Kachemak Bay Research Reserve Phytoplankton Update
June 25th – July 1st, 2021

Harmful Algal Bloom Program
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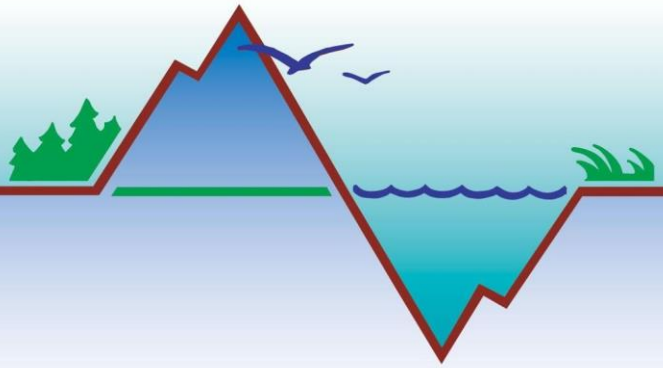

Hello Everyone,

This week phytoplankton in the inner bay were sparse at all the sites sampled. We did see *Pseudo-nitzschia* and *Dinophysis* species, two species of concern, present in low abundances in almost all the inner bay samples. A group of phytoplankton is considered present if at least one cell of that group is seen in the sample. We monitor the abundances of the three species of concern with specific criteria to provide valuable information to shellfish harvesters of all types and public health officials to protect human health in our communities. KBNERR is not a regulatory agency, the statewide stance toward harvesting and consumption of wild shellfish is "Dig at your own risk".

As a reminder *Pseudo-nitzschia* sp. produce domoic acid, this toxin acts as a neurotoxin and can lead to amnesic shellfish poisoning (ASP) in humans, birds, and marine mammals when toxic shellfish are consumed. *Dinophysis* sp. produce okadaic acid which can lead to diarrhetic shellfish poisoning (DSP) after consumption of contaminated shellfish. For more information on these species and symptoms associated with each please check out the resources on our website or see the fact sheets attached to this week's KBNERR Weekly Phytoplankton email.

All commercially harvested shellfish are regulated by the DEC and considered safe for consumption.

The outer bay this week had abundant and blooming phytoplankton at all sites sampled except for Seldovia Harbor. Two diatoms, *Dactyliosolen* sp. and *Lauderia* sp. dominated at several outer bay locations.

As always, please reach out with any questions. We wish everyone a happy Fourth of July holiday!

Thank you to all our monitors for collecting phytoplankton samples!
Jasmine and Rosie

**Due to weather delays, shipping distances and times, the processing of some samples may happen after the weekly update is shared. The results from these samples will be included in subsequent updates, which is why not all sample dates in the tables below fall within the date range of the current Weekly Update.

Kachemak Bay Research Reserve Phytoplankton Update
Qualitative Analysis Phytoplankton Data

INNER BAY

DATE	Bay	Water Temp	Salinity	Dominant species	Dinophysis	Pseudo-nitzschia	Alexandrium
6/20/2021	China Poot	8	33	Mixed Diatoms	Present	Present	None
6/25/2021	China Poot	7.5	-	Sparse Sample	Present	Present	None
6/29/2021	Halibut Cove	11	28	Sparse Sample	None	None	None
6/29/2021	Homer Harbor	10.6	27.7	Sparse Sample	Present	Present	None

OUTER BAY

DATE	Bay	Water Temp	Salinity	Dominant species	Dinophysis	Pseudo-nitzschia	Alexandrium
6/29/2021	Sadie Cove	12	-	Mixed Diatoms	None	Present	Present
6/30/2021	Seldovia	9.6	27.5	Sparse Sample	None	Present	None
6/30/2021	Kasitsna	9.4	29.8	*Dactyliosolen* sp. and *Lauderia* sp	None	Present	None
6/30/2021	Jakolof	10.3	30.1	Mixed Diatoms	None	Present	None
6/30/2021	Tutka Bay	12	-	*Dactyliosolen* sp. Bloom	None	Present	None
6/30/2021	Sadie Entrance	10.9	30.4	*Dactyliosolen* sp. Bloom	None	Abundant	None
6/30/2021	Eldred Passage	10.2	30.2	Mixed Diatoms	None	Present	None

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