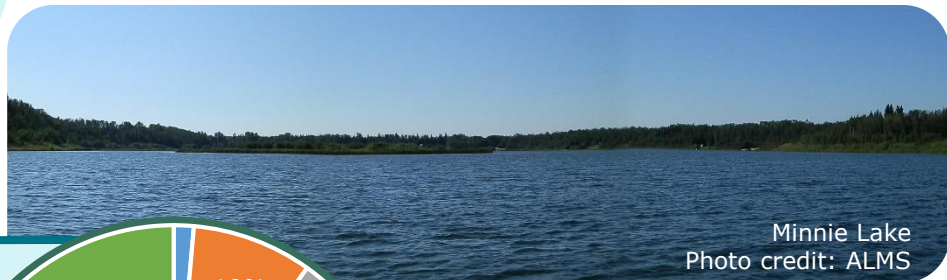


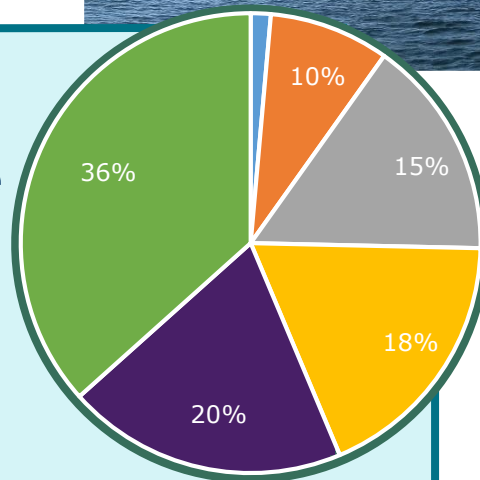
June 5th AWQA Day

The goal of AWQA Day is to increase awareness and understanding of our water resources, while also promoting stewardship and personal involvement in the protection of our waterways.

The AWQA program has been provided by the Alberta Lake Management Society since 2005, but it's not restricted to a single day. Kits can be purchased at any time, and the entire open-water season is available for testing and reporting. In 2015, a total of **1094** people took part in sampling Alberta waterways with their AWQA kits, between May and November.



What types of waterbodies were sampled?



Thank You!

AWQA could not be a success without all of its eager participants. Thanks to all of those who took an interest in the health of their local watershed.

Who participated?

AWQA participants are part of a wide variety of groups. Some of these for 2015 included:

- **School groups**
- **Individuals & families**
- **Watershed groups**
- **Government agencies**

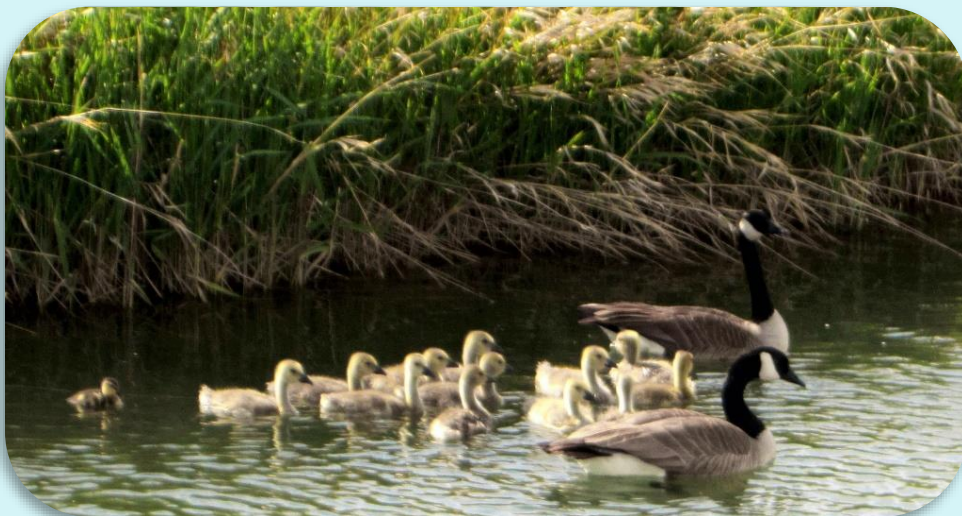
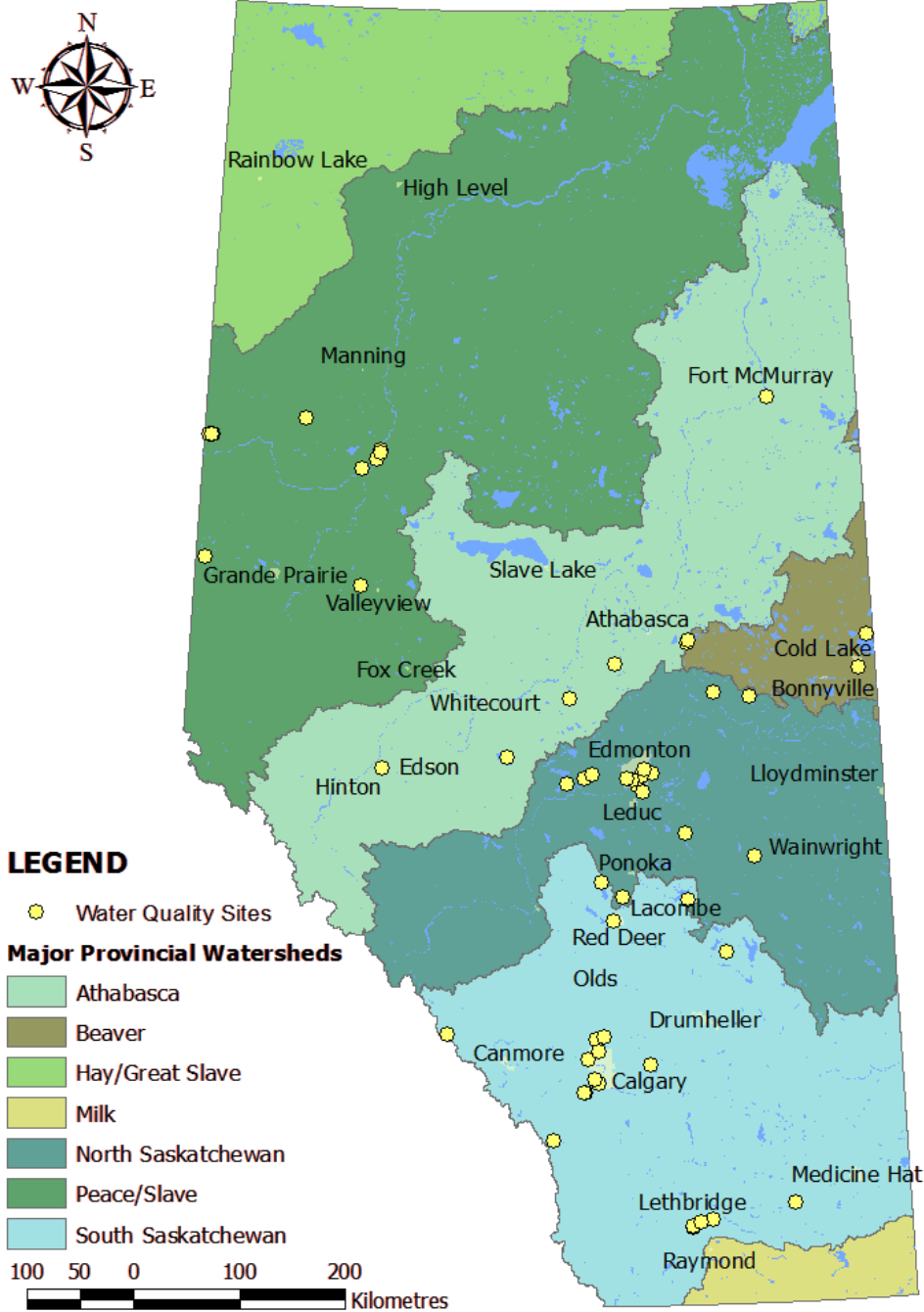


Photo credit: Saikat Kumar Basu

Where did people sample with their AWQA kits?

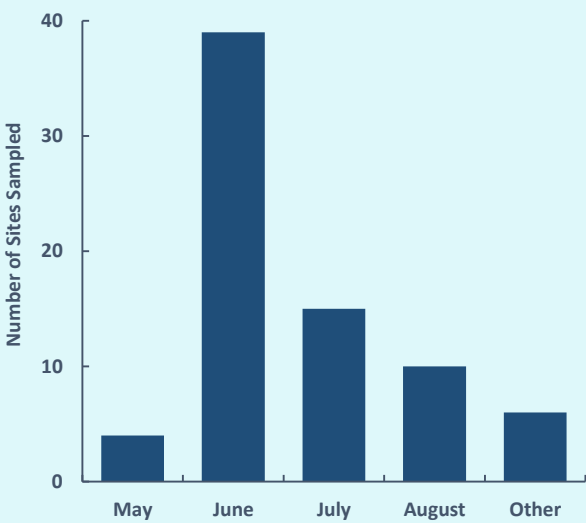


Albertans sampled at over 70 sites in five of the seven major provincial watersheds this year, and measured the following water characteristics:

- **Turbidity**
- **Dissolved Oxygen**
- **pH**
- **Water Temperature**

These four characteristics of water quality are easy to measure in the field, and are important components of healthy aquatic ecosystems.

When did people collect their samples?



Major Basin	% of total participants in 2015	% of sites/watershed in 2015
Athabasca	8%	11%
Beaver	6%	11%
North Sask	54%	25%
Peace	9%	15%
South Sask	23%	38%

What is a watershed? An area of land that catches precipitation and drains into a larger body of water such as a wetland, stream, river or lake. No matter where you are, you are in a watershed.

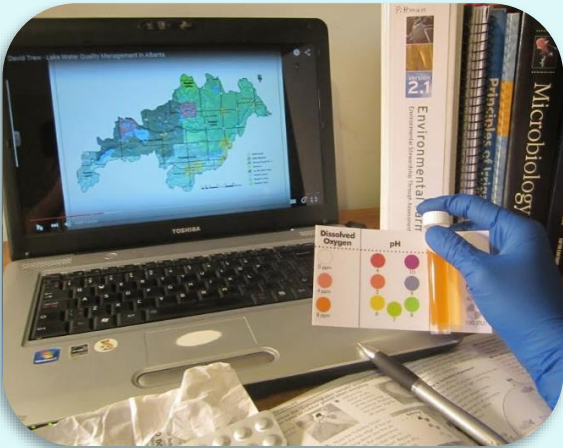


Photo credit: Saikat Kumar Basu

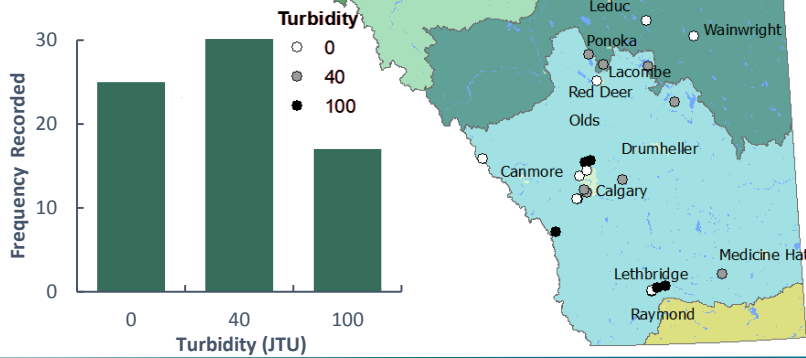
2015 AWQA Water Quality Results

The data collected for AWQA creates a snapshot of water quality, however it is not intended to provide rigorous scientific information. The value of this program comes from educational opportunities encountered during sampling, engagement of the public in understanding the benefits of a healthy watershed, and demonstrating the positive impact of collective action.

Turbidity

... measures water clarity, and is a function of the amount of particles suspended in the water.

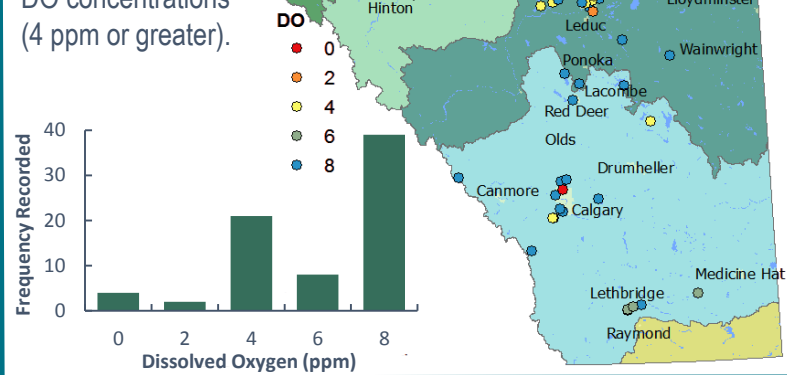
Turbidity can be caused by soil erosion, urban runoff, activities (e.g. boating), and bottom feeders that stir up sediments. **43%** of this year's samples were moderately turbid (40 Jackson Turbidity Units).



Dissolved Oxygen

... measures the amount of oxygen dissolved in water.

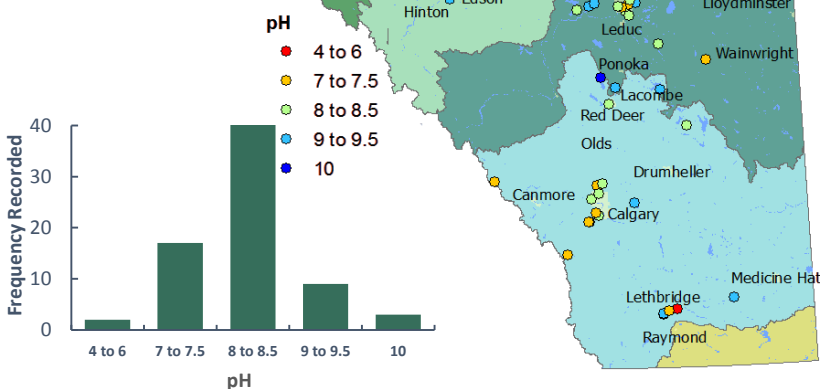
DO values greater than 5-6 ppm are generally required to support diverse and healthy aquatic life. **91%** of this year's samples had moderate to healthy DO concentrations (4 ppm or greater).



pH

... measures the relative acidity of the water. A pH of 7 is neutral, with anything less being acidic and anything greater as basic.

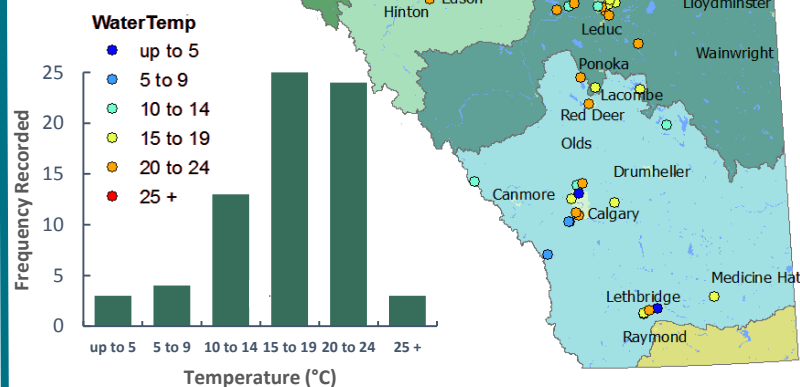
A pH level between 6.5 and 8.5 is considered ideal for sustaining a wide diversity of aquatic plants and animals. **81%** of this year's results were within this ideal range.



Water Temperature

... is a measure of how hot or cold the water is

Water temperatures under 20°C tend to be more favourable for aquatic life, as colder water can hold more oxygen. **82%** of this year's results were 20°C or under.



It was a long, hot summer for many Albertans, which explains the slight increase in water temperature from the previous year's results. Turbidity and dissolved oxygen were also slightly increased, while pH remained the same in comparison to previous reports.



Photo credit: Sandra Kathnelson

**Save
your
test kit!**

Each kit can test up to 10 samples and tablets will last over a year. Supplies from past years can be reused, and additional kits and refills can be purchased from ALMS. Data can be uploaded to the online database found at: www.alms.ca

What did Albertans have to say about their AWQA Day experience?



**I
Love
AWQA!**

This was a slough. It had very long grass, frogs, and lots of green moss on it. We found baby birds around it.

*Students from
Byemoor School*

Water level was low, submergent vegetation covered over 70% of the pond. There had only been 2 rain events that may have seen water flow into this pond in the 14 previous days.

*Roland Kirzinger
& Al Leong*

*ALMS Outreach
program*

Hot weather! A leech and dragonfly larva were found in the wetland. A family of coots and ducks were in the wetland.

**Thanks to our
sponsors, kits
were provided
free of charge
this year**

Interested in getting more involved?

If you're interested and passionate about continuing your involvement in watershed and water quality activities, please think about:

- **Joining a local watershed stewardship group**
Visit www.stewardshipdirectory.com and search for a group near you
- **Consider volunteering with lake sampling through ALMS or another non-profit group**
Find out more about becoming a LakeWatch volunteer with the Alberta Lake Management Society (www.alms.ca)
- **Check out online resources to learn more about what we can do to protect water quality**
Alberta Tomorrow is a great place to start for anyone, and also has lots of information for teachers (<http://albertatomorrow.ca>)



**TD Friends of the
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