

Underground water impact report

An Underground Water Impact Report (UWIR) is prepared to model, make predictions and manage the impacts of extraction of underground water by petroleum tenure holders (including coal seam gas tenure holders).

An UWIR establishes responsibilities for petroleum tenure holders and ensures measures and programs are in place to respond to impacts on underground water.

The key elements of an UWIR are:

- a comprehensive water monitoring program (water monitoring strategy)
- projections of potential future water level impacts (including the immediately affected area which triggers the make good obligations)
- a spring impact management strategy

There are additional responsibilities for managing underground water impacts beyond an UWIR. These include baseline assessment plans and a final report.

Who has to prepare an underground water impact report?

A petroleum tenure holder is required to prepare an UWIR.

If the chief executive of the Department of Environment and Resource Management (DERM) has declared a cumulative management area (CMA), that is an area that is likely to experience an impact on underground water due to the exercise of underground water rights by two or more petroleum tenure holders, the Queensland Water Commission (QWC) takes over the responsibility for preparing an UWIR for the CMA.

This ensures that in areas where impacts may overlap, the QWC as the independent body can prepare a report to oversee and propose management measures for the cumulative impacts as a whole.

When must an underground water impact report be submitted?

An UWIR must be submitted 14 months after;

- the day production testing or production started in the area. This is the responsibility of the petroleum tenure holder.
- the day a renewal application for a tenure is granted. This is the responsibility of the petroleum tenure holder.
- the day a CMA is declared. This is the responsibility of the QWC.

A revised UWIR is required for the CMA or petroleum tenure every three years from the date the initial UWIR was approved.

What must be included in an underground water impact report?

An UWIR must assess the likely impacts of water extraction by a tenure holder and outline processes to monitor and manage these impacts.

The UWIR must:

- detail the amount of water to be taken by the tenure holder
- identify aquifers that are likely to be affected by the extraction of underground water
- analyse the movement of water between aquifers
- analyse any trends in water level change for the aquifer
- provide a map of any 'immediately affected area' and any 'long term affected area' where water levels are predicted to decline because of the tenure holder extracting water
- provide information on all water bores that are located in the predicted immediately affected area including:
 - the number of water bores
 - the location of water bores
 - the authorised use or purpose of each water bore.

The UWIR must also include:

- a proposed water monitoring strategy for monitoring the quality and quantity of water

affected by underground water rights and a timetable for implementing the strategy

- a spring impact management strategy which assesses connectivity between springs and aquifers, predicts impacts on the spring and proposes options to mitigate any impacts:

For a CMA, the UWIR must include:

- a proposed responsible tenure holder for each report obligation that is mentioned in the report
- the proposed responsible tenure holder who must comply with the make good obligations for each water bore.

Water monitoring strategy

A water monitoring strategy includes a strategy for monitoring the extent of the impact on underground water resulting from petroleum tenure holders exercising their water rights. This must include a strategy for monitoring:

- the quantity of water taken or produced
- changes in the water level of aquifers
- changes in the water quality in aquifers resulting from water level decline.

The strategy must also include:

- a program for reporting to the QWC about the implementation of the strategy
- a program for undertaking a baseline assessment for each bore that is outside the petroleum tenure area and in a long term affected area.

Spring impact management strategy

The spring impact management strategy ensures that petroleum tenure holders manage the predicted impacts on underground water resulting from the exercise of water rights.

The strategy must:

- identify potentially affected springs
- assess the connectivity between the spring and the aquifer over which the spring is located
- assess the predicted risk to and impact on the ecosystem and cultural and spiritual values of the spring
- include options to prevent or mitigate any such impact and a timetable for implementing the strategy
- include a program for reporting to the QWC about the implementation of the strategy.

Consultation on underground water impact reports

UWIRs will be released for public consultation prior to being given to DERM's chief executive for approval.

A notice about a proposed UWIR will be published in local newspapers and on the entity's website (if established) that prepared the UWIR.

The notice will outline where copies of the report can be obtained and how to go about making a submission.

Each bore owner that the proposed report relates to will be given notice of the release of the report. A bore owner, or any other person, may request a full copy of the proposed report from the entity and make a submission.

The recipient of the submissions must prepare a summary report for the chief executive of DERM. This summary report will be part of the decision making process for the UWIR.

Approving an underground water impact report

If the UWIR is approved by the chief executive of DERM, the entity that prepared the report must place a notice in a newspaper and on their website.

The entity must also give a copy of the report to each owner of a water bore within the area to which the report relates.

Each approved UWIR will also be published on the DERM website.

Compliance with an underground water impact report

Petroleum tenure holders are required to comply with the approved UWIR.

An offence applies for not complying with the report. The maximum penalty for an individual is \$166,500 and for a corporation is \$832,500.

Who is exempt from preparing an underground water impact report?

A petroleum tenure holder is not obligated to submit an underground water impact report if they provide a notice of closure of tenure to the chief executive of DERM before the UWIR is due. In this case a Final Report will be required to be submitted instead.

For general enquiries contact the Queensland Government call centre 13 74 68 (13 QGOV) or visit <www.derm.qld.gov.au>