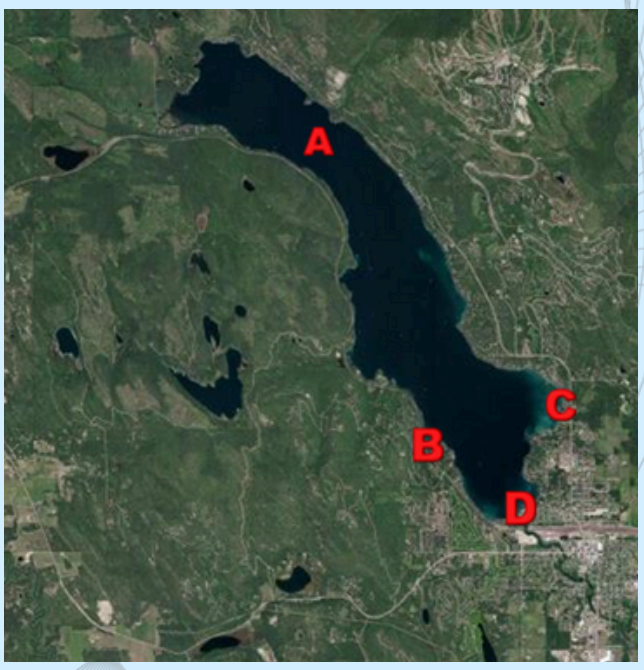
BTEX in Whitefish Lake

What is BTEX

BTEX stands for benzene, toluene, ethylbenzene, and xylene. The main source of BTEX in Whitefish Lake is boat gas. BTEX can have various negative health effects and is regulated in drinking water. Many of the boat ramps on Whitefish Lake are near swim areas making this a top safety priority.



Sampling Locations:

A) Mid-lake reference near Hellroaring point

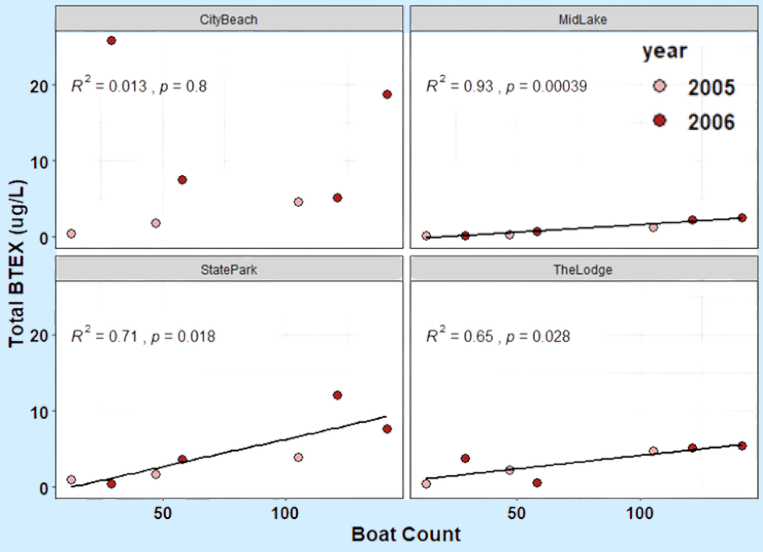
B) Whitefish Lake State Park boat launch at Dog Bay—between the dock and swimming area

C) The Lodge at Whitefish Lake boat dock at Monk's bay

D) City of Whitefish boat launch at City Beach—between the dock and swimming area

Results From the 2005 BTEX Study

The 2005 study showed that BTEX levels and boat count were correlated at all of the sampling sites except for City Beach (see graph right). This lead WLI to conclude that there must be increased contamination occurring due to the heavily used boat ramp. After this information was presented to Whitefish City Council a gasoline interceptor trench was installed in the boat ramp at City Beach (pictured above).



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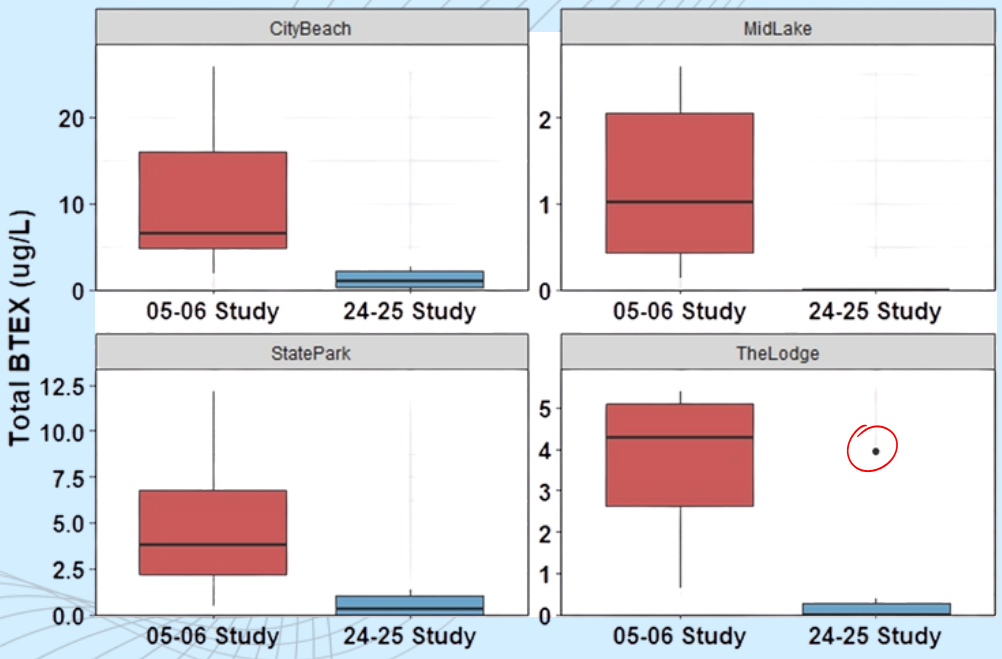
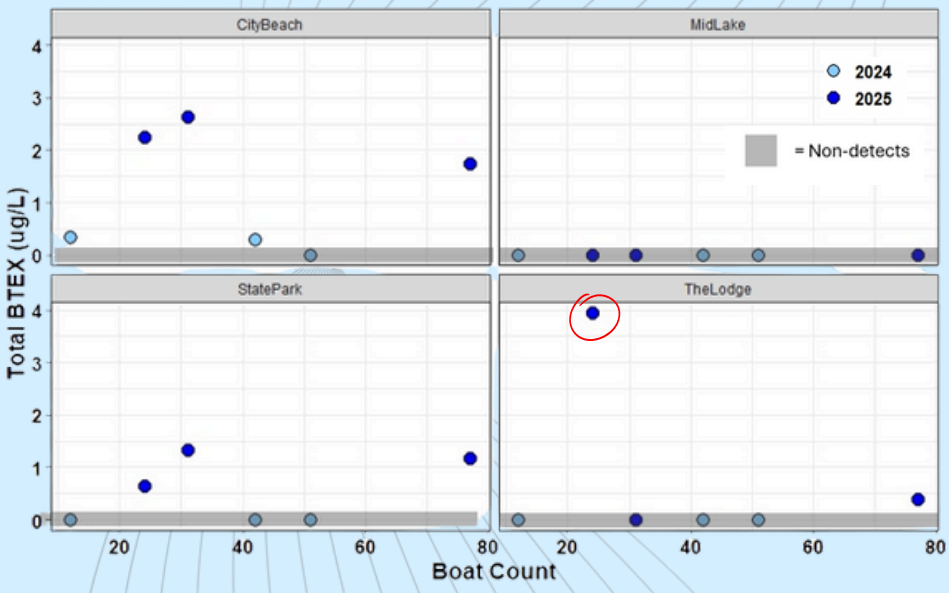
BTEX Levels are Now Lower

The results of repeating the study in the summers of 2024 and 2025 show that BTEX levels are significantly lower in Whitefish lake. This could be due to a combination of factors including the interceptor trench at City Beach and innovations making boat motors more efficient and less likely to cause contamination.





BTEX Level is No Longer Correlated with Boat Count

Having detectable BTEX levels is now much more rare and more likely due to an older boat, leaking motor, or incorrect use of the City Beach interceptor trench.
Woody Weekend at The Lodge (the circled point) may have an impact on BTEX levels. Further supporting the hypothesis that BTEX levels can be influenced by older boats. However, BTEX leaves the water quickly, so levels return to normal rapidly after contamination events.

Overall, BTEX levels are much lower and there is no longer BTEX detected at the mid-lake reference site

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