



City of
Kelowna

Grant from Critical Community Infrastructure Fund

Presentation to Council | October 30, 2023

Presentation Outline

- ▶ Introduction – Provincial Grant
- ▶ Background on Turtle Lake dam safety issues
- ▶ Mitigation Plan
- ▶ Budget and Grant Funding
- ▶ Questions

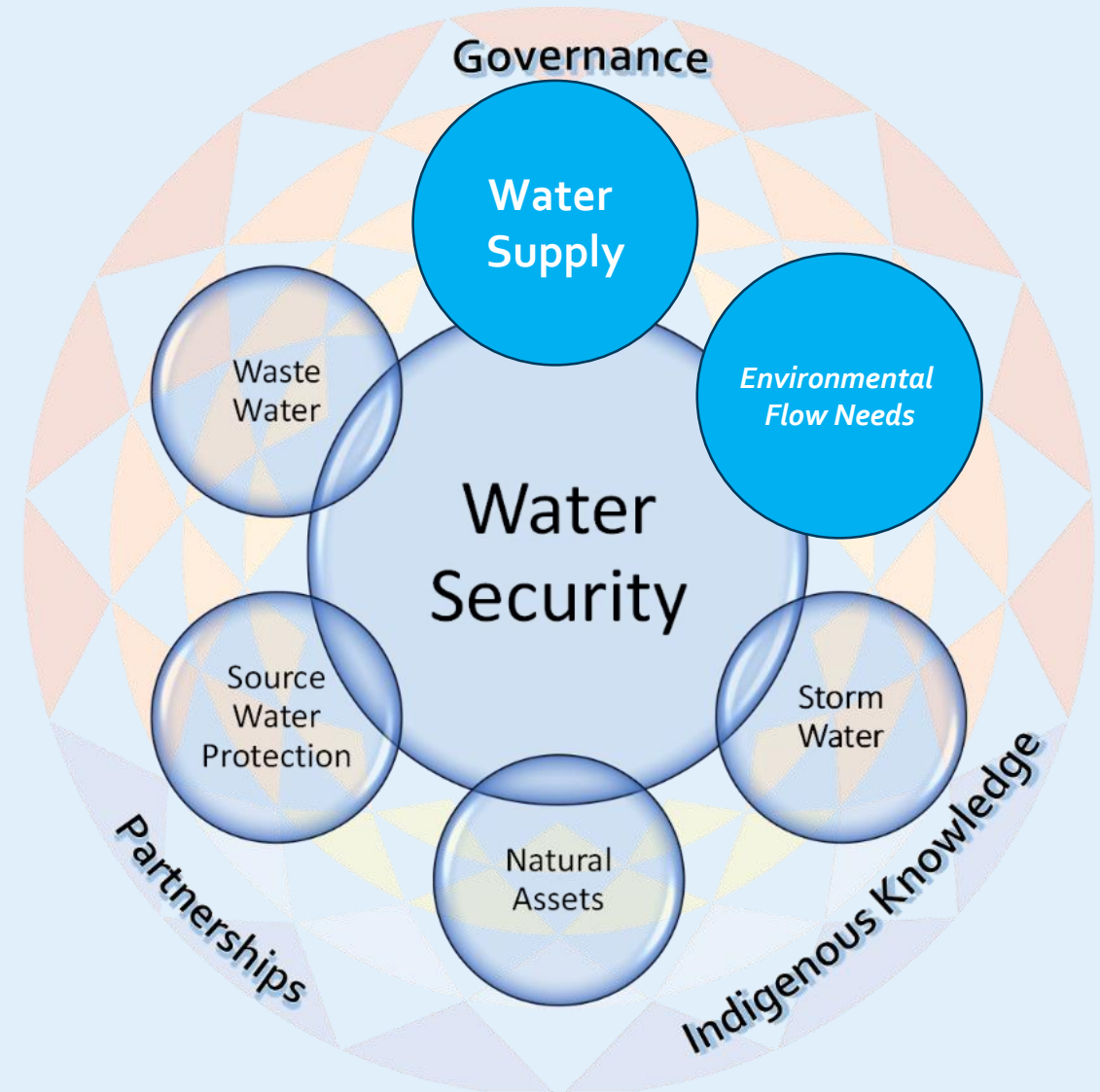
Water Security Plan

Principle 1:

All residents and water users in the City have a safe, affordable, resilient and sustainable supply of high-quality drinking water and a reliable supply of water for agriculture.

Principle 7:

Assure that the quality and quantity of water is available to support a healthy aquatic ecosystem.



The six water sectors outlined in the City's Water Security Planning Process

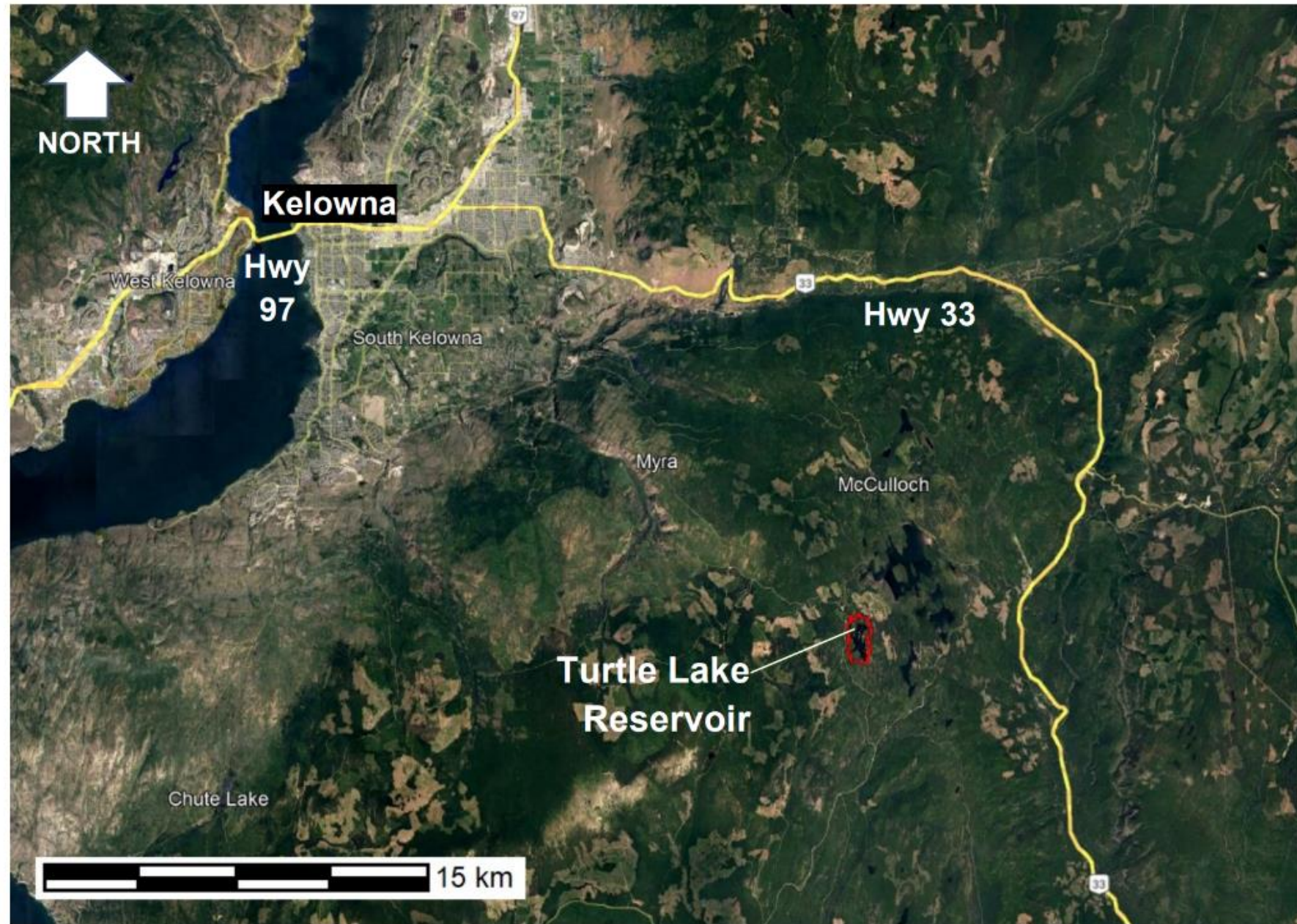
Turtle Lake

Dam Safety Issue

- ▶ Dam Safety Review (Draft) completed in Fall 2022.
- ▶ Seepage concerns/monitoring well fluctuation with both dams
- ▶ To eliminate any risks to public safety, City reduced water levels.



Location Turtle Lake



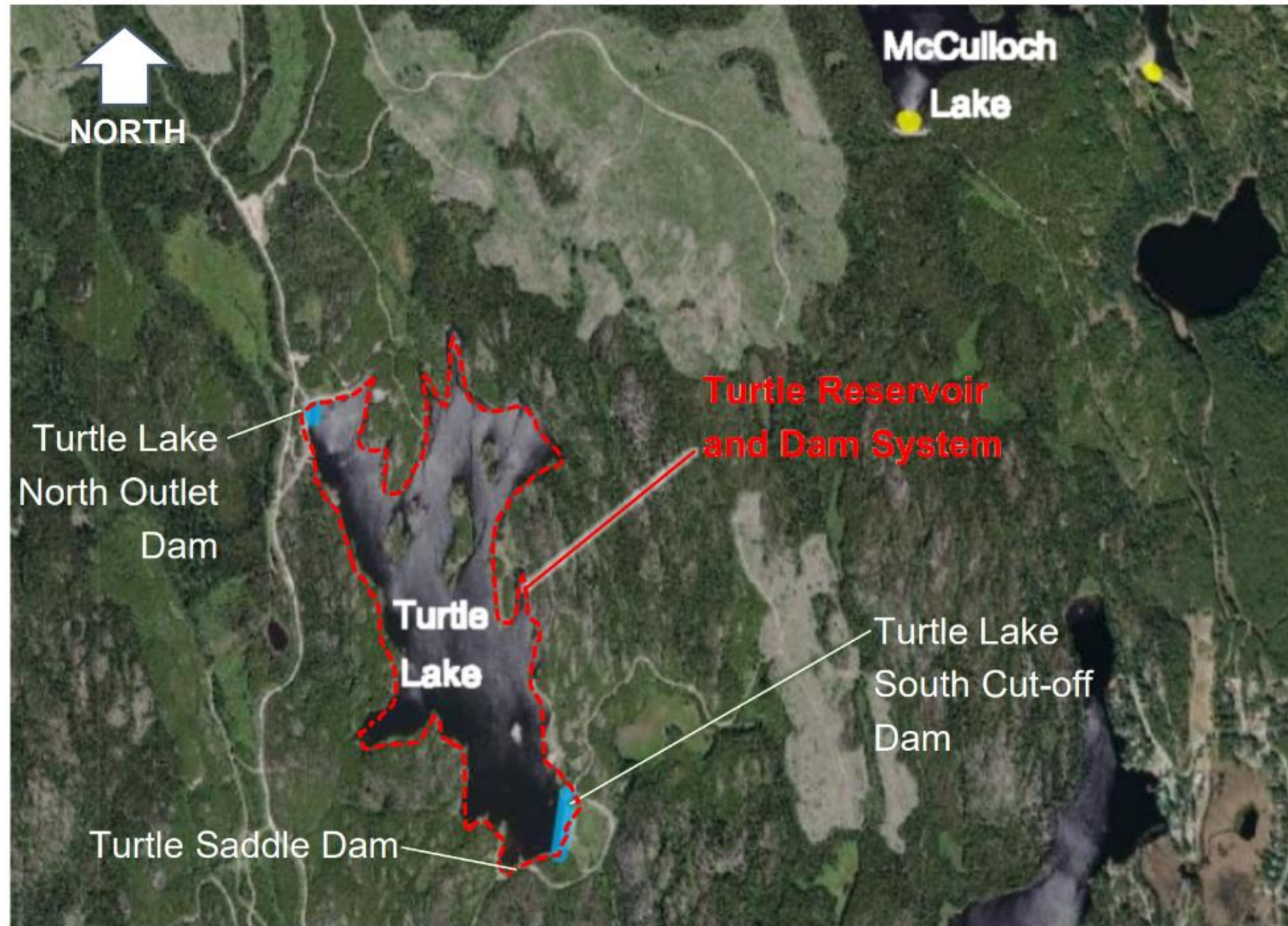
Diversions & Direction of Flow



Location

Turtle Lake

- ▶ 2 dams



Turtle Lake

North Dam



Figure 2-9: Turtle Lake North Outlet Dam – Oblique photograph of dam (October 2021)

Turtle Lake South Dam



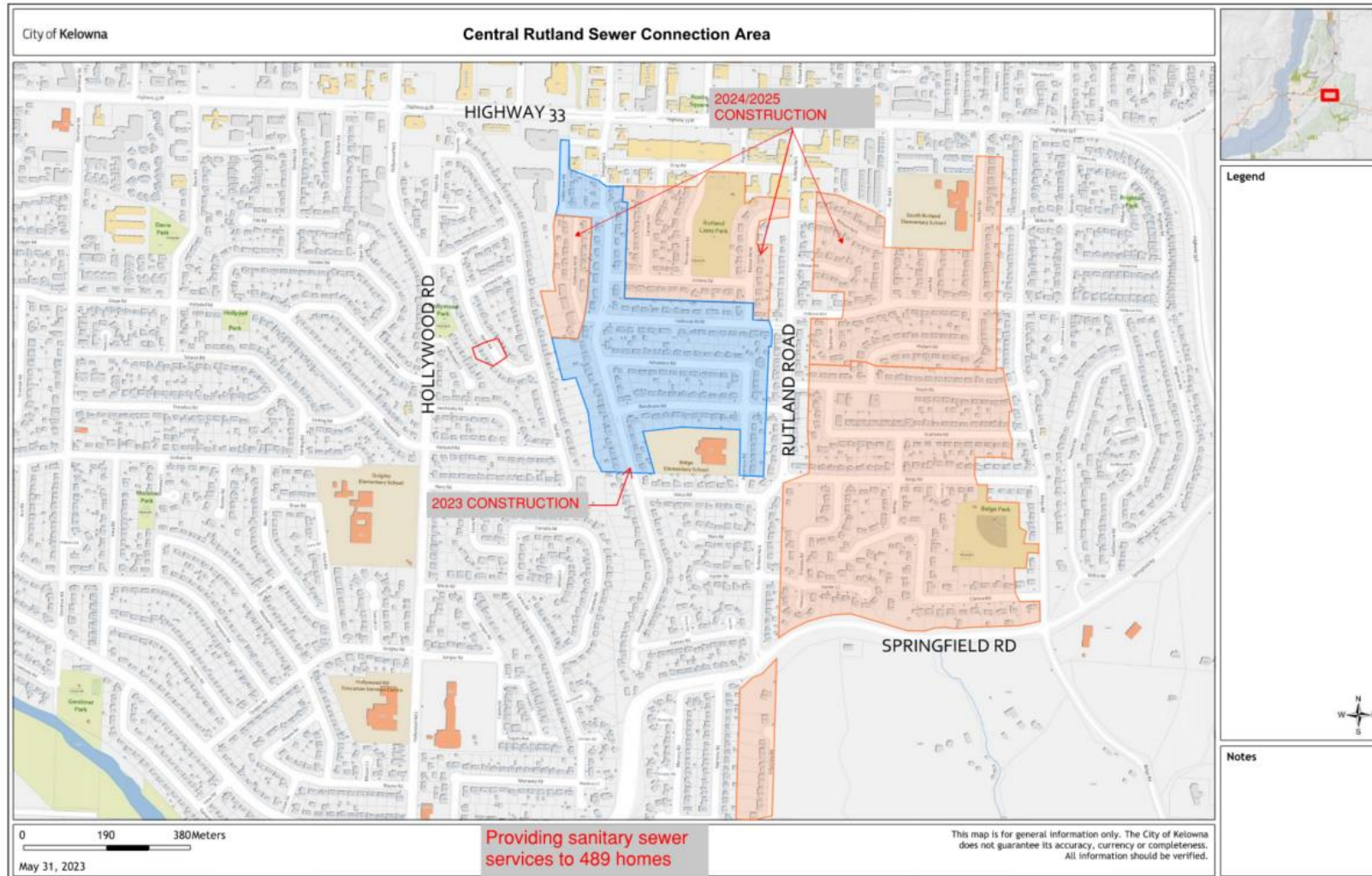
Figure 2-22: Turtle Lake South Cut-off Dam – Oblique photograph of dam (October 2021)

What needs to be done?

- ▶ Spring 2023
 - ▶ Cautious approach
 - ▶ Staff reduced water levels by 4 metres.
- ▶ Summer 2023
 - ▶ More frequent monitoring
 - ▶ Critical Community Infrastructure Fund Grant received (\$3M)
- ▶ Fall 2023
 - ▶ Consultant selection - Engineering and Geotechnical Expertise
- ▶ Winter 2023 +
 - ▶ Review of process
 - ▶ Mitigation strategy to be developed and cost estimate.



Rutland Centre Sewer Connection Project



Conclusion

- ▶ Repair/remediation is high priority need at Turtle Lake.
- ▶ Apply the Critical Community Infrastructure Funds grant to develop a remediation plan and effect the repairs on Turtle Lake.





Questions?

For more information, visit kelowna.ca.