Alberta Watercourse Crossing Inventory (ABWCI) App

Watercourse Crossing Program

Watercourse crossings can fragment fish habitats and impact water quality. Stream fords and poorly maintained structures such as culverts can change the stream channel, devegetate banks, slow down the water allowing it to warm and decrease concentrations of dissolved oxygen and transport large amounts of sediment downstream smothering fish nurseries and removing habitat for aquatic invertebrates.

The Alberta Watercourse Crossing Inventory (ABWCI) App is a tool to help document stream crossings and support the prioritization and remediation of habitat for Alberta's native fish species, including Arctic grayling, Athabasca rainbow trout, bull trout and Westslope cutthroat trout. These fish rely on clean, clear, cool and connected waters to survive and thrive.

Get the App



You can download the ABWCI app from the Google play store for Android or App store for Apple/iOS devices.

Search for "ABWCI" or click the links below: Apple/iOS Android

Why use the app?

You can make a difference and support native fish recovery! The App allows anyone to collect data using a phone or tablet without a cellular connection by uploading pictures and providing comments on:

- The type and condition of the crossing.
- Road erosion or sediment problems.

The data is helping the Government of Alberta to create a database of watercourse crossings across the province. This information will be used to manage for the cumulative effects of stream crossings and help prioritize and coordinate remediation efforts across watersheds.

Remediated crossings will:

- Help improve threatened fish populations by allowing fish access to more habitat.
- Improve water quality and fish habitat by keeping sediment out of streams and river.
- Help keep motorists and recreationalists safe.

This app is not a compliance complaint tool. Any spill, release or emergency that may cause, is causing or has caused an adverse effect to the environment must be immediately reported to Alberta Environmental Hotline by phoning 1-800-222-6514.



ABWCI Functions

To allow for reporting from several user groups, there are different levels of access on the App. To request permission changes to your account, please email AEP.WCCrossing@gov.ab.ca with your username and affiliations.

Non-government organization account (research group, industry, stewardship group)

- Required survey form on the app
- · Access to data collected by user/user group

Citizen Science Account

- Required survey form on the app
- · Access to only the individuals surveys on the dashboard

Government of Alberta General Account

- Required survey form on the app
- Full access to all user submitted data

Please note there is an "Extensive Data Collection" Group which you can request access too. Note this survey has many more fields than are required and is reserved for users that have formal training.





Before you go checklist

Safety First!

- Ensure you are equipped for a day in the great outdoors (water, food, first aid supplies, battery charger, bear spray).
- Plan where you are going, know how to get back and make sure you bring a map if required.
- Ensure you have a check-in protocol with someone in case you are delayed!
- NEVER put yourself at risk to complete a survey. If you are unsure or do not feel safe do not do it!
- Remember to Clean, Drain Dry Your Gear to prevent the spread of Whirling Disease.

Before you go

- Download the ABWCI App from the App store.
- While in cellular service, register as a new user, verify your email and request access changes if necessary.
- Login to the AbWCl app using your email and password and test a survey to ensure the app is working correctly.
- For any questions you may have, refer to the guide in the 'About Us' tab or view a tutorial at https://www.alberta.ca/watercourse-crossing-program.aspx
- Make sure you are logged into the app with your account before you head out.

Survey Tips

- If you encounter an area with multiple crossings please complete one assessment for each crossing.
- If you don't complete multiple assessments, please select the crossing that looks the worst from a fish passage or sediment issue.
- If you are unsure how to answer any of the survey fields please refer to the user manual or the blue "information" icons imbedded in the survey.

After you get back

- Make sure to submit your surveys once you are back in cellular service or connected to Wi-Fi. You will manually have to submit the surveys onto the dashboard from your device (using the play button the inspections tab).
- Log onto the dashboard http://abwci.azurewebsites.net to ensure your surveys were uploaded and view your data.

