



Australian Government



BIOREGIONAL  
ASSESSMENTS

PROVIDING SCIENTIFIC WATER RESOURCE  
INFORMATION ASSOCIATED WITH COAL  
SEAM GAS AND LARGE COAL MINES

# Coal resource development and water resources in the Gwydir subregion

*The Bioregional Assessment Program has improved our understanding of the potential impacts of coal seam gas and coal mining developments on water resources and water-dependent assets such as wetlands and groundwater bores.*

## At a glance

There is limited potential for coal resource development in the Gwydir subregion. As a result, coal mining and coal seam gas extraction is unlikely to affect water resources and water-dependent assets in the subregion.

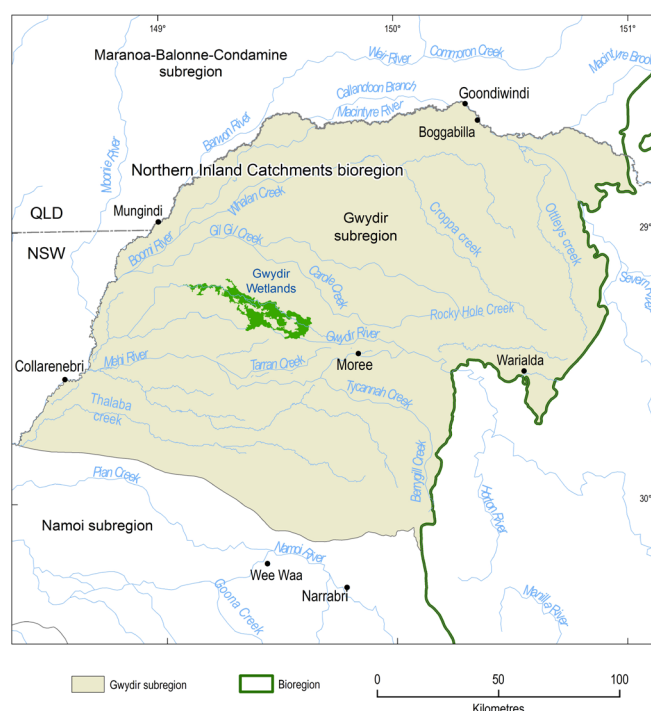
## Where is the Gwydir subregion?

The Gwydir subregion is in the Murray–Darling Basin in northern New South Wales. It is one of the four subregions within the Northern Inland Catchments bioregion.



Mallowa Creek, Gwydir subregion, NSW, 2013

Credit: Department of the Environment and Energy



Map of the Gwydir subregion

## Where are the coal and coal seam gas resources?

There has been little coal exploration in the subregion. Coal seams identified in the rocks of the Bowen, Gunnedah and Surat geological basins underlying the Gwydir subregion are at depths that are uneconomic to mine. Coal seam gas extraction is also uneconomic. This is because the amount of methane in the coal seams is generally too low, and where it is high, there are also high levels of carbon dioxide.

There are no coal mines operating in the subregion. As of October 2014, when the assessment of resources was completed, there were no coal mines or coal seam gas extraction projects planned or proposed in the Gwydir subregion.

## How was the assessment done?

Scientists used the best available data to describe coal and coal seam gas resources, surface water and groundwater. Local experts, including councils, natural resource management groups and community groups, provided information on water-dependent assets, such as wetlands and bores that rely on surface water or groundwater. A register of these assets is available for use in future assessments.

## How will information from the assessment be used?

The data and tools from this assessment are available to support natural resource management in the Gwydir subregion. They can be used in future assessments and environmental studies.

Results from this assessment are provided in four reports, a water-dependent asset register and a data register at [www.bioregionalassessments.gov.au/assessments/gwydir-subregion](http://www.bioregionalassessments.gov.au/assessments/gwydir-subregion). The website provides open access to the methods and datasets used to develop the assessment. Data from a range of disciplines are provided under a Creative Commons Attribution license where possible on the Australian Government's public data information service [www.data.gov.au](http://www.data.gov.au).

Visit [www.bioregionalassessments.gov.au](http://www.bioregionalassessments.gov.au) to find out more about the Bioregional Assessment Program.

