

Darwin Region Water Supply Program

Community Reference Group Communique



ISSUE 6 | December 2024

The sixth meeting of the Darwin Region Water Supply Program (the Program) Community Reference Group (CRG) was held on 4 December 2024 at Energy House in Darwin City.

MANTON DAM RETURN TO SERVICE

Trevor Durling from the Power and Water Corporation provided an update on the immense progress made on the Manton Dam Return to Service Project. The contractor, 'Exact Contracting' continues to ramp things up ahead of the end of the year, with over 50,000 hours completed towards the project.

By December 2024, approximately 45% of the total pipework has been installed with all pipework scheduled for delivery by the end of December. This 22km of pipeline will support water transportation from Manton Dam to the Strauss Water Treatment Plant. The pipeline is expected to be completed by late 2025.

In support of necessary upgrades to the inlet tower, Exact Contracting collaborated with Polaris Marine to assemble and deploy a work barge capable of supporting a 40-tonne capacity crane, and a work platform around the inlet tower. This work barge is expected to be removed by mid-December. The upgrade to the inlet tower replaces obsolete equipment with new automated equipment for both ease of operation and safety purposes. Security fencing upgrades and 24/7 monitoring equipment will also be installed.

The Recreation Management Plan, Catchment Management Plan, and the Heritage Management Plan are all under development for the Manton Dam project.



ADELAIDE RIVER OFF-STREAM WATER STORAGE

Environment Update

Natalie Fries from GHD, AROWS environment consultant, provided an update on the progress of the Environmental Referral.

The AROWS project submitted an Proponent Initiated Environmental Referral to the Northern Territory Environment Protection Authority (NT EPA). The Environmental Referral is the first step of a comprehensive Environmental Impact Statement (EIS) process. Progressing the project through the EIS process will ensure that the environmental impact of AROWS is considered at the highest level of assessment by undertaking the scientific, stakeholder engagement and regulatory processes required to deliver the project. Territorians are invited to provide comment via ntepa.nt.gov.au/consultation. The consultation period will open from January 2025.

The Environmental Referral will also be submitted to the Australian Government for assessment under the Environment Protection and Biodiversity Conservation Act 1999. It is expected that the public comment period for this process will occur in 2025 via eap-cp.powerappsportals.com/open-for-comments

Following the Environmental Referral, the NT Government will spend the next 2-3 years working with scientists, the local community, Aboriginal people, and other experts to better understand any information gaps and how to mitigate impacts. Feedback on the Referral will set the Terms of Reference to guide this work.

Land

- Cultural values impact assessment
- Geomorphology assessment
- Sediment transport modelling
- Contaminated land assessment
- Geotechnical investigations
- Baseline surveys (including habitat condition and quality assessment) and vegetation mapping
- Significant impact assessment of NT and Commonwealth protected matters
- Offsets strategy (if required)

Air

- Emissions inventory update in line with latest engineering design and operational functions.

Studies and assessments we plan to undertake to understand the gaps

Water

- Census of registered groundwater bores
- Additional baseline monitoring (e.g., surface water levels and flows, groundwater levels, bathymetric surveys)
- Hydrologic and hydraulic modelling
- Hydrogeological modelling
- Sediment transport modelling
- Water quality modelling
- Bathymetry and channel geometry targeted surveys
- Baseline aquatic ecology surveys
- Significant impact assessment of NT and Commonwealth protected matters

People

- Stakeholder consultation and engagement
- Social impact assessment study
- Economic impact assessment
- Cultural values impact assessment study
- Heritage assessment surveys
- Dam break/ failure assessment
- Traffic impact study
- Biting insects assessment
- Crocodile population increase assessment

Concept Design Update

Jocelyn Ellero from SMEC Australia, who are delivering the AROWS concept design, provided an update on their work since the last CRG meeting. After a robust multi criteria assessment process, a preferred layout for the infrastructure components for AROWS is now in place. This layout fed into the Environmental Referral work undertaken by GHD. Options assessments were undertaken for the river intake infrastructure, the outlet infrastructure, and the dam type. In total, 11 dam types were considered in a long list with the preferred option outcome as an asphaltic core rockfill dam. This dam type was chosen due to its compatibility with the narrow abutments at the dam sites, the groundwater flow favours a non-erodible core, and that construction is less likely to be disrupted by the Top End's heat, rain and wind. This would be the first of this dam type in Australia.

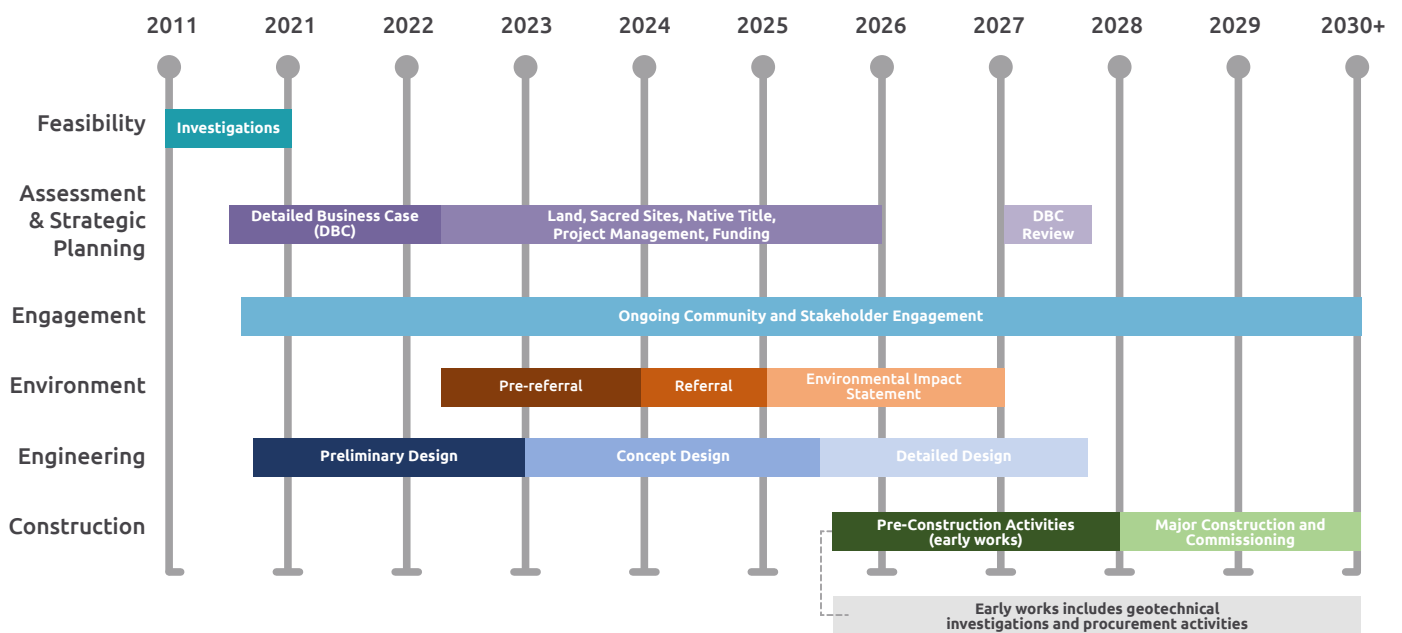
In 2024, a series of airborne investigations took place including airborne electromagnetic survey, radiometric and magnetic survey, and LiDAR surveying. This data will provide information on where the next stage of geotechnical studies should take place.

The concept design report is due for completion in the second quarter of 2025.

AROWS Infrastructure Components

The AROWS project comprises of 5 overarching infrastructure components with different functions	
Intake infrastructure	River intake, pump station and transfer pipeline. The intake infrastructure moves water from the Adelaide River into the basin during the wet season.
Basin infrastructure	Dams and a spillway. This infrastructure holds water in the naturally occurring basin and stops the water from flowing out at low points in the ridges.
Outlet and delivery infrastructure	Outlet, pump station and delivery pipeline. The outlet infrastructure moves water from AROWS to the Strauss Water Treatment Plant.
Supporting infrastructure	Temporary works and permanent utilities/facilities. This infrastructure is to support the construction and operation of the AROWS project (access tracks, laydown areas, site facilities, electricity substation, telecommunication facilities).
Connecting infrastructure	Pumps, pipeline, and a balance tank this will help move water from the delivery infrastructure to the future Strauss Water Treatment Plant.

Project Timeline



Project timeline estimate only. Subject to final approvals and funding

ADELAIDE RIVER WATER ALLOCATION PLAN

Simon Cruickshank from the Department of Lands, Planning and Environment (DLPE) provided an update on the Adelaide River Water Allocation Plan, the draft of which is expected to be complete in mid-2025.

Water allocation is about deciding how to divide and distribute water resources among different people, groups, and activities. To sustainably manage and allocate water resources in the Northern Territory, water allocation plans are developed. The Adelaide River Water Allocation Plan will set how much water can be taken from surface water resources (Adelaide River) and how much needs to remain to protect the resource. This is an important process separate to the AROWS project which will help inform how water is extracted from the river to fill the AROWS reservoir.

Darryl Day, both the chair for the Darwin Region Water Supply Program CRG and the Adelaide River Water Advisory Committee noted that the advisory committee works alongside the DLPE to provide advice and recommendations on the development and implementation of the Adelaide River plan to the department and Minister.

Water quality, biodiversity, ecosystem mapping and extraction modelling reports are all in development to inform the plan. More information on the plan can be found [here](#).



CRG Members

Members present at the CRG meeting included:

- Darryl Day, Chair
- Andrew MacKay MLA, Member for Goyder
- David Ciaravolo, Amateur Fishermen's Association NT
- Gary Higgins, Community Member
- Greg Troughton, NT Farmers
- Kezia Purick, Community Member
- Ruth Palmer, Property Council of Australia and Lake Bennett Community Association Inc
- Sharon Hillen, Coomalie Community Government Council

Meeting Schedule

The next CRG meeting is scheduled for April 2025.

More information

If you would like to receive more information regarding the Program and upcoming events in your community, sign up to the [community e-newsletter here](#).

Contact details

Community members are encouraged to contact their CRG representative to voice matters related to the Program by emailing CRG.waterinfrastructure@nt.gov.au.

Alternatively, community members can contact the NT Government Program Team directly by email on WaterInfrastructure.DLI@nt.gov.au or by calling 08 8999 5106.



Sign up to receive Community Updates on the Darwin Region Water Supply Program.