

Oregon Harmful Algae Bloom Program

2011 Bloom Season Recap

Goals:

The Harmful Algae Bloom program is working to gain a better understanding about toxic algal blooms and their impact on human health. Funding is through a 5-year grant from the Centers for Disease Control and Prevention (CDC).

Highlights this year:

- Distributed 60 permanent bloom advisory signs to partners for posting at lake access points and/or recreational use areas.
- The 2011 bloom season was the first one with an added requirement to test both cell counts and toxins before an advisory could be lifted. The number of advisories did not appear to be greatly impacted by this requirement, although some stakeholders did express concern about the additional costs involved.
- Outreach activities included presentations to PSU students, OSU Pet Day, community meetings and events, state and national lake associations, newsletter articles and new partnership with OVMA.
- Worked with USFS and J. Herbert Stone Nursery in Central Point to mitigate potential impacts of emptying the nursery reservoir, which was affected by a toxic algae bloom. Of concern: human health risk (especially nursery workers), environmental impact and damage to plant seedlings.
- As a result of dog deaths along the South Umpqua River near Myrtle Creek, HABS issued an extended advisory that received significant media coverage. In partnership with Douglas County, HABS posted signs along the river to highlight the risk of toxins in bedrock pools. Dog safety posters were distributed to pet businesses in the area.
- Developed Angler Fact Sheet to respond to frequent questions from the public; 875 were distributed via ODFW and USFS.

Figure 1. 2011 Advisories, numbered chronologically

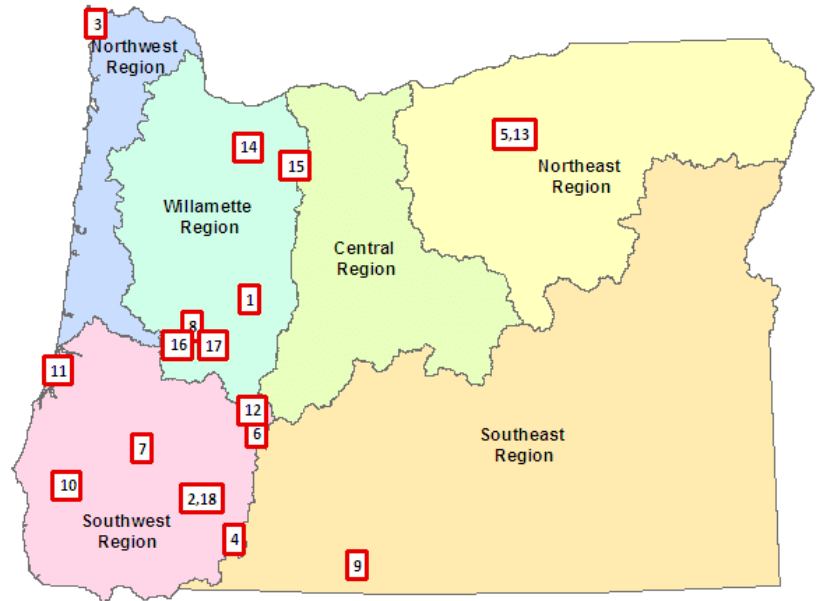
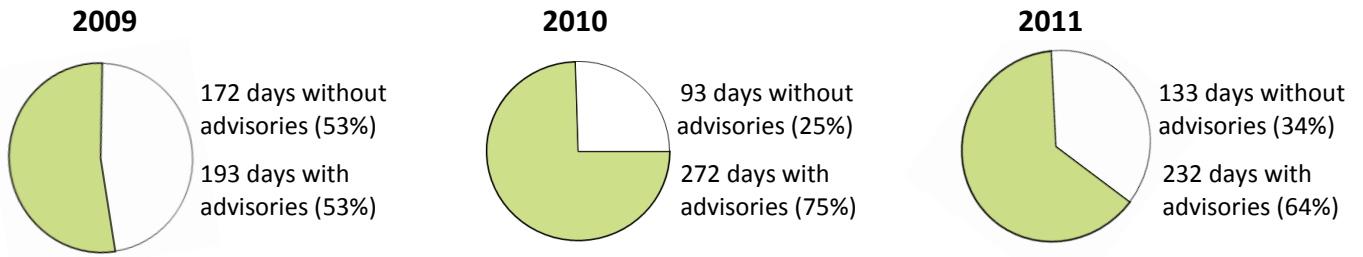


Table 1. 2011 Advisories by waterbody, region and date

#	Waterbody	Region	Start	End	Duration
1	Cougar Reservoir	Willamette	6/14	7/19/11	35
2	Lost Creek Lake	Southwest	6/20	7/11/11	21
3	Cullaby Lake	Northwest	7/01	9/01/11	62
4	Fish Lake	Southwest	7/01	7/25/11	24
5	Willow Creek Reservoir	Northeast	7/11	8/08/11	28
6	Diamond Lake	Southwest	7/29	8/09/11	11
7	S. Umpqua @ Myrtle Cr.	Southwest	7/29	1/09/12	164
8	Dexter Reservoir	Willamette	8/19	10/14/11	56
9	Gerber Reservoir	Southwest	8/23	1/31/12	161
10	Sru Lake	Southwest	8/24	2/07/12	167
11	Tenmile Lake (South)	Southwest	8/25	11/21/11	88
12	Lemolo Lake	Southwest	8/31	9/19/11	19
13	Willow Creek Reservoir	Northeast	9/07	11/09/11	63
14	North Fork Reservoir	Willamette	9/08	09/23/11	15
15	Timothy Lake	Willamette	9/08	09/23/11	15
16	Dorena Reservoir	Willamette	9/19	10/24/11	35
17	Fall Creek Reservoir	Willamette	9/20	12/30/11	101
18	Lost Creek Lake	Southwest	9/23	1/11/12	110
Total					1,179

Advisories were in effect from June 2011 until February 2012 - 232 days vs. 272 days in 2010 vs. 193 days in 2009

Figure 2. Oregon HAB Season



During the 2011 season, 18 advisories were issued. They were in effect for a total of 1,175 days (advisory-days). The number of advisories has increased from an average of 7 from 2005-2007 to an average of 19 during the last 4 years, as shown in Table 2 and Figure 3. This could indicate that cyanobacteria blooms are increasing in severity but may also reflect enhanced surveillance efforts among local, state and federal partners during that time period.

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

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

Figure 3. HAB Advisories & Advisory-days

