



Public Service Announcement

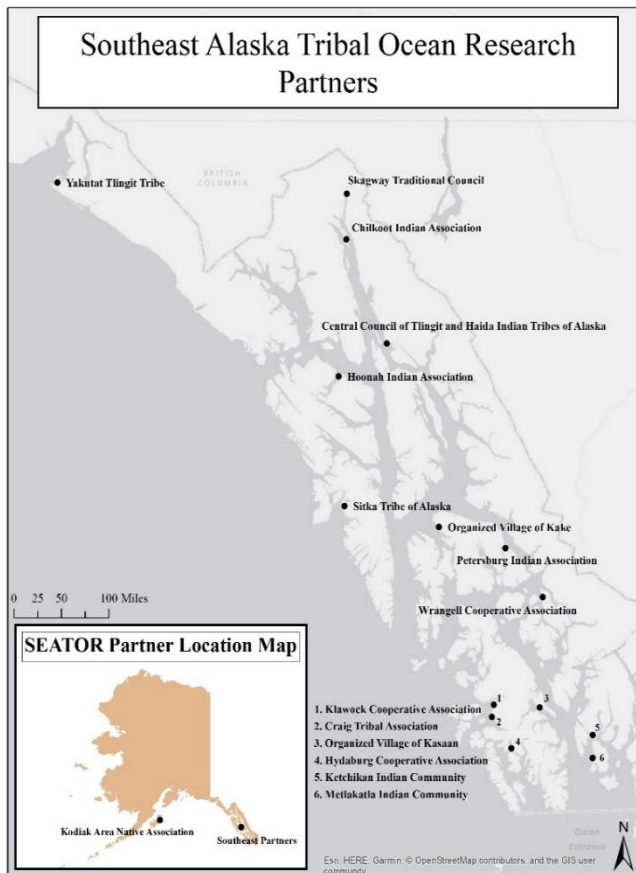
August 15, 2019



Elevated Levels of Paralytic Shellfish Toxins in Southeast Alaska and Kodiak

The Southeast Alaska Tribal Ocean Research network (SEATOR) is a group of 16 Tribal Governments in Southeast Alaska and Kodiak testing shellfish for Paralytic Shellfish Toxins (PSTs) which cause Paralytic Shellfish Poisoning (PSP) (Figure 1). SEATOR partners send shellfish samples to the Sitka Tribe of Alaska Environmental Research Laboratory (STAERL) for toxin analysis. STAERL has measured elevated values of PSTs throughout Southeast Alaska and Kodiak in 2019. This Public Service Announcement is a summary of PST occurrences that exceeded the regulatory limit of 80 µg of toxins per 100 g of tissue (µg/100 g) in 2019 as sampled by SEATOR partners. These data are generated by testing blue mussels (*Mytilus edulis*), an indicator species, for PSTs.

Figure 1: SEATOR Partner Locations



April 2019

The first sample in 2019 that exceeded the regulatory limit of 80 µg/100 g occurred on April 9th in Ketchikan. In previous years, the first sample to exceed the safety threshold was collected in mid to late April. Three weeks after the first sample exceeded the regulatory limit, blue mussel samples in Ketchikan had toxin values of 2161 µg/100 g, more than 25 times the safety threshold for human consumption.

May 2019

Four communities had blue mussel samples over the regulatory limit in May (Kasaan, Ketchikan, Kodiak and Skagway). While Kasaan and Kodiak’s blue mussel samples were slightly over the regulatory limit, both Skagway and Ketchikan had toxin values over 800 µg/100 g.

June 2019

Eight communities had blue mussel samples over the regulatory limit in June. The northern Southeast communities of Haines, Juneau, and Skagway all had toxin values over 1400 µg/100 g. The maximum PST value recorded in a SEATOR blue mussel sample in 2019 so far is 4412 µg/100 g, which was collected on June 18th from Auke Rec/Pt. Louisa in



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Juneau. This is the highest PST value in a SEATOR blue mussel sample analyzed by STAERL since testing began in 2016. On Prince of Wales Island, both Craig and Klawock saw toxin values over 350 $\mu\text{g}/100\text{ g}$. In southern Southeast, Ketchikan continued to see elevated values of more than 500 $\mu\text{g}/100\text{ g}$. On Kodiak Island PSTs remained slightly over the regulatory limit.

July 2019

Four communities had blue mussel samples over the regulatory limit in July. The northern Southeast communities of Skagway and Juneau continued to have values over 100 $\mu\text{g}/100\text{ g}$. Sitka exceeded the regulatory limit for the first time since June of 2017 with toxin levels of 430 $\mu\text{g}/100\text{ g}$. On Prince of Wales Island, Klawock was the only community to exceed the limit, with toxin levels of 105 $\mu\text{g}/100\text{ g}$.

Data

Fifty-four blue mussel samples have exceeded the regulatory limit in 2019 (Tables 1-4). Seventeen samples from five different communities have tested over 800 $\mu\text{g}/100\text{ g}$, which is ten times the safety threshold for human consumption. 2019 has had the highest values of PSTs in SEATOR blue mussel samples since STAERL began testing in 2016. More SEATOR communities have also seen blue mussel samples above the regulatory limit than in previous years. In 2019 ten SEATOR partner communities have had elevated values of PSTs compared to five in 2018 and eight in 2017. Information in the tables is organized by region, community, site and date collected.

Table 1: Blue mussel samples with elevated PSTs in northern Southeast Alaska.

Table 2: Blue mussel samples with elevated PSTs in southern Southeast Alaska.

Table 3: Blue mussel samples with elevated PSTs on Prince of Wales Island in.

Table 4: Blue mussel samples with elevated PSTs on Kodiak Island, Alaska in.

Paralytic Shellfish Poisoning

PSP symptoms include tingling in the lips and fingertips, numbing of the arms and legs, nausea, difficulty breathing, and even death. Anyone with these symptoms should seek immediate medical care or call **9-1-1**. Suspected cases of PSP should be reported to the State of Alaska Section of Epidemiology at 907-269-8000, after hours 800-478-0084.

Based on current data, PSP risk level is expected to remain elevated for effected communities. In these communities subsistence and recreational harvest is considered extremely dangerous. To learn more about harvesting shellfish in your area visit seator.org/data.

Contact SEATOR with additional questions at (907)-966-9650 or seator@sitkatriben-sn.gov



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Table 1. Blue mussel samples with elevated PSTs in northern Southeast Alaska. Samples collected by SEATOR partners: Chilkoot Indian Association, Hoonah Indian Association, Central Council of Tlingit and Haida Indian Tribes, Sitka Tribe of Alaska, and Skagway Traditional Council.

| | STAERL ID | Date Collected | Sample Site | PSP Result (µg/100 g) |
|----------------|------------------|-----------------------|----------------------------|------------------------------|
| Haines | 190616 | 6/5/2019 | Kochu Island | 476 |
| | 190656 | 6/10/2019 | Viking Cove | 3594 |
| | 190657 | 6/11/2019 | Chilkat State Park | 1491 |
| Hoonah | 190720 | 6/24/2019 | Gartina Creek/Harbor Way | 144 |
| | 190721 | 6/24/2019 | Shaman Point/Cannery Beach | 182 |
| Juneau | 190588 | 6/4/2019 | Amalga Harbor | 2187 |
| | 190701 | 6/18/2019 | Amalga Harbor | 1606 |
| | 190771 | 7/3/2019 | Amalga Harbor | 279 |
| | 190585 | 6/5/2019 | Auke Rec/Pt. Louisa | 1211 |
| | 190679 | 6/18/2019 | Auke Rec/Pt. Louisa | 4412 |
| | 190768 | 7/2/2019 | Auke Rec/Pt. Louisa | 387 |
| | 190793 | 7/10/2019 | Auke Rec/Pt. Louisa | 254 |
| | 190831 | 7/15/2019 | Auke Rec/Pt. Louisa | 106 |
| Sitka | 190751 | 7/3/2019 | Starrigavan North | 430 |
| | 190791 | 7/11/2019 | Starrigavan North | 127 |
| Skagway | 190512 | 5/20/2019 | Nahku Beach | 886 |
| | 190584 | 6/4/2019 | Nahku Beach | 741 |
| | 190658 | 6/11/2019 | Nahku Beach | 2611 |
| | 190661 | 6/18/2019 | Nahku Beach | 2275 |
| | 190731 | 6/24/2019 | Nahku Beach | 1279 |
| | 190740 | 7/1/2019 | Nahku Beach | 1147 |
| | 190781 | 7/8/2019 | Nahku Beach | 216 |
| | 190810 | 7/16/2019 | Nahku Beach | 161 |
| 190841 | 7/22/2019 | Nahku Beach | 122 | |



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Table 2. Blue mussel samples with elevated PSTs in southern Southeast Alaska. Samples collected by SEATOR partner Ketchikan Indian Community.

| | STAERL ID | Date Collected | Sample Site | PSP Result (µg/100 g) |
|------------------|-----------|----------------|---------------|-----------------------|
| | 190411 | 4/9/2019 | Seaport Beach | 86 |
| | 190455 | 4/22/2019 | Seaport Beach | 906 |
| | 190488 | 4/30/2019 | Seaport Beach | 2161 |
| Ketchikan | 190551 | 5/20/2019 | Seaport Beach | 614 |
| | 190555 | 5/20/2019 | Herring Cove | 561 |
| | 190572 | 5/28/2019 | Seaport Beach | 1399 |
| | 190655 | 6/10/2019 | Seaport Beach | 574 |

Table 3. Blue mussel samples with elevated PSTs on Prince of Wales Island. Samples collected by SEATOR partners: Craig Tribal Association, Organized Village of Kasaan, and Klawock Cooperative Association.

| | STAERL ID | Date Collected | Sample Site | PSP Result (µg/100 g) |
|----------------|-----------|----------------|-----------------------------|-----------------------|
| Craig | 190602 | 6/4/2019 | False Island Boat Launch | 341 |
| | 190672 | 6/18/2019 | False Island Boat Launch | 134 |
| Kasaan | 190556 | 5/23/2019 | Whale House Beach | 139 |
| | 190578 | 6/4/2019 | Big Salt | 116 |
| | 190660 | 6/12/2019 | Big Salt | 366 |
| | 190694 | 6/19/2019 | Big Salt | 163 |
| | 190737 | 6/25/2019 | Big Salt | 300 |
| Klawock | 190577 | 6/4/2019 | City of Klawock Boat Launch | 949 |
| | 190659 | 6/12/2019 | City of Klawock Boat Launch | 655 |
| | 190693 | 6/19/2019 | City of Klawock Boat Launch | 944 |
| | 190736 | 6/25/2019 | City of Klawock Boat Launch | 1087 |
| | 190786 | 7/9/2019 | City of Klawock Boat Launch | 105 |



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Table 4. Blue mussel samples with elevated PSTs on Kodiak Island, Alaska.
Samples collected by SEATOR partners: Kodiak Area Native Association and Sun'aq Tribe of Kodiak.

| | STAERL ID | Date Collected | Sample Site | PSP Result (µg/100 g) |
|---------------|------------------|-----------------------|---------------------|------------------------------|
| | 190536 | 5/21/2019 | Mission Beach NE | 128 |
| | 190617 | 6/6/2019 | Mission Beach NE | 172 |
| | 190443 | 4/20/2019 | Mission Beach SW | 109 |
| | 190492 | 5/5/2019 | Mission Beach SW | 260 |
| | 190537 | 5/21/2019 | Mission Beach SW | 265 |
| Kodiak | 190619 | 6/6/2019 | Mission Beach SW | 355 |
| | 190678 | 6/17/2019 | Mission Beach SW | 88 |
| | 190493 | 5/5/2019 | South Trident Basin | 121 |
| | 190538 | 5/21/2019 | South Trident Basin | 104 |
| | 190620 | 6/6/2019 | South Trident Basin | 121 |
| | 190676 | 6/17/2019 | South Trident Basin | 111 |