

Washington state: Just say 'no' to going in slimy water

State has record number of water-body closures

By NATALIE ST. JOHN
EO Media Group

LONG BEACH, Wash. — Everything's coming up slimy.

The Washington State Department of Ecology is warning citizens to steer clear of the harmful, sometimes toxic algal blooms that have proliferated during this unusually warm, dry summer.

"The big public message is, if people see this green slimy water, just stay out of it. We've had a few dogs that have died this year from drinking it. It's just bad stuff," said Sandy Howard, a Department of Ecology spokeswoman.

According to a press release, "Lakes, rivers and the Puget Sound are experiencing more intense and widespread algae blooms this summer and scientists believe warm water due to the state's drought is partly to blame."

Pseudo-nitzschia, a salt-water algae species that pro-

duces the neurotoxin domoic acid, has already caused widespread closures of razor clam and Dungeness crab fisheries.

'Big bathtub' full of slime

Fresh-water blue-green algae, or cyanobacteria, sometimes produce toxins that can sicken or even kill people and animals, and small children and the elderly are especially vulnerable, according to the press release.

Across the state, nine lakes in Douglas, Jefferson, King, Pierce, and Island counties have known toxic algae blooms. But the the state doesn't regularly test most smaller bodies of water, so there could certainly be other toxic blooms that haven't been identified yet.

A map on the Department of Ecology's freshwater monitoring page shows that only two freshwater bodies in Pacific County have been monitored in recent history. The Chinook reservoir is in great

shape. "Fake Lake," near Westport, has had algae problems in the past, but hasn't been tested since 2009.

Howard explained that much of the monitoring is driven by citizen reports, so it's helpful for citizens to alert the state if they see a bloom.

Even non-toxic species can cause a lot of trouble when they get out-of-hand. As the blooms grow, they suck up nutrients in the water, and then begin to die off. As they decay, they stink, and create organic compounds that strip the water of oxygen. That can prompt further die-off of algae and marine life, leading to even smellier, slimier conditions.

Algal blooms are "a really big issue," this year, said Jessica Payne, another Department of Ecology spokeswoman. "We've had more closures than ever before, and in areas that haven't been closed before."

Waters in the Puget Sound "are 3 or 4 degrees warmer

than they should be for this year," and researchers have observed lower oxygen content in the water, and "massive amounts of jellyfish" that wouldn't typically be present. Payne likens the state of the sound to "a big bathtub."

Payne noted that this year's unusual conditions could provide a glimpse of what the future might hold, if climate change causes coastal waters to heat up permanently.

Bloom that wouldn't fade

In saltwater, millions of tiny plant and animal-like organisms can form massive colonies in the spring and summer, when sun-warmed water near the surface is rich with nutrients. The blooms come in a wide variety of colors, "ranging from green to red, orange yellow or brown," according to the Department of Ecology.

Some types, like the tomato-soup-colored *noctiluca*, look bad but don't pose a threat to humans. But a few saltwater varieties can make people ill if they inhale them, swallow contaminated water, or eat shellfish that have fed on the algae — and it might not be obvious that the toxins are present.

Jerry Borchert, who oversees monitoring programs at the state Department of

Health, said there are three types of algae-produced toxins that could potentially turn up in the Willapa Bay. The state refers to these as "amnesic shellfish poison," "paralytic shellfish poison" and "diuretic shellfish poison."

"The only one we're seeing is amnesic shellfish poison," or domoic acid, Borchert said.

Recently, *pseudo-nitzschia*, which produces domoic acid, has proliferated along the west coast. Though the bloom is invisible to the naked eye, it causes potentially deadly domoic acid to accumulate in the bodies of razor clams and the crab that love to eat them.

"The water from the boat looks normal, but when you concentrate it, it's ooey and gooeey and just dark," said Ruth Howell, a spokesperson for the National Oceanic and Atmospheric Administration.

So far, Borchert said, the *nitzschia* that's growing in Pacific County waters hasn't caused any documented illnesses in humans. And unlike some of the toxic freshwater blooms, "It's so dilute that it has no effect on animals swimming in it," Borchert said. But it's still not safe to eat the affected species — semi-regular testing shows that toxin levels are declining, but they're "still over the action level."

"It's still out there and it could still come back on our coast," Borchert said. "They've never seen a bloom like this that still continues to exist out in the ocean."

Do your part

The Department of Ecology would like citizens to report any suspected blooms, and also do their part to prevent harmful algae from spreading.

The following steps can keep algal blooms in check:

- Reduce the use of fertilizers and don't over water
- Scoop, bag and trash dog poop
- Check, fix and maintain home septic tanks
- Maintain shoreline and wetland vegetation

To find out what a toxic algae bloom looks like, see what lakes are having toxic algae blooms, and to report a suspected algae bloom, visit the Washington State Toxic Algae website: www.nwtoxicalgae.org/

To find out where it's safe to harvest shellfish, call the Shellfish Safety Hotline at 1-800-562-5632 or visit the Department of Health's shellfish safety website.

If you suspect you have been exposed to toxic algae, see your physician. If you suspect your pet has been exposed, take it to the vet immediately.

ACCUWEATHER® FORECAST FOR ASTORIA

Astoria 5-Day Forecast

Tonight

Occasional rain and drizzle

57°

Shown is tomorrow's weather. Temperatures are tonight's lows and tomorrow's highs

Tuesday

Mostly cloudy with a little rain

66° 52°

Wednesday

Mostly cloudy with a bit of rain

66° 48°

Thursday

Clouds and sun with a passing shower

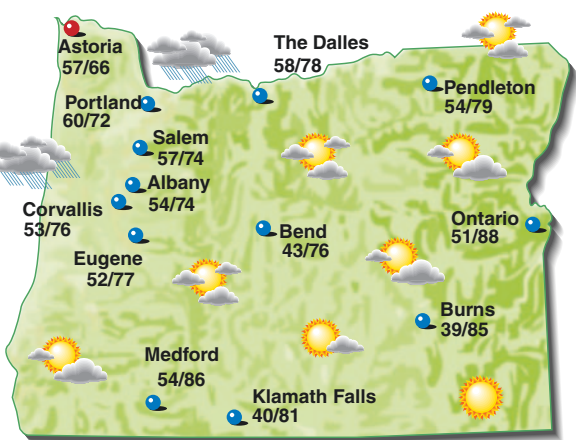
66° 47°

Friday

Mostly cloudy with a passing shower

67° 49°

Oregon Weather



Forecasts and graphics provided by AccuWeather, Inc. ©2015

Almanac

Astoria through Sunday.

Temperatures

High	68°
Low	56°
Normal high	69°
Normal low	52°

Precipitation

Yesterday	0.07"
Month to date	1.18"
Normal month to date	1.10"
Year to date	28.96"
Normal year to date	38.04"

Sun and Moon

Sunset tonight	7:57 p.m.
Sunrise Tuesday	6:35 a.m.
Moonrise today	9:06 p.m.
Moonset today	8:59 a.m.



Regional Cities

City	Today			Tues.		
	Hi	Lo	W	Hi	Lo	W
Baker City	78	39	pc	82	45	pc
Bend	75	43	pc	76	47	pc
Brookings	70	55	pc	68	56	c
Eugene	79	52	c	77	54	sh
Ilwaco	65	58	r	64	56	r
Klamath Falls	80	40	pc	81	42	s
Medford	86	54	pc	86	57	pc
Newport	65	55	c	64	52	c
North Bend	71	56	c	70	55	c

City	Today			Tues.		
	Hi	Lo	W	Hi	Lo	W
Olympia	67	55	r	66	49	r
Pendleton	79	54	pc	79	56	pc
Portland	74	60	c	72	57	sh
Roseburg	81	57	pc	79	57	c
Salem	77	57	c	74	55	sh
Seaside	66	58	sh	65	56	r
Spokane	70	52	c	73	52	c
Vancouver	73	58	c	71	56	sh
Yakima	78	49	c	79	51	c

Under the Sky

Tonight's Sky: The Milky Way arcs high overhead, from Cassiopeia in the north, through the Summer Triangle overhead, to Sagittarius in the south.

Source: Jim Todd, OMSI

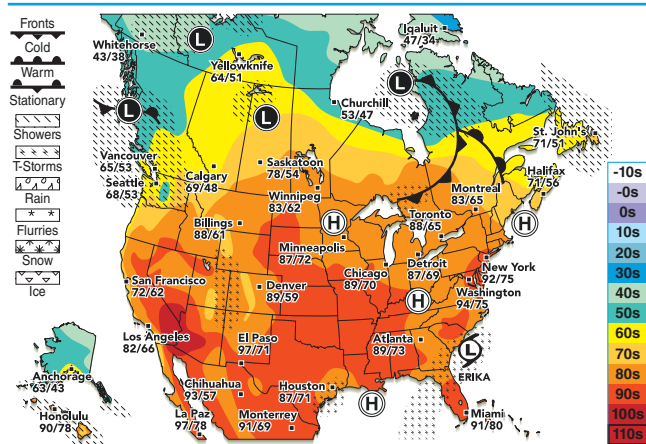
Tomorrow's Tides

Astoria / Port Docks	Time	High	Time	Low
	3:41 a.m.	8.6 ft.	9:56 a.m.	-0.7 ft.
	4:06 p.m.	8.9 ft.	10:32 p.m.	-0.6 ft.

National Cities

City	Today			Tues.		
	Hi	Lo	W	Hi	Lo	W
Atlanta	85	71	pc	89	73	pc
Boston	91	70	pc	81	66	s
Chicago	85	68	s	89	70	s
Denver	84	57	t	89	59	t
Des Moines	87	69	s	91	71	s
Detroit	87	67	pc	87	69	s
El Paso	96	69	t	97	71	t
Fairbanks	47	33	c	51	32	pc
Honolulu	90	78	sh	90	78	t
Indianapolis	86	69	pc	88	69	pc
Kansas City	87	71	s	90	70	s
Las Vegas	102	76	s	100	75	pc
Los Angeles	85	67	pc	82	66	pc
Memphis	91	73	pc	93	74	pc
Miami	90	79	t	91	80	pc
Nashville	86	68	pc	91	70	pc
New Orleans	92	75	pc	93	77	pc
New York	93	75	pc	92	75	s
Oklahoma City	93	71	s	93	71	s
Philadelphia	91	73	pc	93	73	s
St. Louis	91	74	pc	93	75	s
Salt Lake City	87	68	s	92	69	pc
San Francisco	74	60	pc	72	62	pc
Seattle	68	58	r	68	53	r
Washington, DC	90	73	c	94	75	s

Tomorrow's National Weather



Shown are noon positions of weather systems and precipitation. Temperature bands are highs for the day. Forecast high/low temperatures are given for selected cities. Weather (W): s-sunny, pc-partly cloudy, c-cloudy, sh-showers, t-thunderstorms, r-rain, sf-snow flurries, sn-snow, i-ice.

Deaths

Aug. 25, 2015
BOYER, Edwin John "Ed," 35, of Astoria, died in Astoria. Hughes-Ransom Mortuary in Astoria is in charge of the arrangements.

Aug. 28, 2015
LAUGHMAN, Thomas Neil, 61, of Hammond, died in Portland. Caldwell's Luce-Layton Mortuary in Astoria is in charge of the arrangements.

Aug. 29, 2015
HART, Vernon Earl, 33, of Astoria, died in Astoria. Ocean View Funeral & Cremation Service in Astoria is in charge of the arrangements.

Aug. 30, 2015
WOHLGEMUTH, Philip, 68, of Astoria, died in Astoria. Caldwell's Luce-Layton Mortuary in Astoria is in charge of the arrangements.

Lotteries

OREGON

Sunday's Pick 4:
1 p.m.: 8-7-9-1
4 p.m.: 3-1-7-5
7 p.m.: 5-7-7-9
10 p.m.: 0-5-7-7

Saturday's Megabucks:
3-4-6-20-35-46
Estimated jackpot: \$1.2 million.

Saturday's Powerball:
18-21-25-28-29, Powerball: 16, Power Play: 2
Estimated jackpot: \$110 million.

Saturday's Pick 4:
1 p.m.: 9-6-7-4
4 p.m.: 8-5-9-5
7 p.m.: 6-3-1-7
10 p.m.: 4-5-3-3

Friday's Pick 4:
1 p.m.: 6-0-0-2
4 p.m.: 1-4-9-9
7 p.m.: 3-3-5-1
10 p.m.: 2-3-3-7

WASHINGTON

Sunday's Daily Game:
0-1-2
Estimated jackpot: \$12 million.

Sunday's Keno: 05-13-14-18-20-28-29-30-41-47-49-51-52-54-59-65-67-72-75-77

Sunday's Match 4: 08-13-14-17
Estimated jackpot: \$110 million.

Saturday's Daily Game:
4-5-7
Estimated jackpot: \$140,000

Saturday's Keno: 02-04-07-12-16-20-22-42-43-46-53-54-55-59-63-65-72-74-77-79

Saturday's Lotto: 03-10-24-25-27-38
Estimated jackpot: \$3.2 million.

Saturday's Match 4: 11-17-20-22
Estimated jackpot: \$11-17-20-22

Friday's Daily Game:
9-4-3
Estimated jackpot: \$74 million.

Friday's Keno: 02-04-12-14-16-21-26-27-28-31-50-52-53-56-58-60-65-66-68-71

Friday's Match 4: 09-14-19-21
Estimated jackpot: \$74 million.

Public meetings

MONDAY
Seaside City Council, 6:30 p.m., workshop, City Hall Council Chambers, 989 Broadway, Seaside.

TUESDAY
Seaside Community and Senior Commission, 10 a.m., Bob Chisholm Community Center, 1225 Avenue A, Seaside.

Seaside Library Board, 4:30 p.m., Seaside Library, 1131 Broadway, Seaside.

Port of Astoria Commission, 5 p.m., workshop, 422 Gateway Ave., Suite 100.

Cannon Beach City Council, 6 p.m., City Hall, 163 E. Gower St., Seaside.

Miles Crossing Sanitary Sewer District Board,

6 p.m., 34583 U.S. Highway 101 Business.

Astoria Planning Commission, 6:30 p.m., work session, Neighborhood Greenway, City Hall, 1095 Duane St.

Seaside Planning Commission, 7 p.m., City Hall Council Chambers, 989 Broadway, Seaside.

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