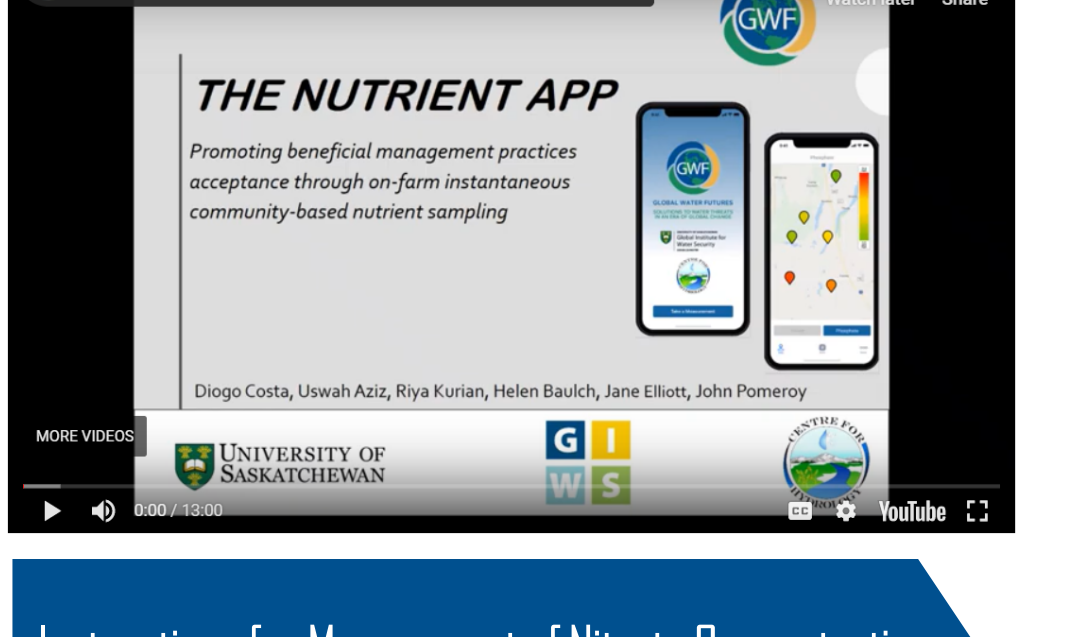


Webpage: <https://gwf.usask.ca/projects-facilities/nutrient-app.php>

Click on the link below for a demonstration video on how to use the app

www.youtube.com/watch?v=swgPnKB5lvQ



Instructions for Measurment of Nitrate Concentrations

What you will need:

Nutrient App Installed on Phone

Hach Nitrate Test Strips

www.hach.com/nitrate-and-nitrite-test-strips/product?id=7640211606

Step 1

First, unpeel the part of the sticker with the reference colour chart from the bottle of the nitrate test strip starting from the top right corner. Place the sticker on a flat surface (e.g. notebook).

Step 2

Dip the test tip of the strip directly into the water source (or into a water sample) for 1sec. Then wait 30 seconds to allow the colour to develop.

Step 3

Position the test strip on the white, right hand side of the reference colour chart. Launch the Nutrient App and select 'Nitrate' to take a measurement. Take a picture of the test strip on the reference colour chart. Make sure your photo is a close up photo as shown below. Now crop the photo for better accuracy and click 'Next'.
Make sure there are no shadows on the reference colour chart or the test strip. Make sure that the image is not pixelated.

Example of a good image

Example of a bad image(with shades and stripes)

Step 4

Match each of the boxes in the colour chart to the boxes on the right hand side. For example, start by tapping the colour corresponding to the 50mg/l concentration on the reference chart and then tap the corresponding box on the right hand side. Repeat the procedure for the remaining reference concentrations.
Make sure the colours displayed on the right match the pixels selected in the image

Tap on 50mg/l in the reference chart first

Then, tap on 50mg/l on right hand side

Step 5

After tapping all the reference colour boxes on the image, tap on the upper measuring tip of the test strip. Click 'Next'.

Tap on test strip and click next

Step 6

Follow the steps prompted in the App and provide the required information.

Step 7

View the estimated concentration for nitrate. Save the results and upload them to gain further insight on your collected data through advanced graphing options on the Nutrient App website.
Thank you for supporting science.

Instructions for Measurment of Phosphate Concentrations

What you will need:

Nutrient App Installed on Phone

API PhosphateTest Kit

<https://www.apifishcare.com/product.php?id=589#XYBWpikKgZw>

Step 1

Fill the glass vial with 5ml of water to be analysed. Add 6 drops from solution #1, cap the vial and shake vigorously for 5 seconds. Now, add 6 drops of solution #2, cap the vial and shake the test tube for 5 seconds. Wait for 3 minutes for colour to develop.
Make sure the vial is clean and dry. Water should be upto the 5ml mark.

Step 2

Place the reference card facing up on a flat surface. Place the vial standing up on the right hand side of the card. Launch the Nutrient App and select 'Phosphate' to take a measurement. Take an image as shown in the photo on the left. Make sure your photo is a close up photo. Now crop the photo for better accuracy and click 'Next'.
Make sure there are no shadows on the reference colour chart or the test strip. Make sure to identify the two cone areas formed in the vial.

Right Image

Wrong Image with shades and stripes

Step 3

Match each of the boxes in the reference card to the boxes on the right hand side. For example, start by tapping the colour corresponding to the 10mg/l concentration on the reference card and then tap the corresponding box on the right hand side. Repeat the procedure for the remaining reference concentrations.
Make sure the colours selected match the reference colours in the card.

Tap on 10mg/l on reference card first

Then, tap on 10mg/l on the right hand side

Step 4

After tapping all the boxes on the right hand side to the reference card, tap the lightest point at the bottom of the vial(inside the inner cone). Click 'Next'.

Tap on the lightest point inside the inner cone

Step 5

Follow the steps prompted in the App and provide the required information.

Step 6

View the estimated concentration for phosphate. Save the results and upload them to gain further insight on your collected data through advanced graphing options on the Nutrient App website
Thank you for supporting science.