Kachemak Bay Research Reserve Phytoplankton Update
July 3rd to July 9th, 2020
Harmful Algal Bloom Program
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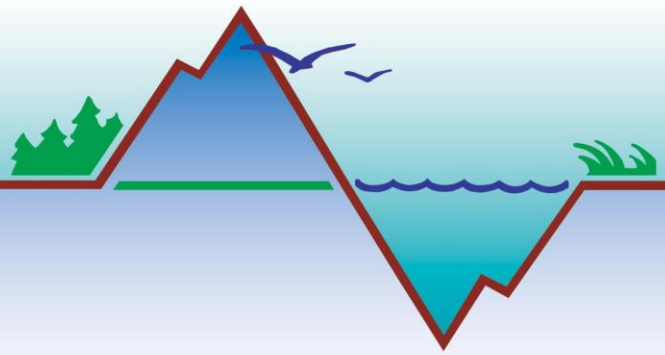

Hello Everyone,

This week we started seeing a relative increase in the number of dinoflagellates in the samples. Dinoflagellates are a group of phytoplankton that use flagella, long whip like structures, to move around. *Alexandrium* sp. and *Dinophysis* sp. are both dinoflagellates. *Chaetoceros* sp. are at bloom levels again in Eldred Passage and Tutka Bay. Overall, the samples this week have abundant phytoplankton from a diverse number of species.
This week we also saw *Pseudo-nitzschia* sp. density increase to abundant levels in Jakolof and Kasitsna Bay. Eldred Passage sample also had many *Pseudo-nitzschia* present, although not quite enough to meet the criteria of "abundant". *Pseudo-nitzschia* sp. can produce domoic acid and cause amnesiac shellfish poisoning when toxic shellfish are consumed. Cell counts for all three species of concern are used to determine abundance classification.

Commercially harvested shellfish are monitored by DEC and considered safe for consumption.

Please reach out with any questions.
Thanks to all our monitors and partners for the phytoplankton samples!
Rosie Masui & Jasmine Maurer

Kachemak Bay Research Reserve Phytoplankton Update
Qualitative Analysis Phytoplankton Data

INNER BAY

DATE	Bay	Water Temp	Salinity	Dominant species	Dinophysis	Pseudo-nitzschia	Alexandrium
7/4/2020	Peterson Bay	11.6	30	*Chaetoceros* sp.	Present	Present	None
7/7/2020	Halibut Cove	14	26	*Chaetoceros* sp.	Present	None	None
7/9/2020	Homer Harbor	11.5	29.4	Mixed Diatoms	Present	Present	Present

*Samples received after last weekly update

OUTER BAY

DATE	Bay	Water Temp	Salinity	Dominant species	Dinophysis	Pseudo-nitzschia	Alexandrium
7/7/2020	Kasitsna Bay	11.1	31.3	Mixed Diatoms	None	Present	Present
7/7/2020	Jakolof	11	38	Mixed Diatoms	Present	Present	Present
7/7/2020	Eldred Passage	11.1	30.4	*Chaetoceros* sp. bloom	Present	Present	Present
7/7/2020	Tutka Bay	12.5	27.5	*Chaetoceros* sp. bloom	Present	Present	Present
7/8/2020	Sadie Cove	13.5	30	Sparse Sample	Present	Present	None

*Samples received after last weekly update

Kachemak Bay National Estuarine Research Reserve
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