



Department of Water and  
Environmental Regulation

# Installing new monitoring bores to investigate groundwater-dependent ecosystems at La Grange

July – October 2024



Mālipūrti, Nita Downs Station (photo by Carey Johnston)

Groundwater is critical to culturally and ecologically significant sites in the La Grange groundwater area. To study how groundwater supports these sites, the Department of Water and Environmental Regulation (the department) is installing monitoring bores in the area, about 100 to 150 km south-west of Broome. The bores will be installed between July and October 2024.

The research started in 2020 in collaboration with Yawuru and Karajarri Traditional Owners and is funded by the State Groundwater Investigation Program. The project area extends 250 km south-west along the coast between Roebuck Plains and Eighty Mile Beach. The area contains numerous springs and wetland ecosystems with significant cultural and ecological value that may be supported by groundwater. A key component of this project is the installation of monitoring bores.

## Why install monitoring bores?

As groundwater use and demand has increased, so has the need to better understand the ecological and cultural values supported by the Broome Sandstone aquifer. The collection of continuous core samples during drilling will allow us to describe and classify the physical properties of subsurface soil and rock, and describe fine scale features.



Monitoring bores enable regular collection of groundwater level data and water samples. Water quality results will be compared to water samples taken from other locations throughout the area. This allows us to better understand how these ecosystems function, how changes in climate and groundwater use may affect the system, and to ensure groundwater management is appropriate.

### Monitoring bore installation

We will drill and construct up to 22 monitoring bores at 11 sites near groundwater-dependent ecosystems on Yawuru and Karajarri Country. The new bores will be within the localities of Roebuck, La Grange, Eighty Mile Beach and Ginerah, across pastoral leases (Roebuck Plains, Frasier Downs, Nita Downs and Anna Plains).

A small sonic drilling rig mounted on rubber tracks will be used to collect continuous sediment samples. We will install a shallow bore (less than 10 m below ground level) and an intermediate depth bore (maximum 70 m below ground level) at each site.

Department staff will be on site with drilling contractors for the duration of the drilling program.

Right: Sonic drill rig planned to be used  
Below: Soil samples collected from sonic drilling



## More information

To find out more about this project, visit our website:

[wa.gov.au/la-grange-investigation](http://wa.gov.au/la-grange-investigation)

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