

Capilano Park Boat Launch - 2023

Site Information and Background:

General Information:

Name: Capilano Park Boat Launch

Location: 3R7, 10988 50 St NW, Edmonton, AB T6A 2E9

Year of Identification: 2017

Responsible Authority: North Saskatchewan Riverkeeper / Swim Drink Fish

Monitoring Points:

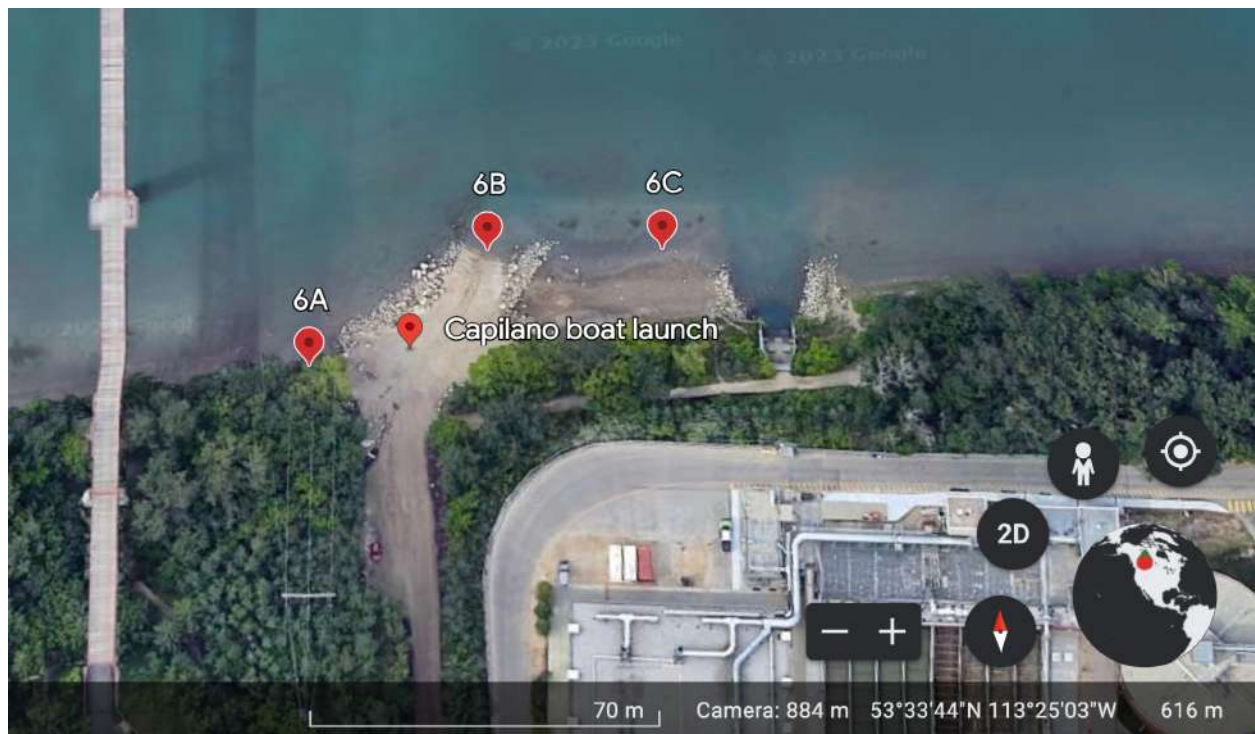


Figure 1a: Monitoring points were selected following the Alberta Safe Beach Protocol which recommends 3 samples taken for beaches 100m long or less. The sampling points will be spaced evenly across the beach area with one upstream of the boat launch, one at the boat launch, and one downstream of the boat launch nearest to the outfall from the Goldbar Park side.



Figure 1b: Map of Capilano Boat Launch Site with Zone of local influence. CSO/Storm Outfall is included in the zone of local influence as there is a bit of an eddy that could bring any contamination from this a bit upstream closer to our sampling site.

Waterbody Information:

Waterbody type: River

Watershed: Beaverhill Subwatershed of the North Saskatchewan River Watershed

Drainage Area (km²): 4405.44 km² (Beaverhill sub-watershed)

Annual Precipitation for Watershed (mm): 476.9mm in Edmonton on average

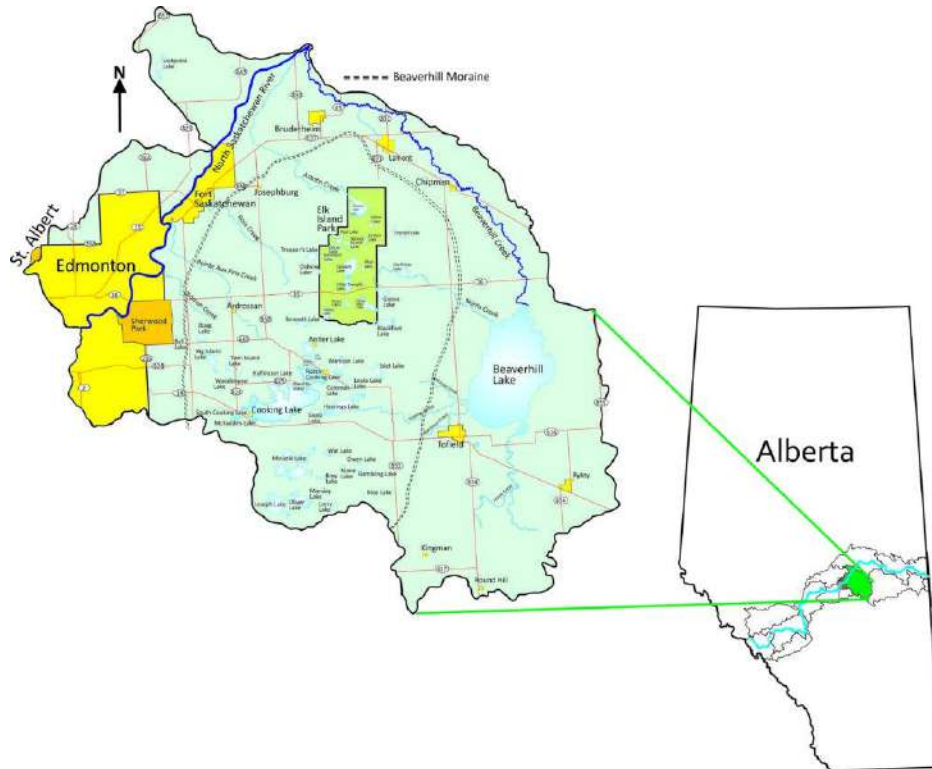


Figure 2: The Capilano Boat Launch site is located in the Beaverhill Subwatershed of the North Saskatchewan Watershed. This map was created by Billie Milholland and was accessed through the North Saskatchewan Watershed Alliance ([Beaverhill subwatershed ~ North Saskatchewan River Watershed](#)).

Surrounding Land Use:

- Park Area
- Residential
- Industrial
- Forest
- Golf course

This boat launch is located in Capilano Park which is located along the North Saskatchewan River in North-East Edmonton. This park backs onto the Capilano residential area which is just South of the park. Immediately downstream of the boat launch is the Gold Bar Wastewater Treatment Plant and Gold Bar Park.

Upstream Pollution Risks:

There are four storm outfalls that are upstream of the boat launch (Figure 3). These outfalls could be discharging faecal, chemical, or other types of contamination, which may have an effect on water quality at the site. The Gold Bar Wastewater Treatment Plant is immediately downstream of the boat launch and has an outfall that periodically discharges effluent next to the site (Figure 3). Due to the proximity this could pose an immediate pollution risk to the water quality at the boat launch, particularly if there is an eddy causing any backflow of the river water at this location. Runoff from the surrounding parks, residential areas and roads could pose a risk of contamination at the boat launch. The use of motorized vehicles and watercraft at this site could also be sources of chemical contamination at this location. The Highlands Golf Club is also immediately upstream on the opposite side of river. This golf course could be a source of potential fertilizer and/or pesticide contamination at the boat launch site.

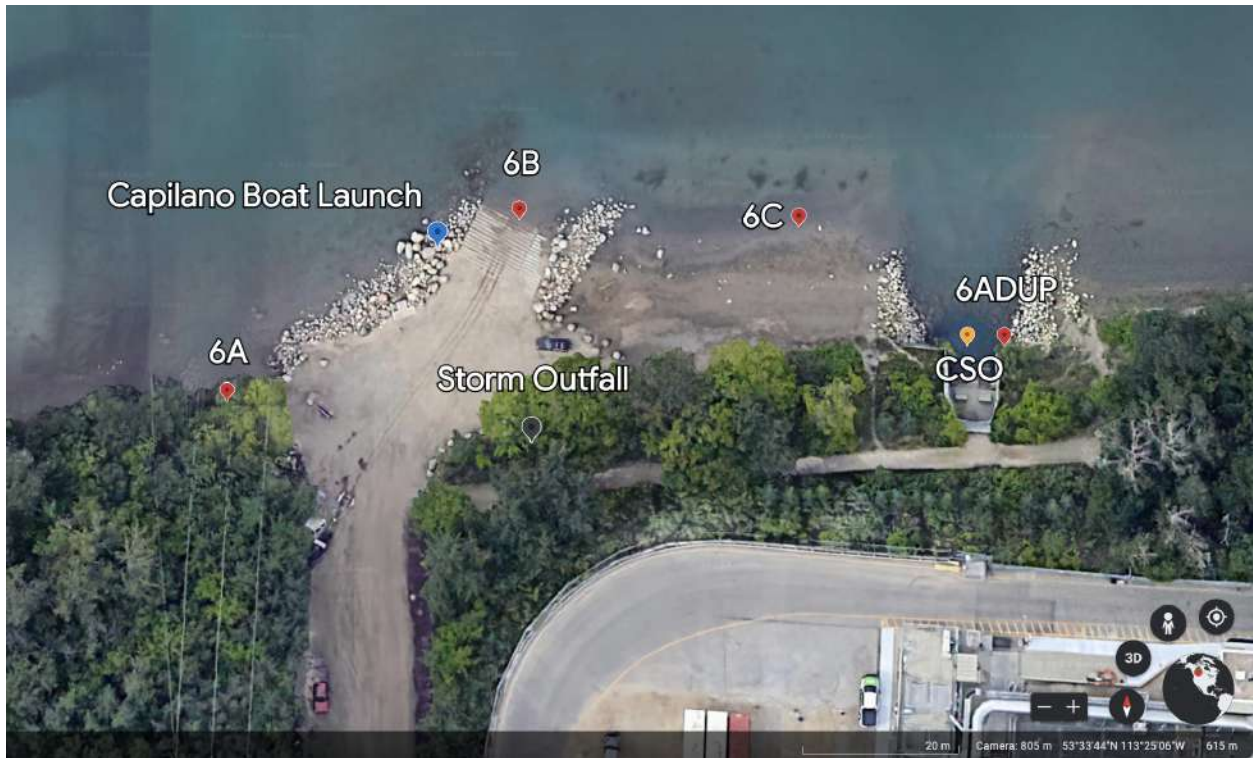


Figure 3: Map of storm outfalls and combined sewer overflows surrounding the Capilano Park Boat Launch site. The blue pin indicates the location of the site. Combined Sewer Overflow data is from [WSER CSO data](#). Storm outfall data obtained from the City of Edmonton open datasets ([Drainage \(Map View\): Outfall | Edmonton - Open Data Portal](#)). The CSOs indicated here are not indicated as CSOs in the City of Edmonton dataset.

Potential Sources of Pollution:

1. Microbiological Hazard Assessment

Overall Risk from Microbiological Hazards:

Stormwater outfalls: **HIGH**

- There are four stormwater outfalls upstream of the Capilano Park Boat Launch and one immediately adjacent to the site downstream (Figure 3). These outfalls could be a potential source of both faecal and chemical contamination as the areas surrounding the beach are residential with high amounts of impermeable surfaces. This risk will likely increase following rainfall events.

Combined Sewer Overflows (CSOs): **HIGH**

- There are two CSOs that discharge sewage into the North Saskatchewan River upstream from this site (Figure 3). WSER data indicates that effluent is periodically discharged from the CSO located adjacent to this site. This risk will likely increase following rainfall events.

Stormwater runoff from beach and surrounding facilities (e.g. parking): **MEDIUM**

- There is a strip of forest area that follows the river surrounding the beach that would act as a buffer for stormwater runoff from surrounding residential areas and infrastructure (roads etc.). However, there is a compacted gravel road that leads immediately down to the paved boat launch which would provide a clear path for runoff. Therefore, risk of contamination from the roads and vehicles is rated as medium.

Stormwater runoff from areas receiving sewage sludge: **HIGH**

- The water treatment plant is in close proximity to the site and could be a potential source of raw sewage contamination during rainwater runoff.

Birds: **LOW**

- There were only a couple of birds along the beach that were observed during sampling. Faecal contamination from birds was determined to be a low risk for this site.

Pets: **HIGH**

- This location is a common location for pet-owners to bring their dogs to walk along the river. Therefore, the risk of faecal contamination from dogs at this site is rated as high.

Swimmers: **LOW**

- No primary water-users were observed using this site for swimming activities during our sampling time. There are also washroom facilities nearby which would help reduce the risk of faecal contamination at this site.

Other wild animals: **LOW**

- No wild animals (other than birds) were observed at this site. However, it can be presumed that they are present in the forested area adjacent to the beach.

2. Chemical Hazards

Overall Risk from Chemical Hazards:

Commercial / Industrial Discharges : **MEDIUM**

- Unknown potential for chemical contamination from untreated effluent being released adjacent to the site from the water treatment plant.

Motorized Watercraft : **MEDIUM**

- Potential contamination from motorized watercraft and vehicles bringing boats down to the boat launch.

Stormwater runoff from urban and residential areas: **MEDIUM**

- The stormwater outfalls upstream of the site (Figure 3) could potentially carry chemical contaminants from surrounding residential areas during rainfall events. There are also residential areas surrounding the site which could be a potential source of chemical contamination, however, there is a forest buffer that would help to protect the beach from this.

Stormwater runoff from areas subject to pesticide application: **MEDIUM**

- The Capilano Boat Launch is located in Capilano Park, which could be a potential source of contamination from pesticides depending on whether or not they are used within the park. However, given that there is a strip of forest that borders the river that would act as a buffer and the amount of pesticide application in these parks is unknown, the risk is rated as medium.

Stormwater runoff from areas subject to fertilizer application: **HIGH**

- The Highlands Golf Club is upstream from the site across the river. Fertilizer runoff from the course could be a potential source of contamination at the Capilano boat launch.

3. Other Biological Hazards

discuss the sources of pollution here and summarize important information about them

Overall Risk from Other Biological Hazards:

Cyanobacterial Blooms: **LOW**

- No cyanobacteria observed at this site.

Schistosomes (Swimmer's Itch): **LOW**

- The presence of Schistosomes or Swimmer's Itch is unknown at this location. However, it is most commonly found in still freshwater bodies such as lakes and ponds.

Large number of aquatic plants: **LOW**

- No aquatic plants observed at this location.

4. Physical Hazards and Aesthetic Considerations

Overall Risk from Physical Hazards:

Steep slopes: **LOW**

- There are no steep slopes at this site.

Depths greater than 4.5 meters: **LOW**

- No depths greater than 4.5 meters were observed at this site.

Large rocks: **MEDIUM**

- There are some large rocks next to the boat launch but they do not cover the entire waterfront at this site.

Slippery or uneven bottom: **LOW**

- The bottom was not slippery or uneven.

Strong Currents: **HIGH**

- The river currents are relatively fast and strong at this location which is why it is rated as a high risk. The North Saskatchewan water levels and flows typically peak in mid-June and could present a hazard to both swimmers and water samplers.
- The level of risk would vary seasonally with changing river conditions

Undertow : **MEDIUM**

- The risks of undertows are unknown at this site. Rated as medium risk until more information is available.

Litter on beach: **LOW**

- There was a bit of litter scattered across the beach area at the time of sampling.

Floating Debris: **LOW**

- No floating debris was visible at the time of sampling.

Broken Glass: **LOW**

- No broken glass was present at the time of sampling.

Medical Waste: **LOW**

- No medical waste was present at the time of sampling.

Facilities and Provisions:

Facilities:

Toilets: 1 washroom facility with 4 stalls in the womens washroom and 2 stalls in the mens washroom. There are no gender neutral bathrooms at this park.

Showers: 0

Drinking Water Fountains: 1

Litter Bins: 1

Recycling Bins: 0

Access for Persons with Disabilities: The washrooms at this park are accessible. The road down to the boat launch is sloped but it is not steep. You can also drive right down to

the boat launch which increases the accessibility of the site. The beach area is flat which improves the accessibility of the beach area.

Safety Provisions:

Lifeguard Station: No

Life Saving Equipment: No

Emergency Telephone: Yes

First Aid Station: No

Beach Postings/Suitability for Swimming: No

Emergency Contact Information: No

Other Information:

Reporting Mechanisms:

- For concerns about water in your area call Environmental Public Health at 1-833-476-4743
- To report a spill release or emergency that could damage the environment, call Alberta Environmental Hotline 1-800-222-6514

Where to find the water quality results:

- Swim Guide: <https://www.theswimguide.org/beach/8364>

Contact Details for EHSS information:

Contact coordinators: Abigail Brown (778) 228-4994, Shaugn Coggins (780) 246-0703.S

Appendix:

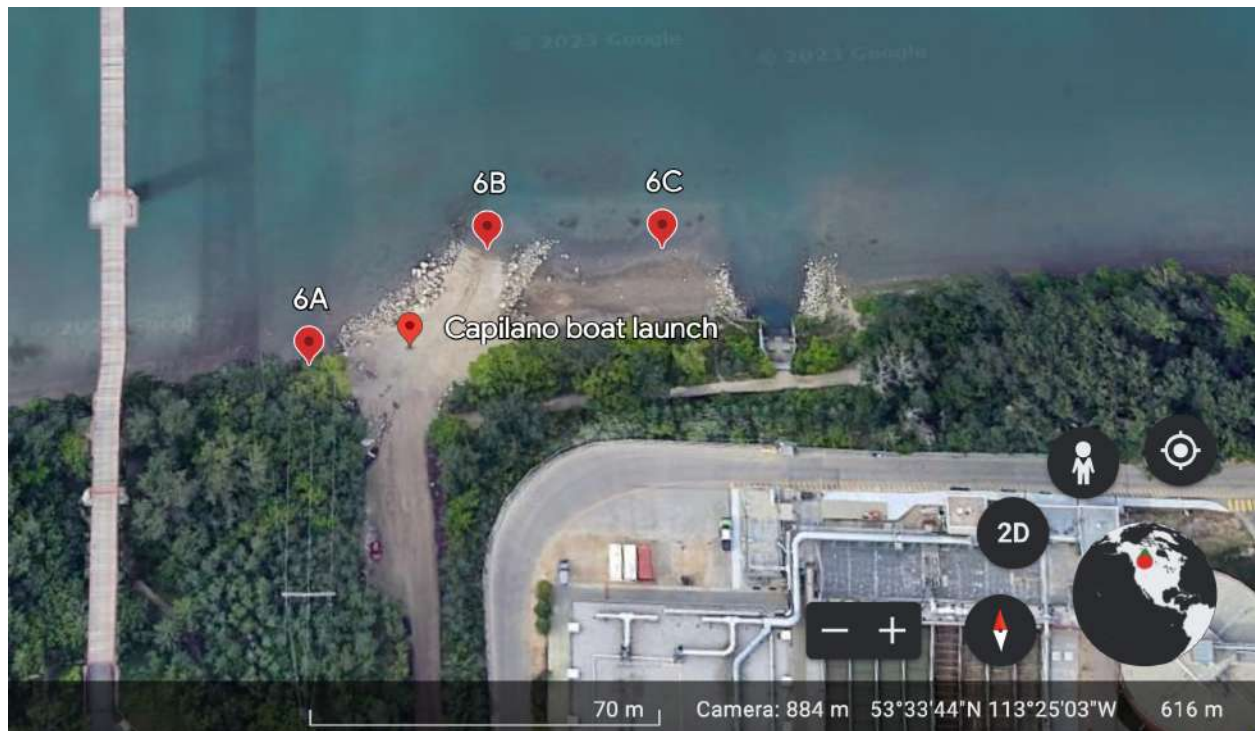


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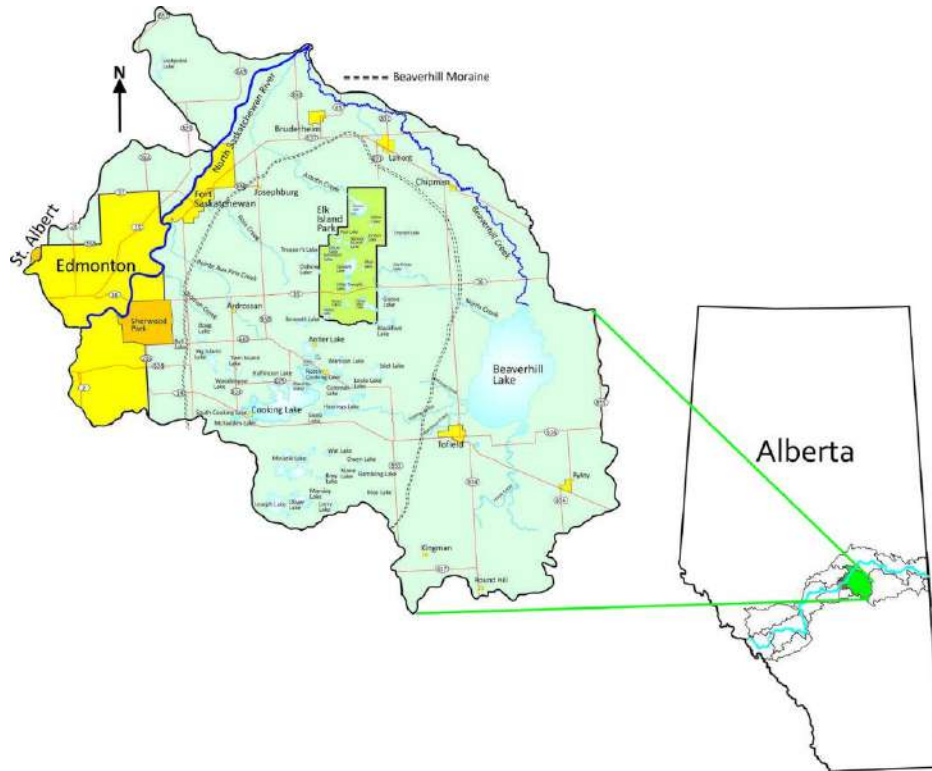


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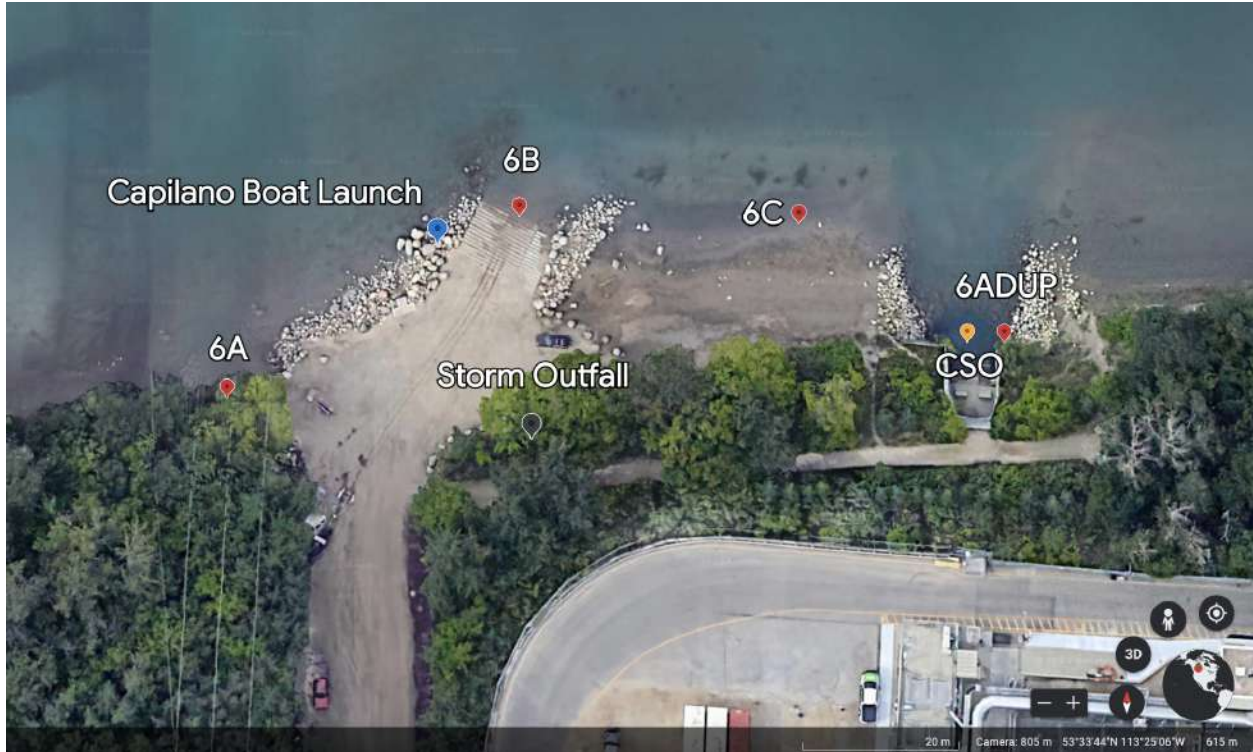


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