

## Timing of water collection and filtration

Please read before you start

eDNA is usually collected from water samples on the site where the water is collected. This insures that any eDNA present in the sample does not break down prior to filtration and helps to prevent cross contamination between sites.

However, if on-site processing is not possible, water samples can be collected, put on ice, and stored in the refrigerator (NOT the freezer) and filtered within 18 – 24 hours after collection. The half life of fish DNA (the average time it takes for half of the DNA present in a sample to degrade) at room temperature is only 4 - 6 hours but it lasts 18 - 24 hours if kept cold.

If you choose to process your samples in the classroom, remember that cross contamination between separate sites must be avoided. qPCR can detect DNA from a single cell, so each site should be processed on a different table or desk using only the materials provided in the white bag used for that site. Nothing should be shared between treatments of water from different sites – not even something as small and simple as a pair of forceps.

You have enough materials in a single site bag to process 6 filters, **3 samples collected at the site and 3 control water samples NOT from the site** (distilled water or tap water that has been kept separate from the water collected from your test sites). Process your control water just before you process your sample.