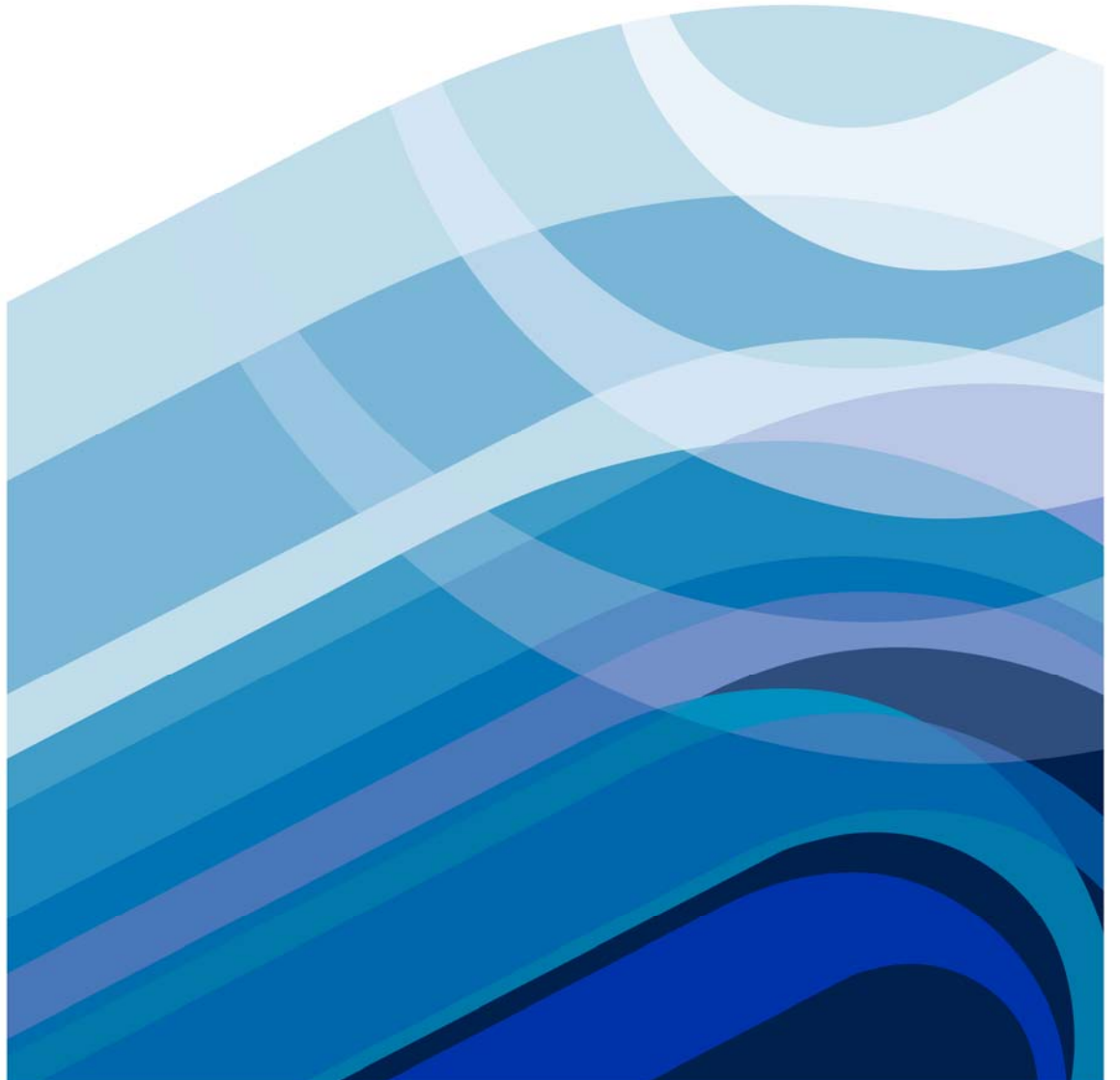




Southern Seawater Desalination Project

Rehabilitation Plan



Southern Seawater Desalination Project

Terrestrial Impact – Vegetation associated with matters of National Environmental Significance (NES)

Post construction impact

Desalination Plant

After the construction stage of the desalination plant, the loss of existing vegetated areas (areas not degraded by the existing cleared quarry) will be 6.22 ha, distributed as follows:

Pump Station: 1.03 ha

Road to connect the Plant Site with the Pump Station: 0.42 ha

However the footprint of the seawater pump station and the connecting road do not impact on vegetation identified as habitat for matters of NES.

The footprint on areas identified as potentially supporting vegetation for matters of NES is 4.77 ha (this is both vegetated and unvegetated). Within this footprint, the actual currently vegetated area impacted containing vegetation associated with matters of NES (tuart/ peppermint feeding or habitat) will be less than 2.00 ha (individual trees impacted number approximately 40). This is shown on the yellow polygon on Figure 1.

Therefore, the proposed offset (at 4:1 ratio) is calculated at $2.00\text{ha} \times 4 = 8\text{ha}$.

Figure 2 is an artists impression of the final site showing post construction rehabilitation and amenity plantings.

Water Storage Facility

The location of the water storage facility has been sited in an area with minimal impact on a number of key sustainability factors including visual amenity and environmental factors.

Figure 3 shows the outcome of the design process for the water storage tanks (approximately 3.5kms from Harvey) located on agricultural land. Approximately 11 trees (Marri) will be removed to construct the tanks.

New Habitat Creation

Desalination Plant

Constructed berm: *12.7 ha* – Tuart/ Peppermint specifically selected for screening and Western Ringtail Possum feeding/habitat.

Landscape amenity plantings (using local species) outside security fencing (areas to be restored in the old quarry degraded areas): *7.7 ha*.

Total area of new vegetation = *20.40ha*

Figure 4 is a detailed view indicating rehabilitation of the section between the seawater pump station and the main infrastructure, the berm with new habitat plantings of Tuart and Peppermint, and areas for amenity landscaping utilising local species.

Water Storage Facility

The Water Corporation is in the process of purchasing this land, of which not all will be required for infrastructure. Figure 3 indicates the areas to be revegetated on site. Revegetation will be 3.5 ha of Marri and local native species.

Additional rehabilitation

Rehabilitation of all areas disturbed by construction but not required post-construction = 5.2 ha (including reestablishment of an additional Western Ringtail Possum north south movement corridor with Tuarts and Peppermints).

Additional Commitments not associated with proposed infrastructure

Rehabilitation of Lots 32, 33 and Part Lot 8

Offset areas: 10.5 ha rehabilitation of existing remnant vegetation outside of current proposal footprint.

Rehabilitation will seek to rehabilitate and significantly improve areas previously identified as supporting species of national and state importance, in particular the rehabilitation of degraded understorey to provide feeding trees and shelter for the Western Ringtail Possums between the existing Tuarts, and an increase in density of Banksias (as a feeding source for cockatoos).

Land Use Commitment

The Water Corporation currently owns freehold Lots 32, 33 and the part Lot 8 that contains a portion of the disused quarry. Lots 32 and 33 are currently zoned Public Utility (water). The current zoning of part Lot 8 will be amended to be consistent with the Lots 32 and 33.

The water storage facility on part Lot 554 Honeymoon Road will also be subdivided and rezoned to Public Utility (water).

Public Utility (water) zoning prevents any development not related to the Water Corporation, and with the current usage anticipated, the Water Corporation will commit not to sell or redevelop the land outside of the current plans for a wastewater treatment plant expansion.

Figure 4 also indicates the footprint of the expanded wastewater facility which currently exists on Lots 32 and 33. The Water Corporation will continue to operate a facility at this location but a maximum future footprint is indicated to provide clarity on the extent of future planning for the facility. All surrounding vegetation not already indicated as the post construction footprint will not be removed without referral to DEWHA. The potential expanded footprint of the wastewater facility will not extend into areas previously identified as having matters of NES.



Fig 1: The polygon indicates the footprint of approximately 4.77 ha containing both vegetated (less than 2 ha) and unvegetated areas.



Fig 2: Post Construction showing rehabilitated and created landscaping and vegetation.

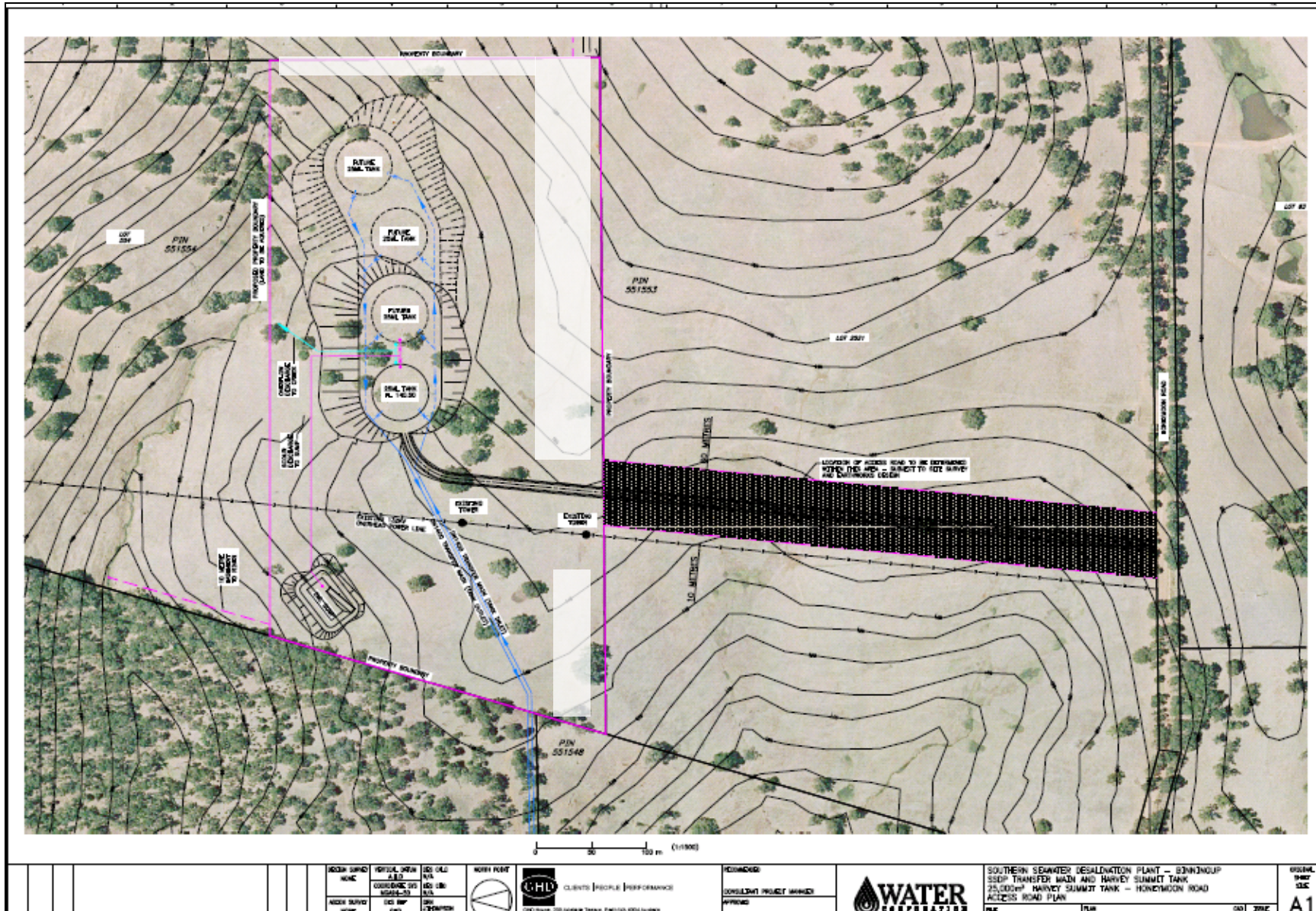


Figure 3 Layout of Water Storage Facility – including screening revegetation of 3.5ha

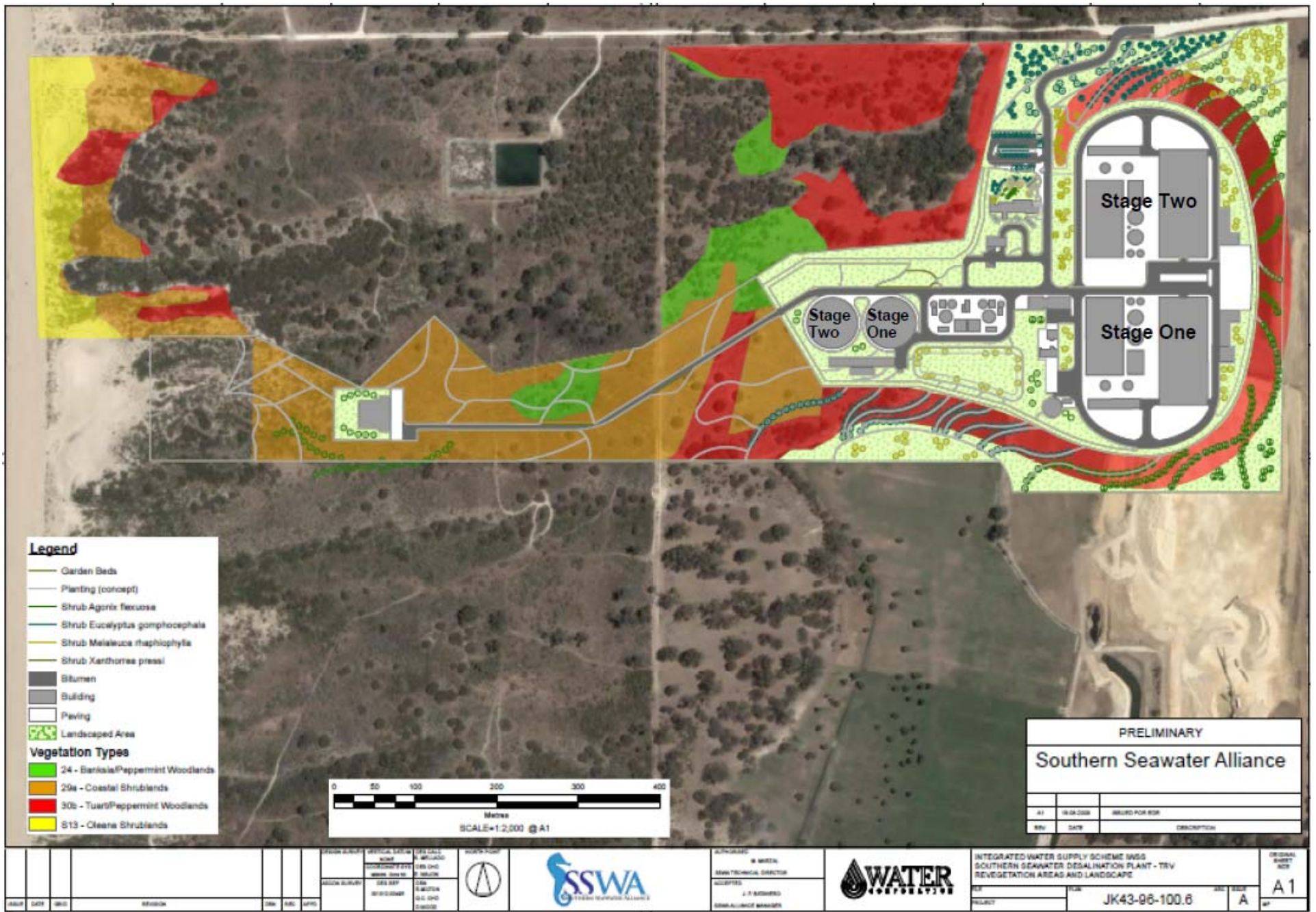


Figure 4 – Revegetation Plan – including additional offset rehabilitation outside of construction footprint

