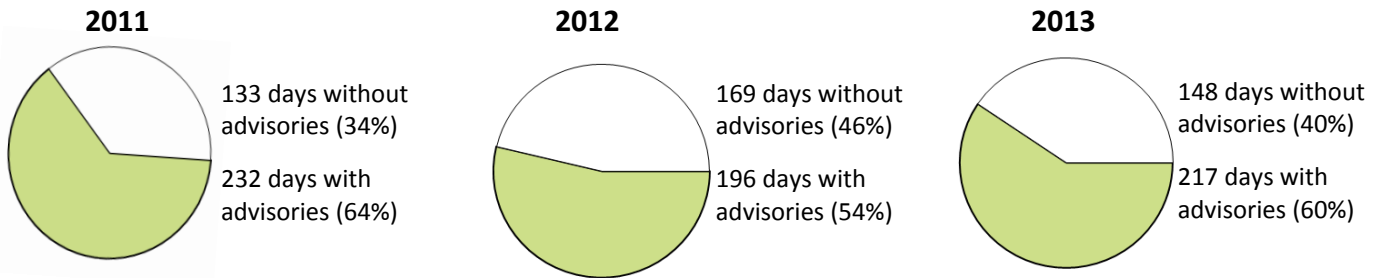


Table 1. 2013 Advisories by waterbody, region and date

#	Waterbody	Region	Start	End	Duration
1	Willow Creek Reservoir	Northeast	6/18	8/13	56
2	Lost Creek Lake	Southwest	6/20	7/05	15
3	Dexter Reservoir	Willamette	7/03	9/19	78
4	Dorena Reservoir	Willamette	7/25	9/24	61
5	Devils Lake	Northwest	8/01	11/21	112
6	Blue Lake	Willamette	8/06	8/09	3
7	Fern Ridge Lake	Willamette	8/15	12/18	125
8	Blue Lake	Willamette	9/09	9/13	4
9	Lost Creek Lake	Southwest	9/13	12/30	108
10	Walterville Pond	Willamette	9/13	10/03	20
11	Tenmile Lake	Southwest	10/04	12/03	60
12	Willow Creek Reservoir	Northeast	10/25	1/21	88
Total					730

Advisories were in effect from June 2013 until January 2014: 217 days vs. 196 days in 2012 vs. 232 days in 2011

Figure 2. Oregon HAB Season



Although 12 advisories were issued in 2013, up from a total of nine in 2012, the total number of lakes under advisories stayed the same (nine). The difference in the number of advisories between 2012 and 2013 is twofold. In 2013 three of the nine lakes with sampling data for HABs had a second bloom and therefore an additional advisory. Toxin based monitoring continued on four lakes from 2012, with the addition of three lakes in 2013. The last advisory for Devils Lake before 2013 was in 2008 and for Tenmile Lake, 2011.

Table 2. HAB Advisories & Advisory-days

Year	Number of Advisories	Advisory-days
2005	6	162
2006	8	191
2007	8	311
2008	14	732
2009	21	727
2010	22	1,412
2011	18	1,175
2012	9	601
2013	12	730

Note: Dominant species - *Anabaena flos-aquae*, all years.

Figure 3. HAB Advisories & Advisory-days

