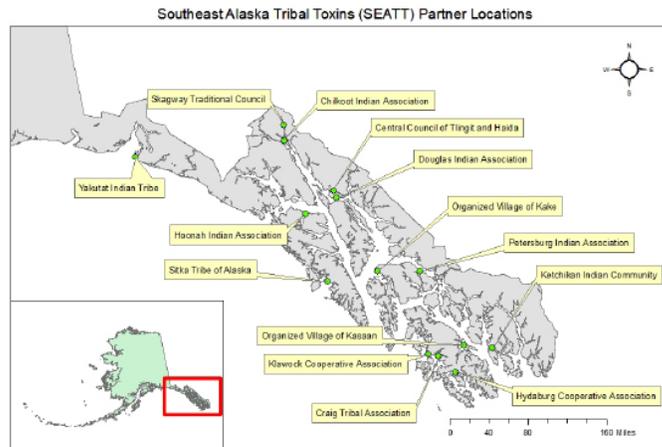


# Southeast Alaska Tribal Toxins



The Southeast Alaska Tribal Toxins (SEATT) partnership is a network of Southeast Alaskan Tribes, university researchers, non-profit organizations, and commercial divers. Together, the network monitors communities across Southeast for harmful algal blooms and toxic shellfish.

Alaskans are hospitalized every year for Paralytic Shellfish Poisoning (PSP), a life-threatening illness caused by eating contaminated shellfish. SEATT members are working to reduce the risks of PSP and related illnesses from wild shellfish by monitoring local plankton populations, testing filtering and testing seawater samples, and testing shellfish samples. As the partnership has grown, SEATT members have also started to monitor a wider range of ocean conditions, to map out algal cyst beds, and to improve our ability to communicate results to the public.



## Phytoplankton Monitoring

Unsafe shellfish are generally caused by a large increase of toxic plankton, or harmful algal bloom. To catch these blooms early, SEATT members collect a plankton sample and a water sample from one or more sites in their communities every week. SEATT members then analyze the plankton sample under a microscope, looking for potentially harmful species and quantifying their abundance. Water samples are filtered and shipped to Sitka for testing. Weekly phytoplankton samples are extremely important to us when deciding whether we need weekly or bi-weekly shellfish samples or whether we should issue a preemptive beach advisory.



## Sitka Tribe of Alaska Environmental Regulatory Lab (STAERL)

In November 2015, the Sitka Tribe of Alaska unpacked the last box of equipment for its new lab. This lab allows the SEATT partnership to test both water samples and shellfish for toxins in the event of a harmful algal bloom. The lab is also available to recreational shellfish harvesters for \$50/sample. All personal shellfish samples are tested within two business days.

The lab uses the FDA-approved receptor binding assay to test shellfish and seawater samples for saxitoxin. The method is fast, accurate, and highly cost effective. In addition, STAERL can test for domoic acid, which can cause Amnesic Shellfish Poisoning, using an ELISA assay. The lab is currently working to become an FDA-certified regulatory lab, which would allow it to test commercial dive products in addition to subsistence and recreational shellfish.



## More questions?

Contact us for additional testing information and collection protocols.  
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