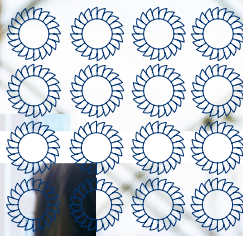
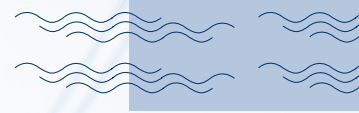




# Protecting Private Water Supplies

Construction works and site investigation have the potential to impact on private water supplies (PWS). This can be through either disturbing drainage patterns (horizontally or vertically) or impacting on the quality of the water source. There is also the potential to damage or impede the infrastructure of PWS, with pipes and tanks possibly omitted from service plans.





# In order to protect PWS, we undertake the following processes:

## Pre-construction

All PWS located within 250m of the proposed works (where excavations are likely to be greater than 1 metre deep) are identified by the project team during the design and environmental assessment of new infrastructure. This is stipulated in SEPA's Land Use Planning System Guidance Note 31 (LUPS-GU31).

This would be done through a search of Local Authority records (for registered PWS) together with personal contact through mail questionnaires or as part of landowner/local resident conversations.

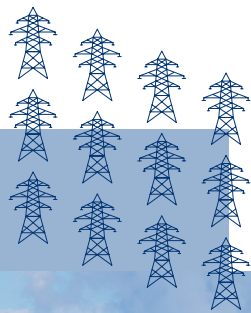
**A risk assessment is then undertaken to identify those PWS that have the potential to be affected by the works, which includes consideration of:**

- The type and depth of water supply source (e.g. borehole, spring or surface water abstraction)
- The catchment area
- The nature of the proposed works (e.g. depth and extent of any excavations, potential for pollution incidents/spillage, etc.)
- Proximity of works to the PWS and related topography of area (is the PWS source uphill of the works)
- The location and route of PWS infrastructure which may be crossed by the infrastructure or new access tracks.

Should the results of this assessment indicate a risk to the PWS source or infrastructure, then mitigation shall be developed for inclusion in a site specific PWS Protection Plan that is discussed and agreed with the PWS owner. A report on potential PWS impacts and mitigation would also be included in the environmental assessments which support the consent application.

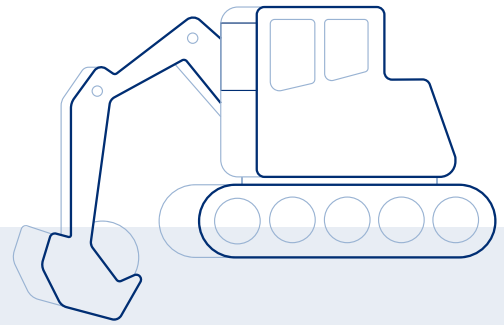
In a small number of instances, where the works cannot be successfully micro-sited away from a PWS, we may be required to undertake a water quality testing programme prior to, during and after construction. This would be agreed with the PWS owner and SEPA.

We may also consider the need to deliver an alternative water supply (on a temporary or permanent basis) in the event of an unforeseen problem with the existing supply. This may include ensuring provisions of bottled water, IBCs of potable water, fresh-water bowers, replacement lengths of suitable piping and fittings to match existing infrastructure area available on site.





# Construction



## During construction, the contractor will be required to comply with the PWS protection plan, and where necessary:

- Undertake and record an initial visual inspection of the condition of the PWS infrastructure
- Fence off the PWS intake (to avoid accidental damage and to deter animals) and identify relevant buffer distances
- Install silt mitigation to prevent runoff from works areas entering the PWS
- Avoid undertaking works within PWS catchments during wet weather or when wet weather is forecast
- Use lower impact access methods (including the use of track panels) where access to works are within the PWS catchment
- Survey and peg out the route of the PWS pipework and other tanks
- Ensure all site operatives working in the area are made aware of the location of the PWS and catchment area, and mitigation measures required through toolbox talks or similar
- Signage may be erected to remind workers when works take place in these areas
- Ensure that there are adequate pollution control and emergency response measures in place to deal with any accidents that could affect a water supply (e.g. spill response or sediment control)
- Implement regular, recorded visual checks on any pipework (for visible signs of cracking or other damage from the works)
- Provision of an alternative supply (temporary / permanent), e.g. taking a surface water abstraction to a point above the works to prevent potential downstream contamination from works impacting upon the supply. (Ensure appropriate landowner agreement and CAR consent is in place.)

## Unidentified Water Supplies

It is possible that previously unidentified PWS may be found during works. If this happens, the contractor will require to stop work in that location and seek specialist advice from the Environmental Clerk of Works.

A risk assessment will then be undertaken and protection measures implemented as required.

Necessary protection measures will need to be identified in consultation with the PWS owner, landowner, specialists and relevant authorities and implemented before work should resume in that location.

