

INFLOW WATER TESTS: What is running from land into the sea

Coastwatch survey question B2 is to capture what inflows are in your survey unit and some quality information at time of visit. This note covers Nitrogen testing and a chlorine sniff and sample test.

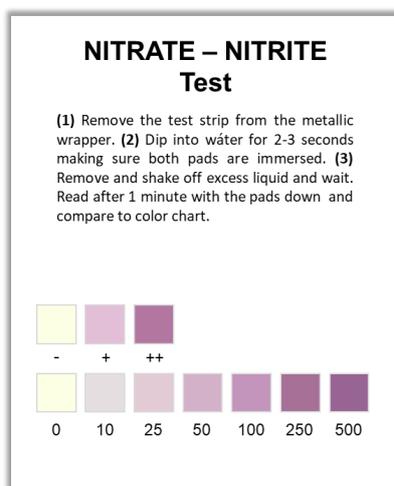
The Nitrate test kits come in 2 types of packing – as individually wrapped strips you use in the field - and as container with 100 test sticks which we are supplying to regional coordinators to check a bunch of samples collected by surveyors at one time. Please use materials as intended and ensure you report back. Your test results and photos are being prioritised for analyses and discussion at our first results event Dec. 22 to contribute to new pollution reduction and stream protection/restoration initiatives.

In field individual strip method: Use on fresh water inflow in your su. (Saltwater interferes with result) Make sure you keep strip(s) dry, closed and cool 4-10 °C until use.



Coastwatch

1. Open the metallic wrapper at the fine line and pull the test strip out like a lolly pop, so you see the reactive pads area at the tip. Don't touch these.
2. **Briefly** (1 sec) dip the pads into the inflow - stream, water from a pipe or seepage you are testing. Shake off any excess liquid and wait.
3. After 1 minute (in cold weather up to 2 min), compare the colour of the pads with the colours on the colour chart and decide which is the best match (see picture).



4. Read the nitrate concentration and write the result into the Coastwatch survey form B2. Make sure you read and photograph within 2-3 minutes as the colour will start to bleed.
5. Take a photo as this is important evidence and reminder on your phone.
6. Alu wrappers for recycling, test sticks are waste.

Smell of chlorine from inflow? Fill the bottle for extra test.

Group or later test method:

Bring one or 2 small water bottles with you labelled 1 and 2 and glove. Part fill bottle with inflow water. Label: su, if stream then name, date and time, your name. Test for Nitrates once u get to the agreed point where everyone is testing together. Store in cool place up to a week to test later. Group testing allows group agreement if unsure of result.

EXTRA 2022: If you picked up a Chlorine smell at an inflow we would like to test water for Cl and N. Please fill the water bottle to the top. Don't open it again until ready to test as chlorine escapes.

What the results mean: If neither pad changes colour, it means Nitrite and Nitrate are below detection and on the nutrient side its clean water! A slight colour change which matches the 10mg/l means there are at least 10mg/l NO₃ in the water, but less than 25 mg/l. If it's a deep colour matching the 50mg/l it means the sample contains at least 50mg/l NO₃ and is therefore in breach of limit values set in EU and national law (Nitrates Directive and as it happens also the Drinking water Directive) In the very rare event of a positive Nitrite result - or sadly not so rare high Nitrate (50mg/l or more) please share both test result photo and an inflow picture. Upload with results or email it to survey@coastwatch.org. If email make sure you include the survey area. Any comments, any source info if Nitrates are high and notes on rainfall just before you surveyed are valuable too. Email or add in B3 survey form. Look up <https://www.catchments.ie> for official status of streams. Any query email us or call 086 8111 684 in urgent cases.

We aspire to healthy streams and clean sea water. To help prevent fertiliser, silt, sewage, chlorine and herbicides getting into our waters your citizen science work and local knowledge really matter.

