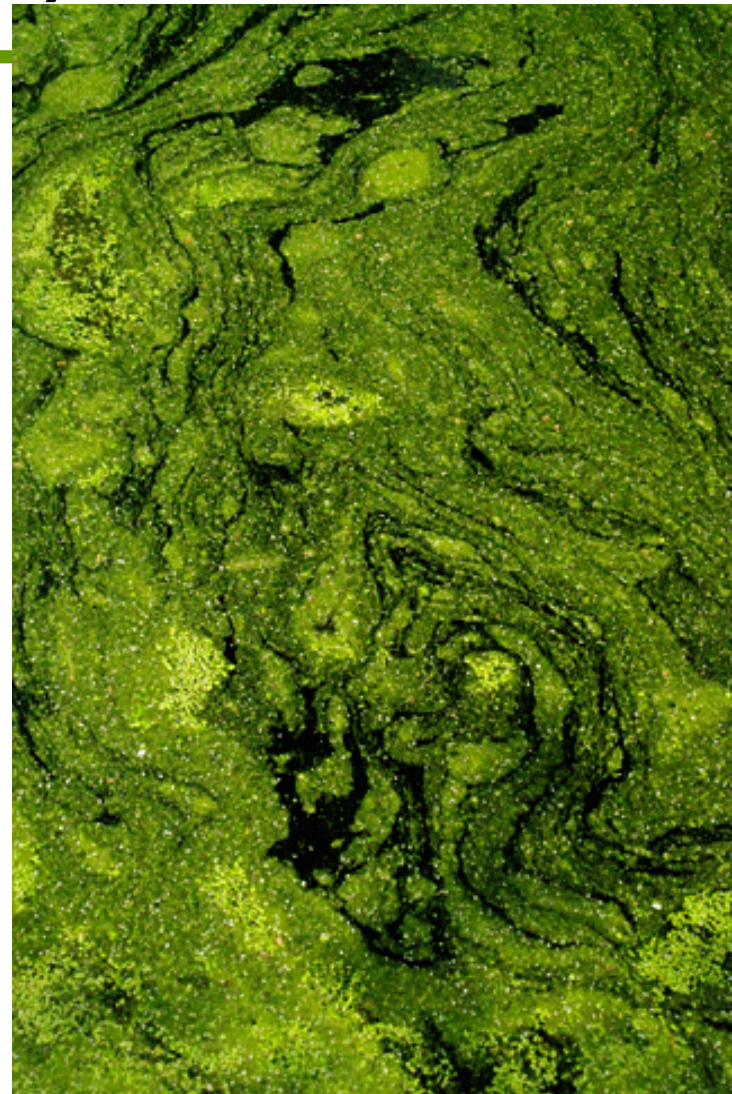


Harmful Algae Blooms in Oregon: Don't Get Slimed!

Harmful Algae Bloom (HAB) Surveillance

- Program overview
- Status and trends
- Bloom advisory process
- Outreach and education



Program Overview



- ✓ Coordinate response to HAB events
- ✓ Alert public when a toxic bloom is detected
- ✓ Track occurrence and characteristics of blooms
- ✓ Investigate reports of HAB-related human & animal illness
- ✓ Maintain relationships with partners
- ✓ Ensure continued quality environmental and health data
- ✓ Raise awareness through education and outreach

Funding: five-year cooperative agreement from the CDC

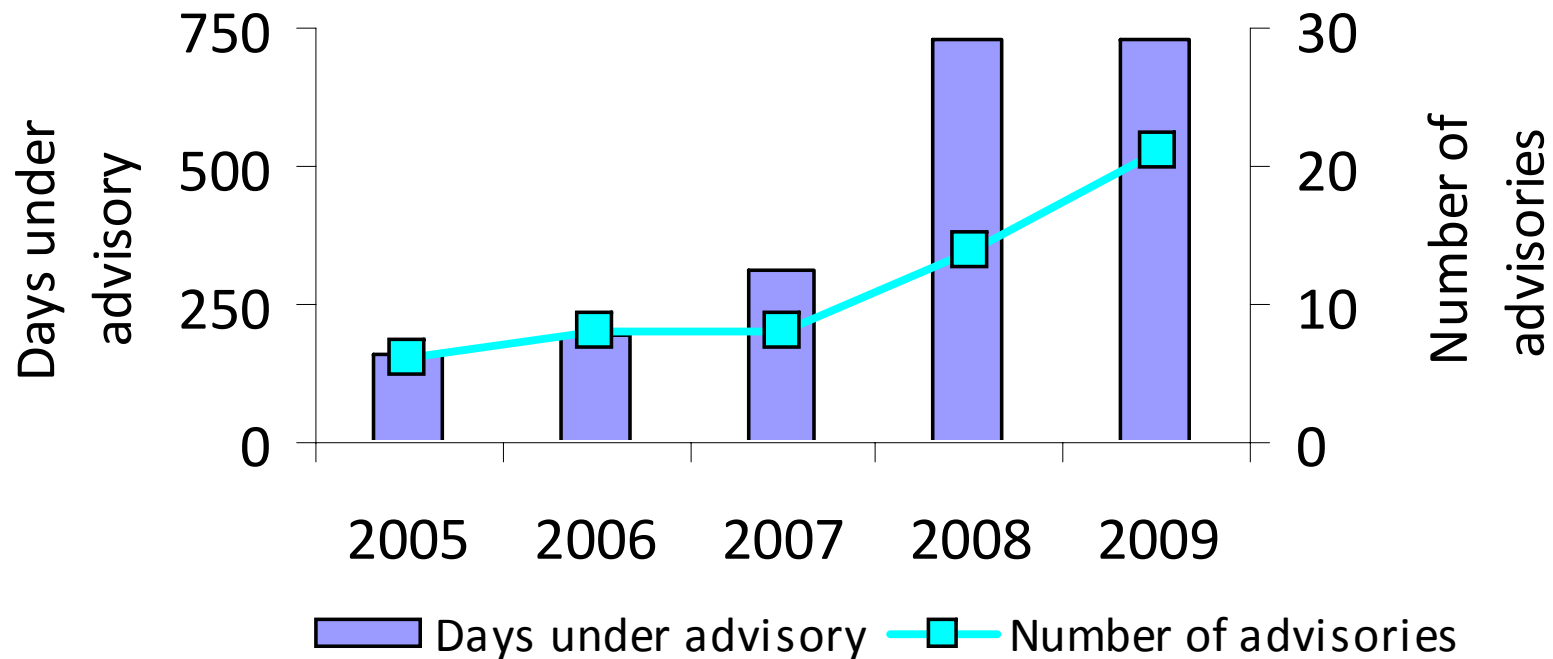
Staff

Jae Douglas MSW, PhD	Principal Investigator
Deanna Conners PhD	Co-Principal Investigator
Curtis Cude	Program Manager
Jennifer Ketterman	Program Coordinator
Bonnie Widerburg MPA	Health Educator
Marina Counter MS, MPH	Research Analyst
Karen Worden	Administrative Specialist

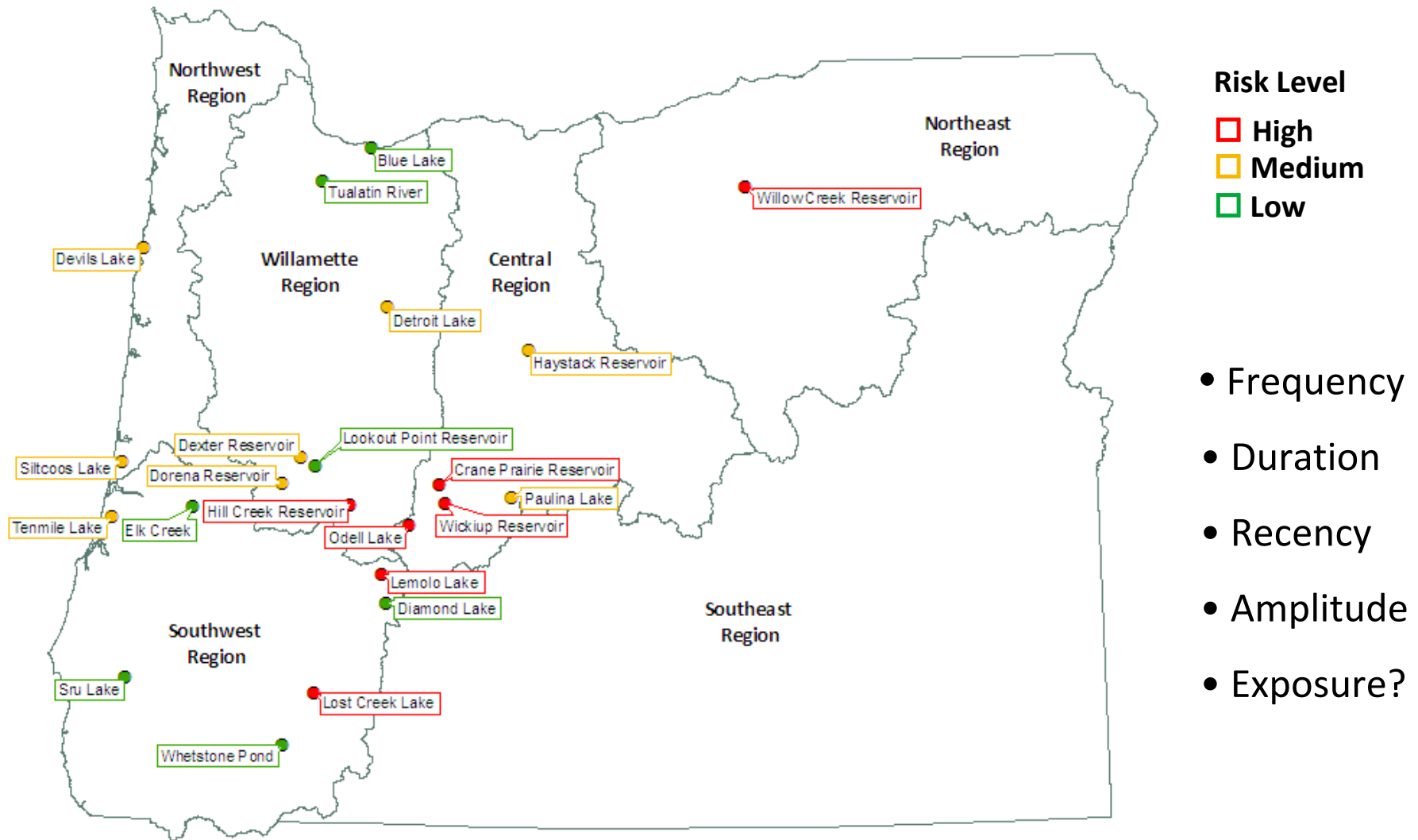
Oregon HABS Program has a total of 1.6 FTE

Status and Trends

Oregon HAB advisories: Number of advisories and advisory-days by year



HAB Risk Index for Monitored Waterbodies



2009 Illness Reports



18 human cases:

- 38 year-old male swam in a reservoir during an active cyanobacteria bloom. Onset of itching within an hour; within 24 hrs was lightheaded with “pins and needles” tingling in upper extremities. Symptoms lasted 5 to 6 days; consistent with anatoxin (nerve toxin) poisoning.
- 42-year old male swam in a reservoir shortly before it was posted for cyanobacteria bloom. By nightfall he had nausea, vomiting, diarrhea, and abdominal pain that lasted several days. Symptoms consistent with microcystin (liver toxin) poisoning.

10 animal cases:

- Including Oregon’s first confirmed dog death from anatoxin poisoning due to algae toxin. All 4 dogs at Elk Creek are now presumed to have died from the algal toxins in the water

2010 HAB Reports



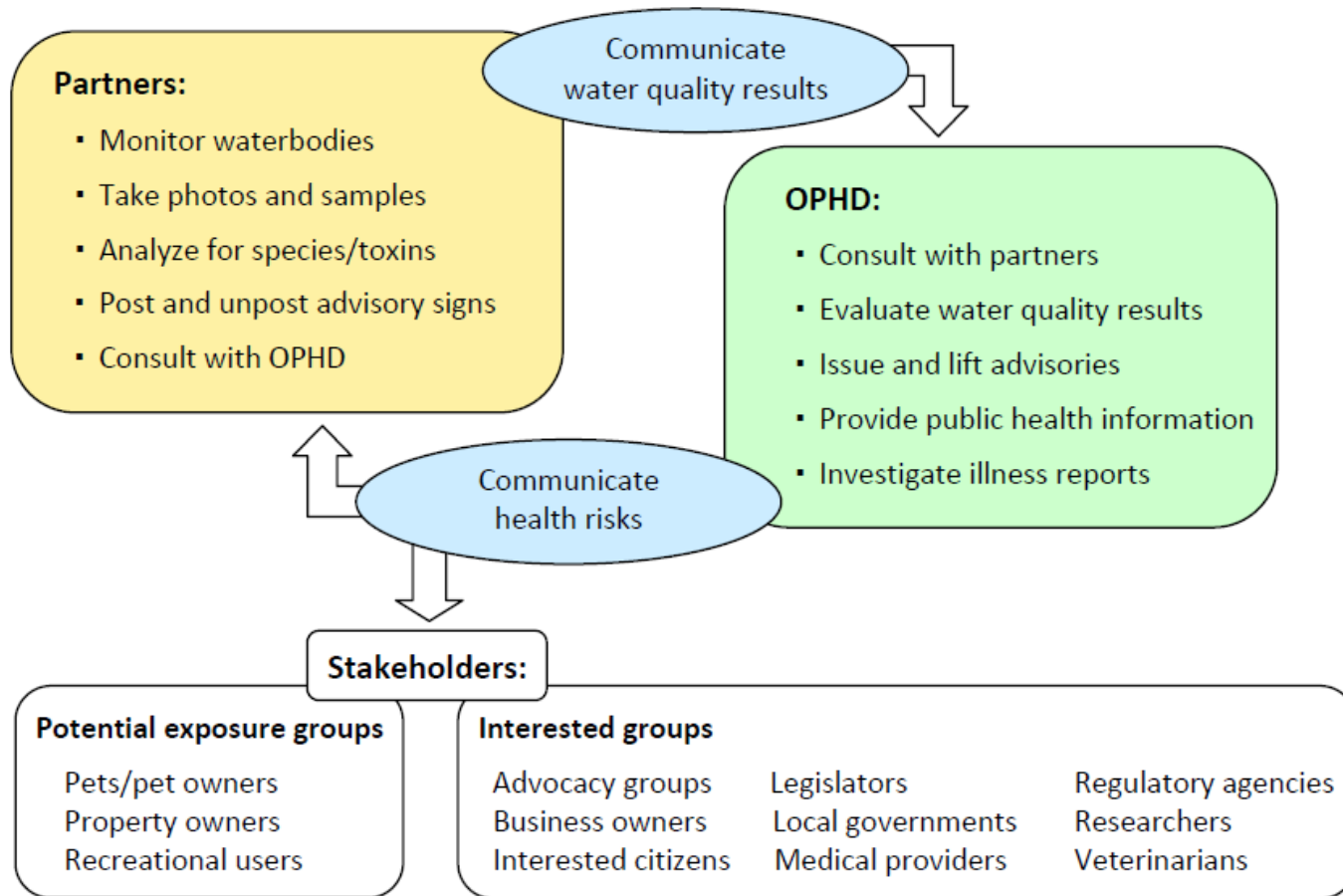
Freshwater:

- Willow Lake in Jackson County; posted 4/21 for a bloom dominated by *Aphanizommon* (5.2M cells/mL), which could produce cylindrospermopsin (hepatotoxin), anatoxin-a and saxitoxin (neurotoxins) as well as lipopolysaccharides (dermal irritant).

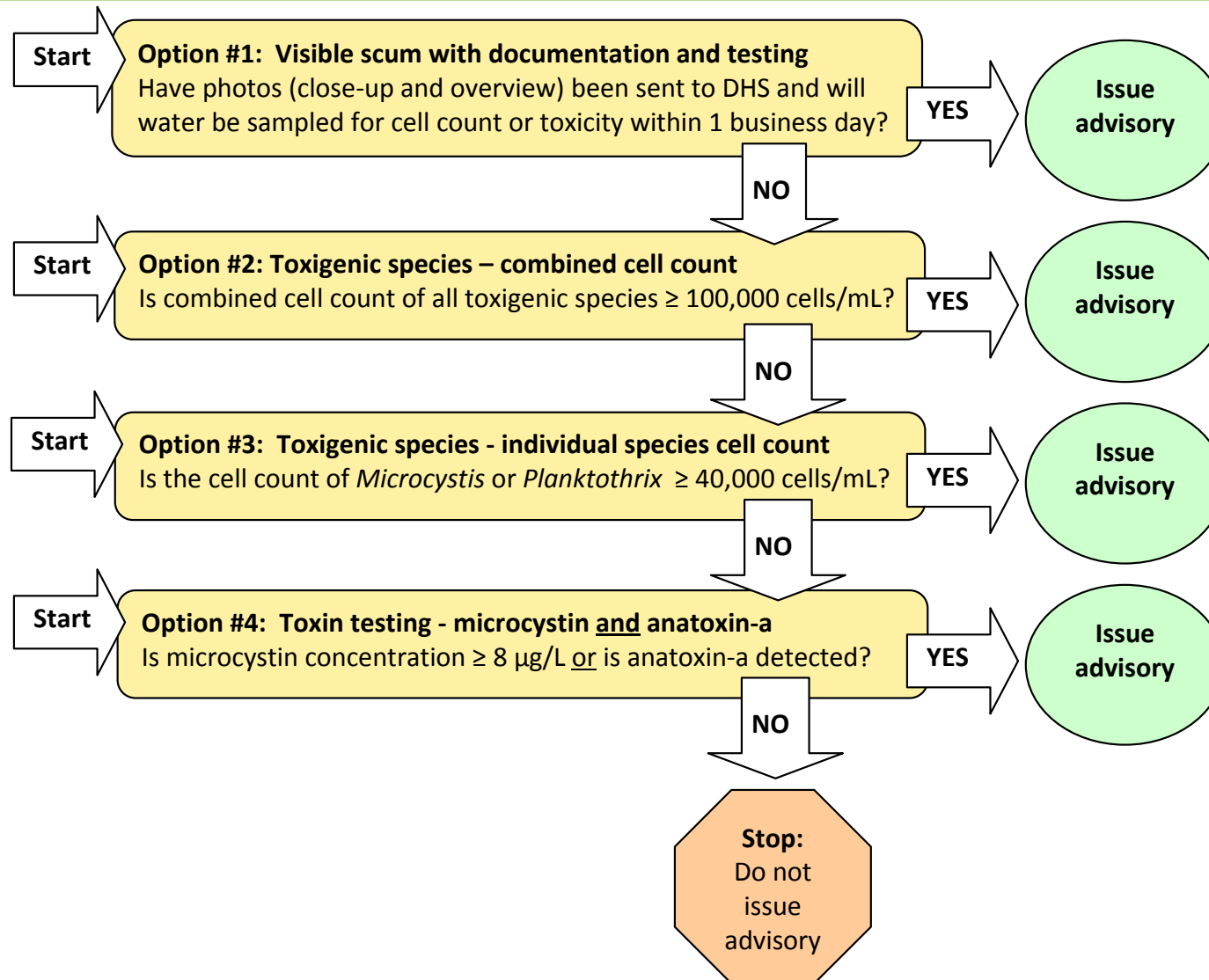
Marine:

- As of 5/7, all recreational and commercial shellfish harvesting is open.
- The consumption of whole recreationally harvested scallops is not recommended. However, coastal scallops are not affected by toxins when only the adductor muscle is eaten.
- Domoic acid and paralytic shellfish toxin results in the safe range.
- Phytoplankton counts have been increasing.

Bloom Advisory Process



Freshwater HAB Advisory Criteria



DHS Public Health Advisory Notification

1. Phone alert:

Management agencies, local health department, DEQ

2. News release:

<http://www.oregon.gov/DHS/news/index.shtml>

3. Toll-free information line:

877-290-6767

4. Program website and E-mail alert:

<http://www.oregon.gov/DHS/ph/hab/advisories.shtml>

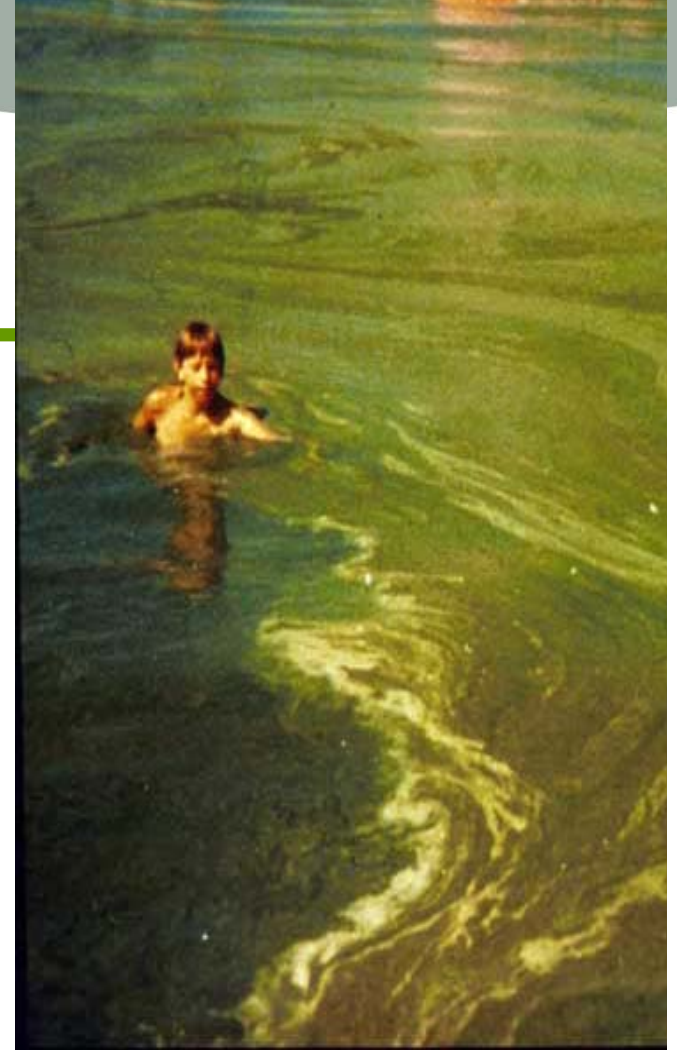
5. Social media tools (e.g.- Twitter): *coming soon*

+ Stakeholders post HABs advisory signs for each bloom



DHS Public Health Messages

- Not all water bodies are monitored
- Avoid scummy, turbid or discolored waters
- Avoid water contact activities
- Do not drink, swallow or inhale affected water
- Thoroughly clean fish, do not eat shellfish
- Symptoms:
 - skin irritation
 - nausea, diarrhea, cramps
 - weakness, fainting, numbness, tingling
 - difficulty breathing
 - heart problems



Children and pets are at the greatest risk of becoming sick

Outreach and Education

- Dog safety poster
- Newsletter articles
- Community events
- Fact sheet -
Drinking water managers
- General education brochure –
English & Spanish



Program Contact Information

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Website: <http://healthoregon.org/hab>

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