

ERA WATER

Project Overview



Waterproofing Eastern Adelaide is being delivered by the Eastern Region Alliance Water (ERA Water); on behalf the Town of Walkerville (ToW), City of Norwood Payneham & St Peters (NPSP) and the City of Burnside (CoB). These councils have been directly involved in the planning and delivery of the project.

The Waterproofing Eastern Adelaide project is supported through funding from the Australian Government's National Urban Water and Desalination Plan, and the Adelaide and Mount Lofty Ranges Natural Resources Management Board, which assisted the Councils in the initial stages and continues to be an integral contributor of the three councils.

These Councils have been working together to plan and now implement the Waterproofing Eastern Adelaide, with a leading team of hydrogeologists, civil engineers, urban designers and other experts who have identified opportunity to harvest, store, filter and reuse stormwater in the eastern suburbs. This Project is expected to reduce operational spending on local reserve and school grounds irrigation and enhance the quality of water that is discharged to the gulf of St Vincent.

The Waterproofing Eastern Adelaide project involves the establishment of wetlands, aquifer recharge and recovery, pipeline installations and water storage facilities.

The Councils will work with the community to ensure that the Project also provides amenity improvements and educational opportunities, whilst at the same time providing irrigation to our schools and reserves.

The treatment, storage and pumping sites in the scheme include:

- Felixstow Reserve: Wetland (Norwood Payneham & St Peters)
- Marden Lower Portrush Road Reserve: Treatment Site / pump station (Norwood Payneham & St Peters)
- Drage Reserve: Pump station (Norwood Payneham & St Peters)
- Tranmere – Shakespeare Ave: Pump station (Campbelltown)
- Langman Reserve: Pump station (Burnside)

Initial hydrogeological investigations have been undertaken and final designs have now been developed.

Project Background

In 2011, the ERA was successful in obtaining Commonwealth funding to proceed with the ERA Stormwater Harvesting and Reuse Feasibility Study. This study further developed the ERA Stormwater Harvesting Scheme which was undertaken by the above noted ERA Councils as a submission for funding under the National Urban Water and Desalination Plan. The feasibility study involved:

- Undertaking hydrogeological drilling and testing of proposed ASR (Aquifer

Storage & Recovery) sites to understand if the underlying hydrological conditions suit ASR

- Site investigations included reviewing the available space to construct the treatment facilities and drilling some test bores to prove aquifer presence and capacity
- Consideration of the impact on public open space and adjacent residents
- Detailed financial analysis and costing
- Analysis of three viable scheme options.

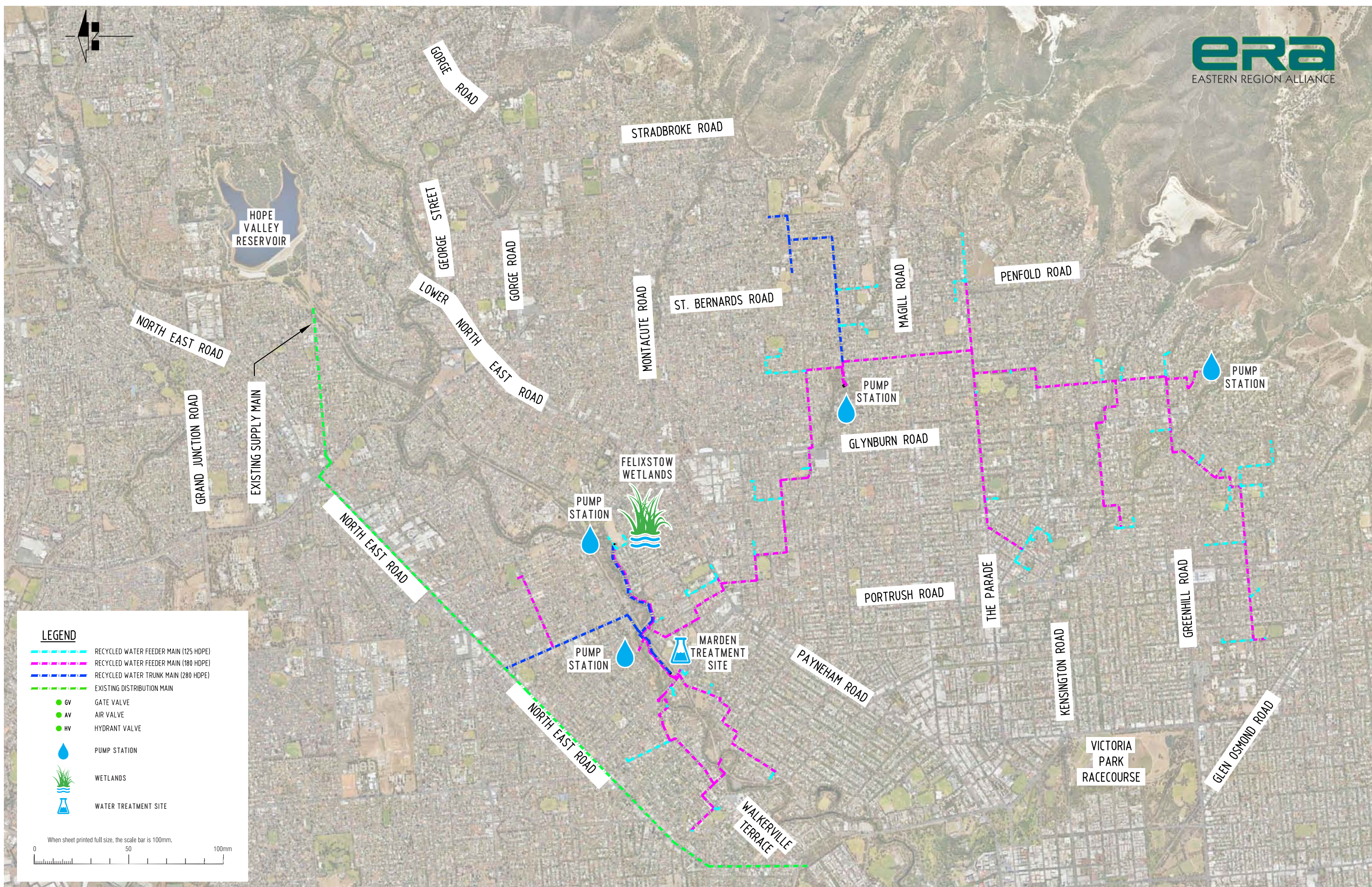
The resulting project budget has been estimated to cost \$22.1million, with a cost share of:

- Commonwealth Government - \$7.6 million
- ERA Councils - \$12.5 million
- Adelaide and Mount Lofty Ranges Natural Resources Management Board - \$2 million

Project Scope

The scheme includes two capture sites and will yield almost 500ML per annum (or 198 Olympic swimming pools), which will supply beyond the current demand of 454ML per annum.

Approximately 40km of distribution pipework will be constructed under this scheme utilising a directional horizontal drilling construction methodology. This construction technique limits the impact of adjacent properties and requires significant less site remediation and reinstatement.



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The Eastern Region Alliance (ERA) has appointed SADB Directional Drilling to construct components of a system of linking and distribution water mains connecting wetlands and distributing recycled stormwater to parks and reserves in the local area as part of the Waterproofing Eastern Adelaide Project.

Pipeline infrastructure will be installed in several stages involving directional drilling and pit excavation along sections of road and verge across five council areas (CoB, ToW, CoNPSP, City of Campbelltown and City of Tea Tree Gully), for more details on pipeline routes in your area please visit the website. Works will be undertaken throughout eastern Adelaide suburbs from March 2016 to mid-2017.

Felixstow Reserve

The conditions at the Felixstow Reserve are very suitable for the establishment of a large wetland. Due to the aquifer storage conditions at Felixstow Reserve the treated stormwater will be distributed to Hamilton Reserve for aquifer injection. The Hamilton Reserve site already has an established bore with a significant yield.

With this significant investment, the City of Norwood Payneham & St Peters took the opportunity to concurrently prepare a Masterplan for the whole of Felixstow Reserve, to ensure that the wetland is integrated into the overall design of the Reserve and that an innovative and well-designed outcome is achieved. To view the wetland design in the final master plan please visit the

City of Norwood Payneham & St Peters website:
<http://www.npsp.sa.gov.au/article/view/248>

How were the bore sites selected?

The selection of bore sites is based on the stability of the aquifer and its ability to contain treated stormwater.

Existing water harvesting infrastructure

Hamilton Reserve: There is an existing bore at this site yielding 10L/s and the nearby MARS Sports site.

Langman Reserve: A test bore has been drilled at this site with a yield of 15L/s.

Timeframes

The Project is planned for completion in mid-2017. Full yields (in respect to the recycled stormwater) would be achieved once the wetland plantings are well established, which may take a year or more.

Construction and timing will be communicated to residents and the community who are directly affected by the installation of the pipeline networks.

All stakeholders located adjacent to the pit sites where directional drilling will be undertaken will be provided with advanced notice of these works.

Each pipeline section generally requires 3-5 days to complete. Following the drilling, the open pit site will be backfilled and fully reinstated, which could take an additional couple of days.

Information and Feedback

Register your interest

Potentially affected residents and business operators, including those who live in close vicinity to the wetlands or pipeline routes, will receive notifications of upcoming construction works planned to occur in the area. You can also register for project updates online (on the Project website www.era.sa.gov.au) or by calling the 24 hour, 7 day info line on 1300 309 660.

Visit the website

Get the latest project information, Questions & Answers and progress and background reports online. Localised notifications will be uploaded at the time of distribution to affected areas.

Detailed plans, showing the location of the pipeline routes, are also available for view online.

Request a meeting with our friendly team members

Call the project team to arrange a suitable time for us to visit you and talk through the project and planned construction methodology in more detail.

Project website: www.era.sa.gov.au

Information Line: 1300 309 660

Please contact our community engagement team on the Project Information Line: 1300 309 660 (24 hours/7 days) or visit the project website to submit your comments, questions or feedback.