



Government of Western Australia
Department of Water and Environmental Regulation

Managing Albany's Aquifers





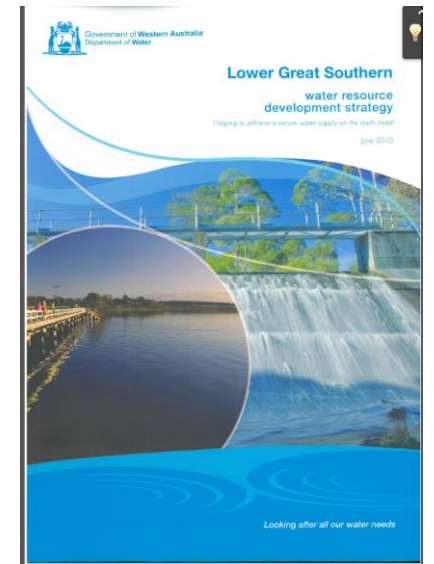
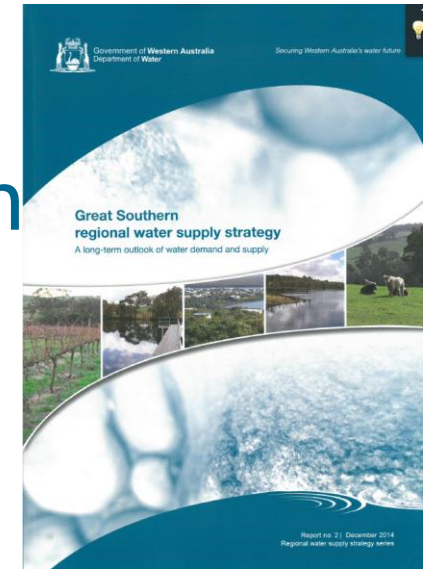
Roles: Department of Water and Environmental Regulation, and Water Corporation

- The Department of Water and Environmental Regulation supports Western Australia's community, economy and environment by managing and regulating the state's environment and water resources
- Water Corporation is the principal supplier of drinking water, and provision of wastewater and drainage services throughout the state of Western Australia

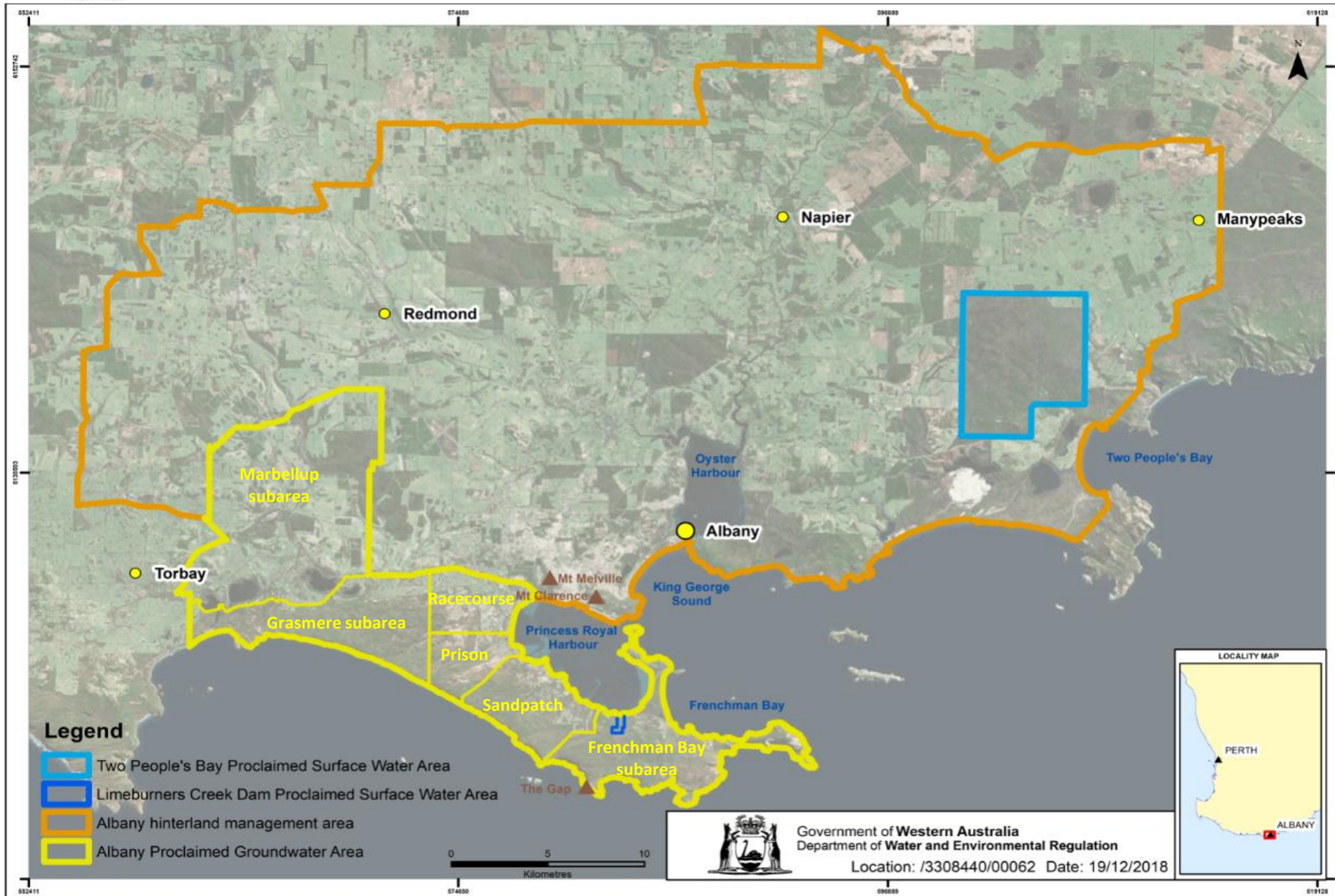


Department of Water and Environmental Regulation water resource management role

- Assess and investigate water resources, values and threats
- Assess and advise on long term water planning e.g.
 - *Lower Great Southern water resource development strategy (2010)*
 - *Great Southern regional water supply strategy (2014)*
- Develop allocation plans to confirm available water in proclaimed areas and guide licensing
 - *Albany and hinterlands water allocation plan (in prep)*
- Licence the taking of water in proclaimed areas



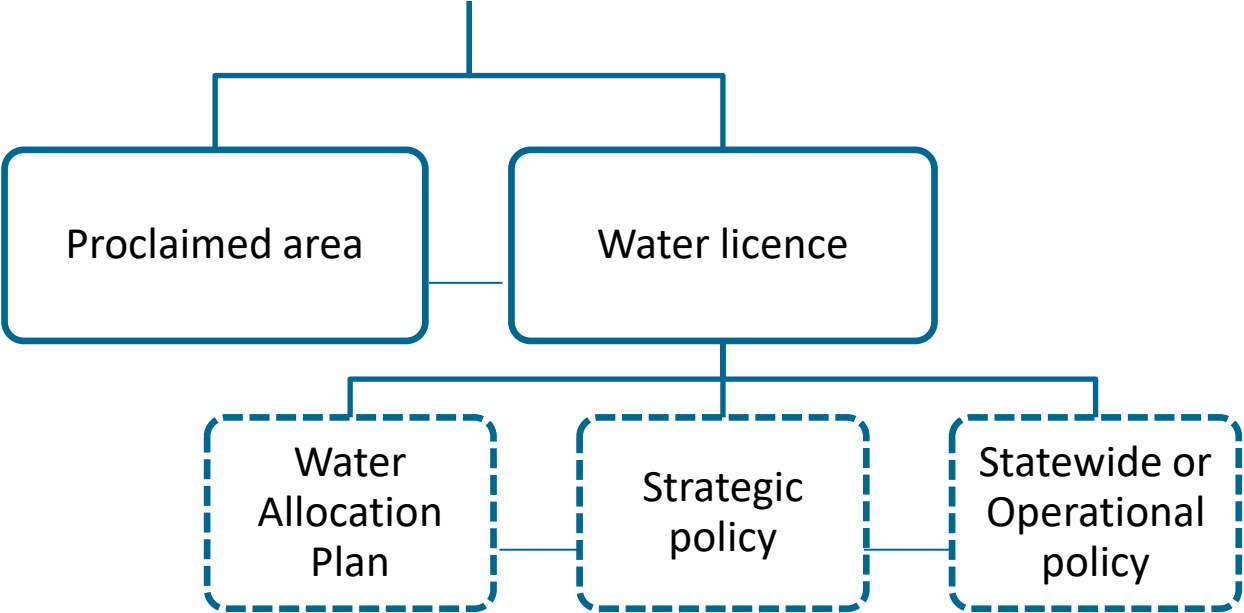
Albany and hinterland allocation plan area





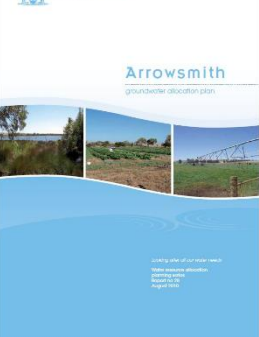
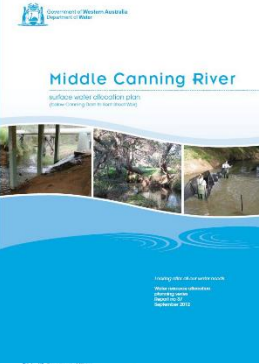
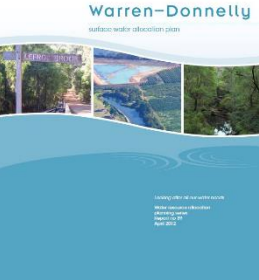
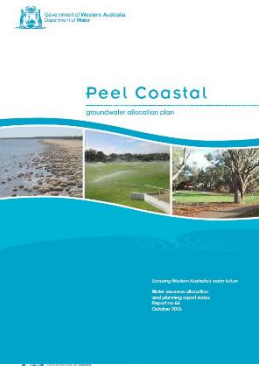
The legislation and tools used to manage water resources

Rights in Water and Irrigation Act 1914 and Regulations



Endorsed by the Minister

*Endorsed by the DG
Noted by the
Minister*





Water allocation plans - what are they?

ACT: *Rights in Water and Irrigation Act 1914*

Water allocation plans set out how much water can be abstracted from a resource, through licences, and how taking this water will be managed over the life of the plan.

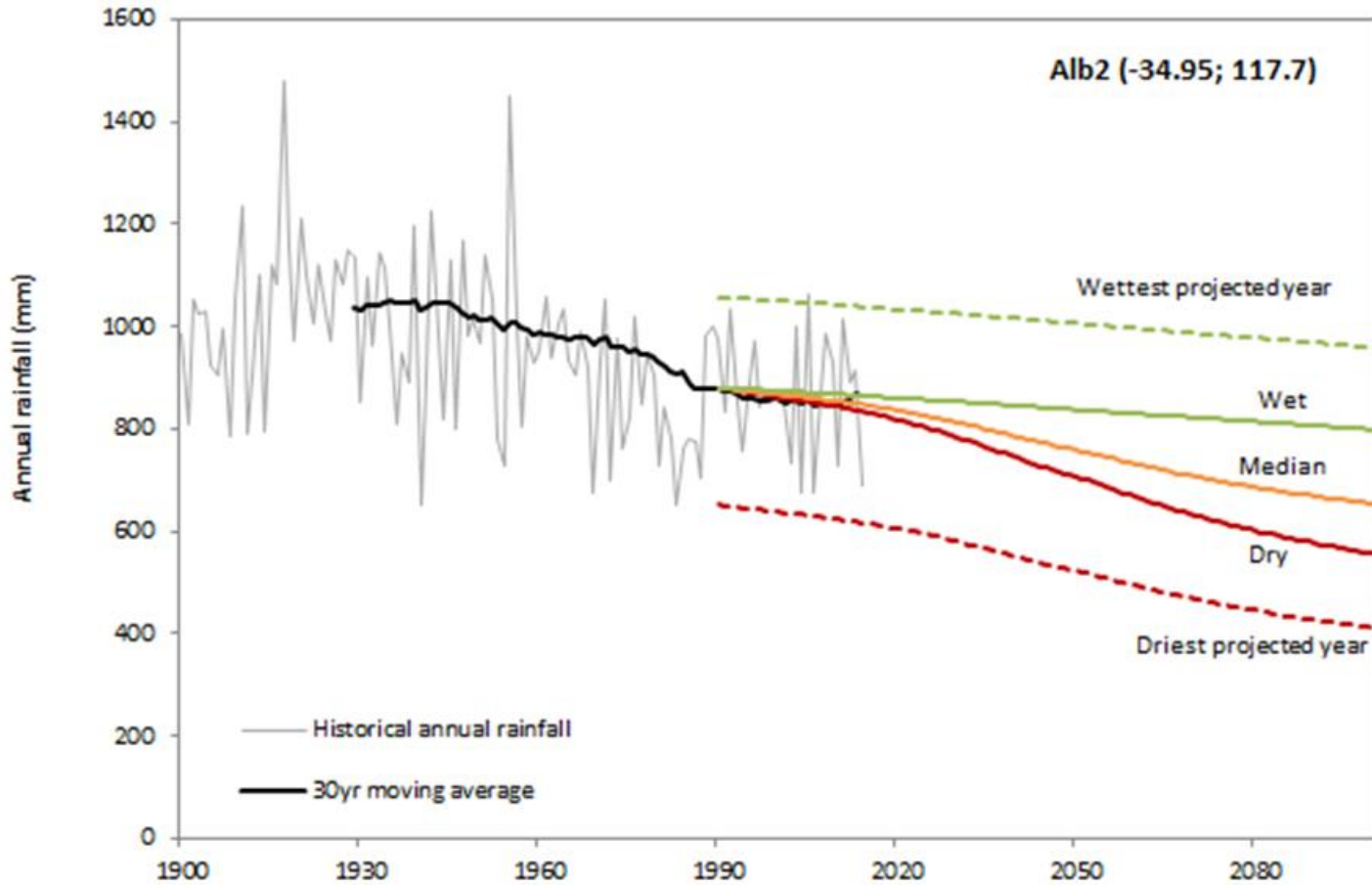
What does a plan include?

- objectives for managing the resource
- water allocation limits, including water for the environment
- water licensing policies
- arrangements for implementing and evaluating the plan

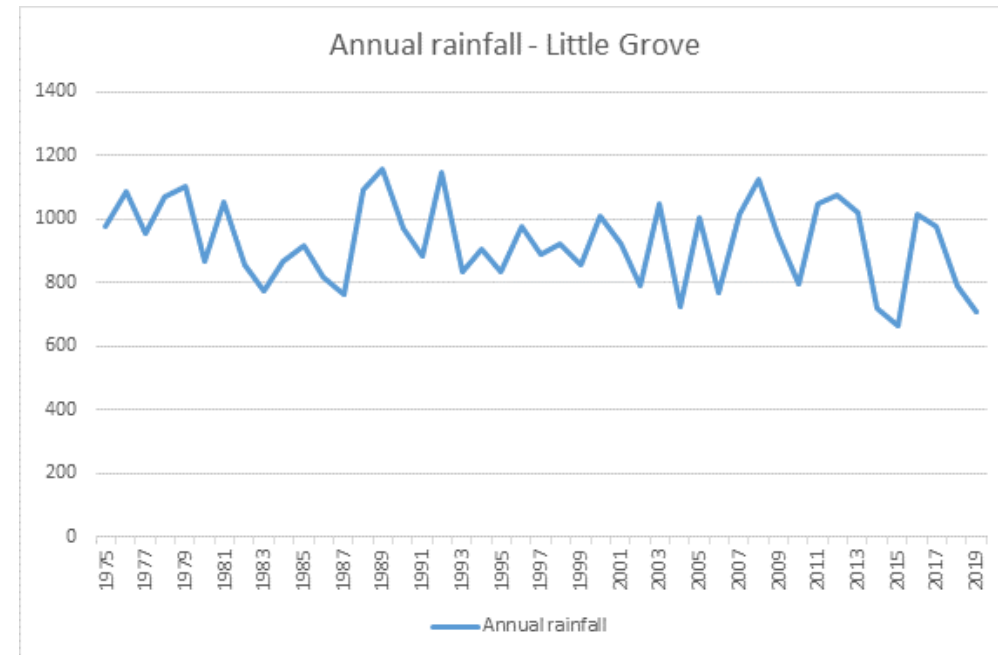
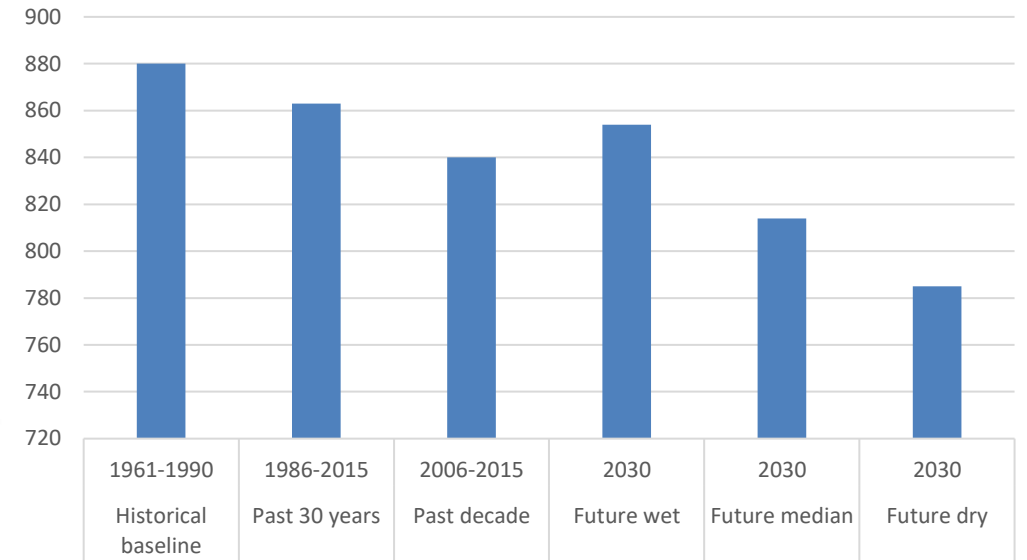




Climate projections

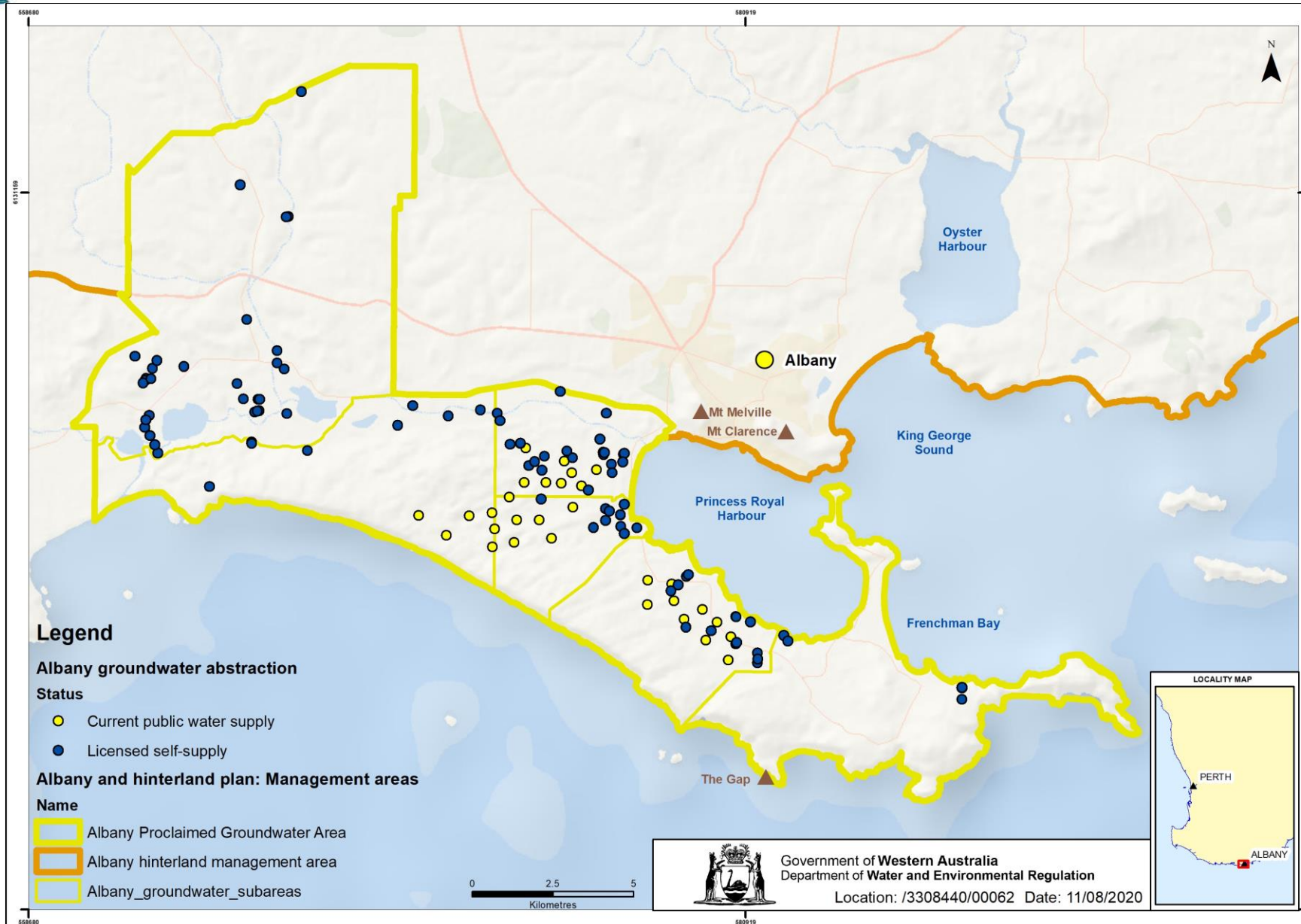


Rainfall data – Alb2



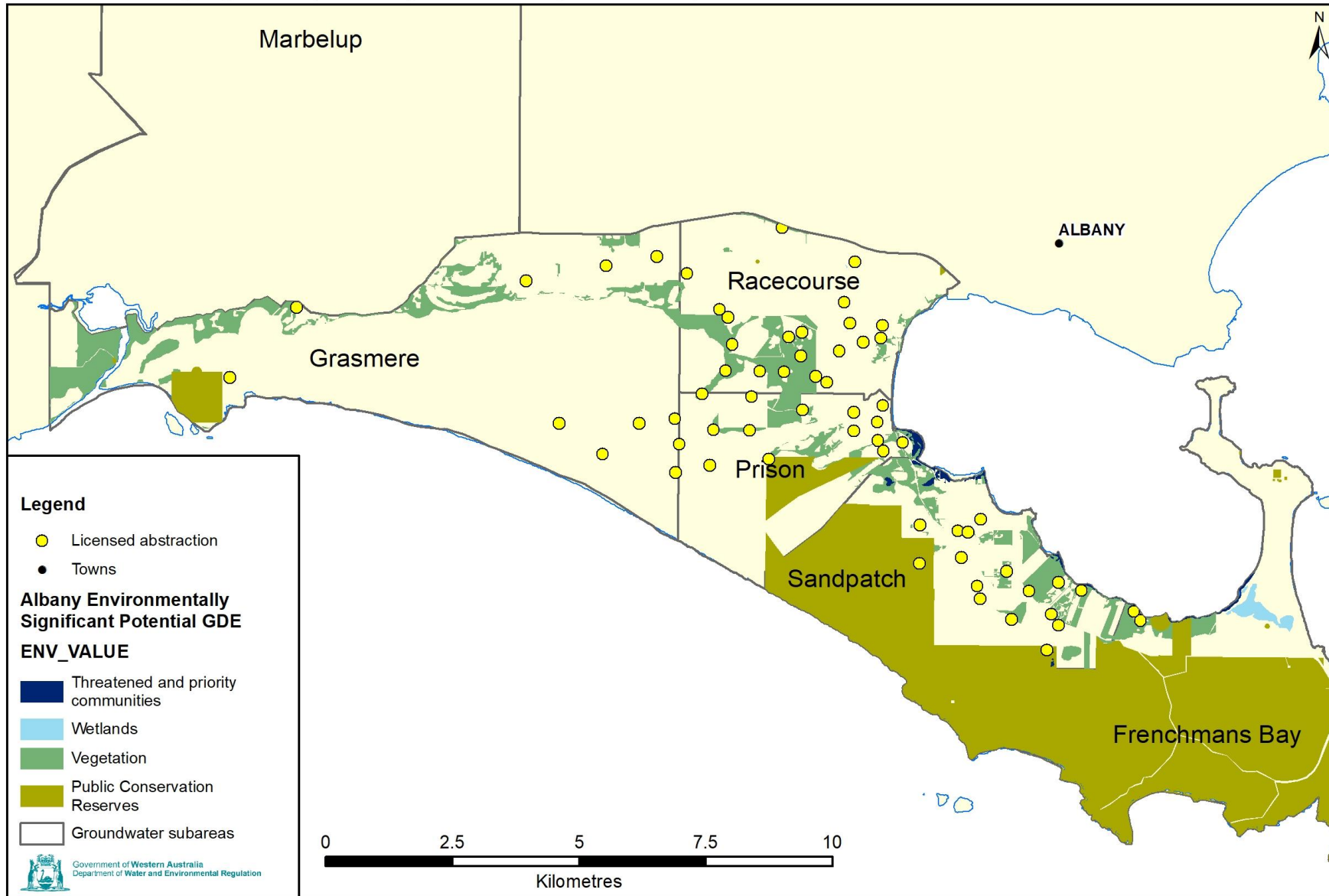


Managing issues and risks



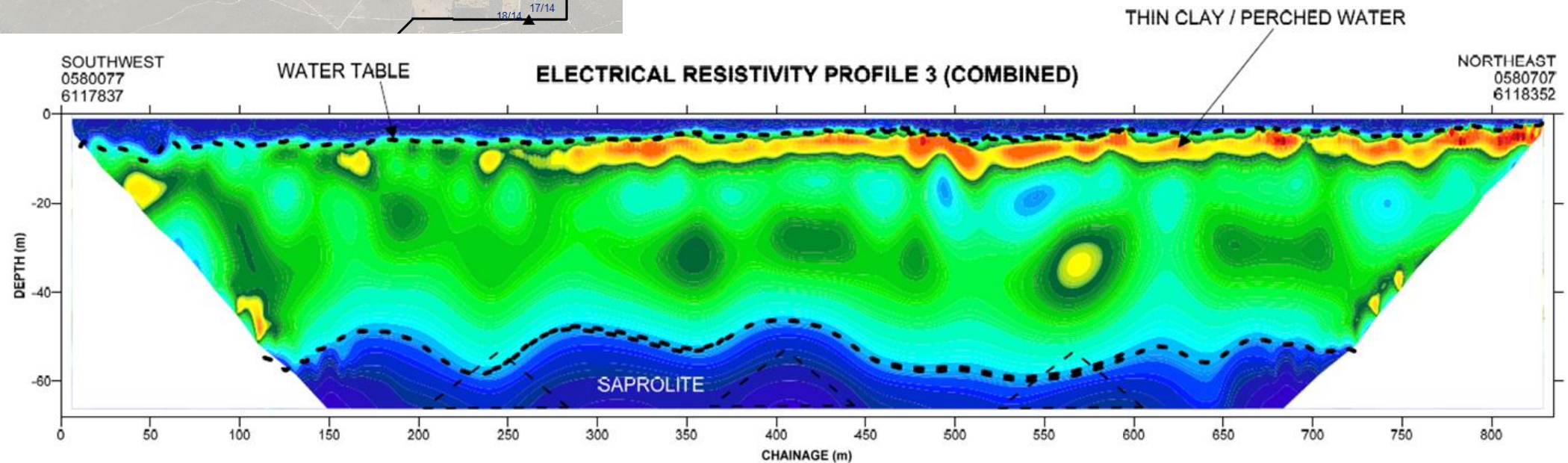
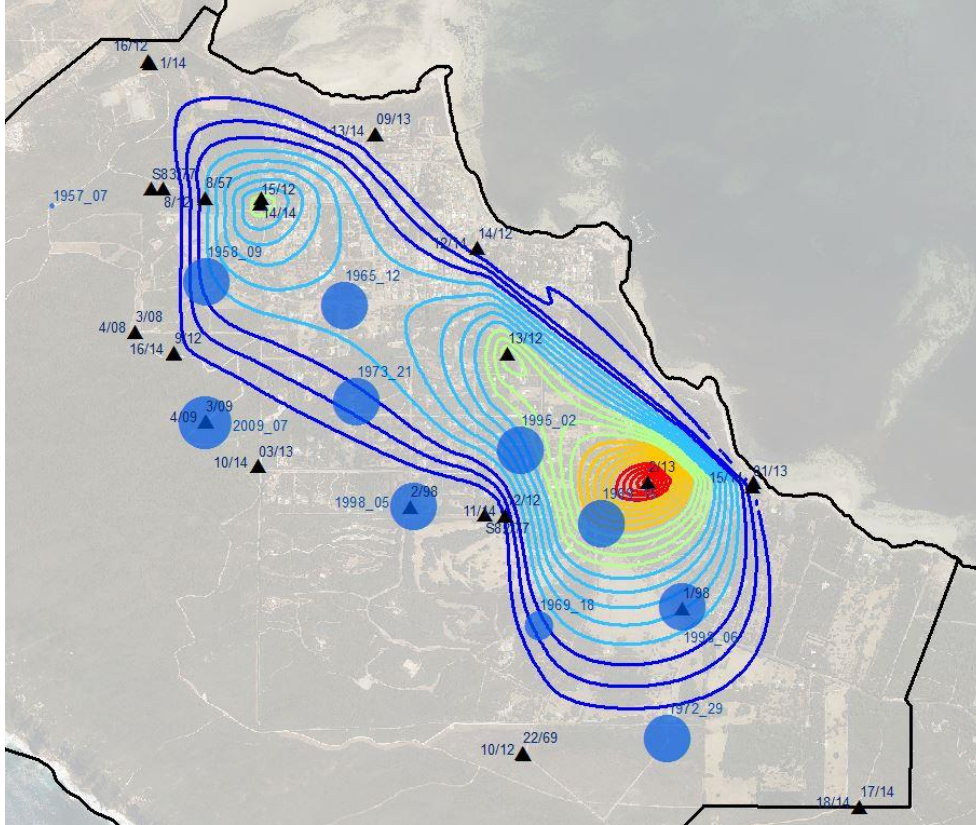


Environmentally Significant potential groundwater dependent ecosystems

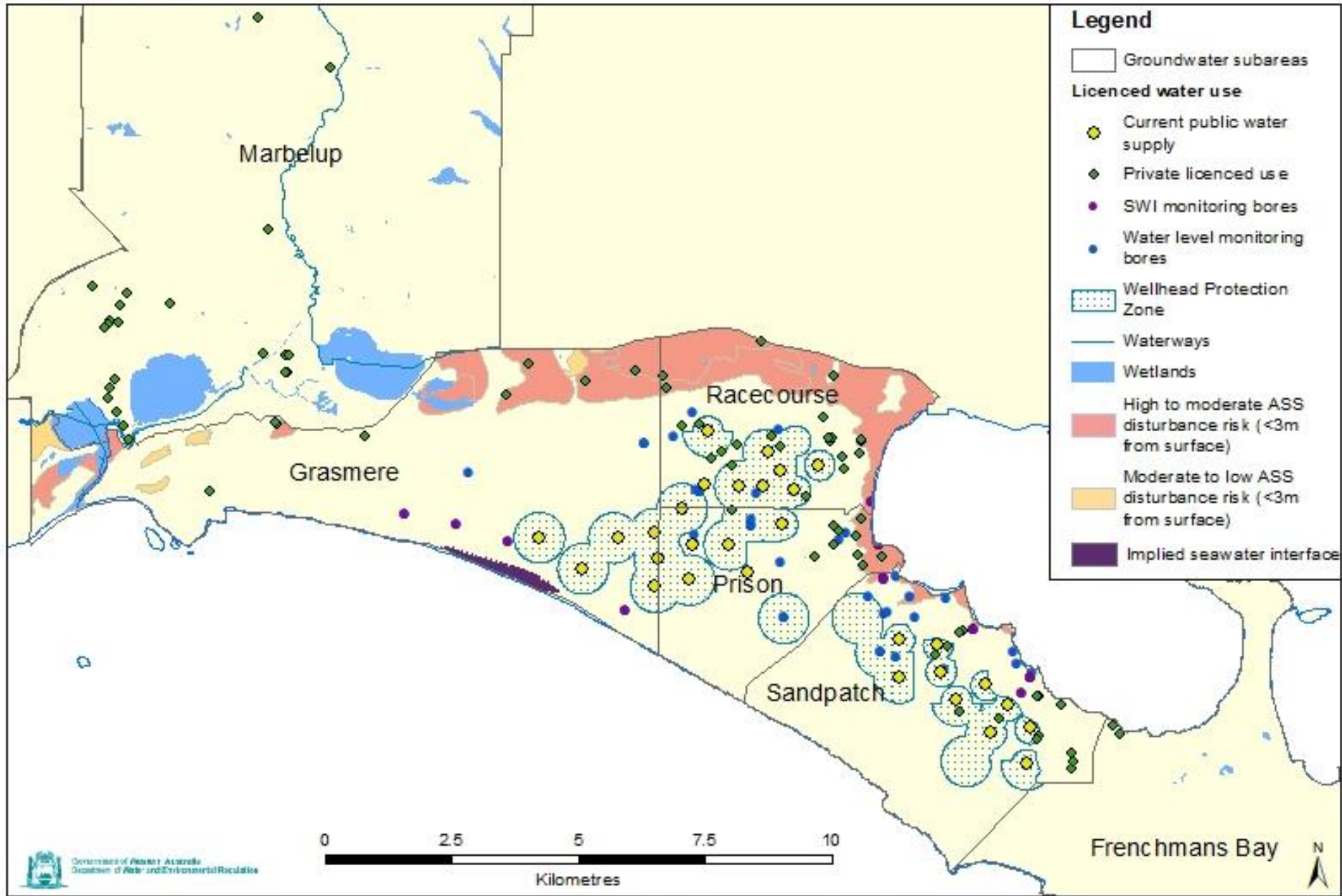


Values to
protect

Superficial aquifer salinity in Sandpatch subarea



Abstraction risk



Potential risks to manage

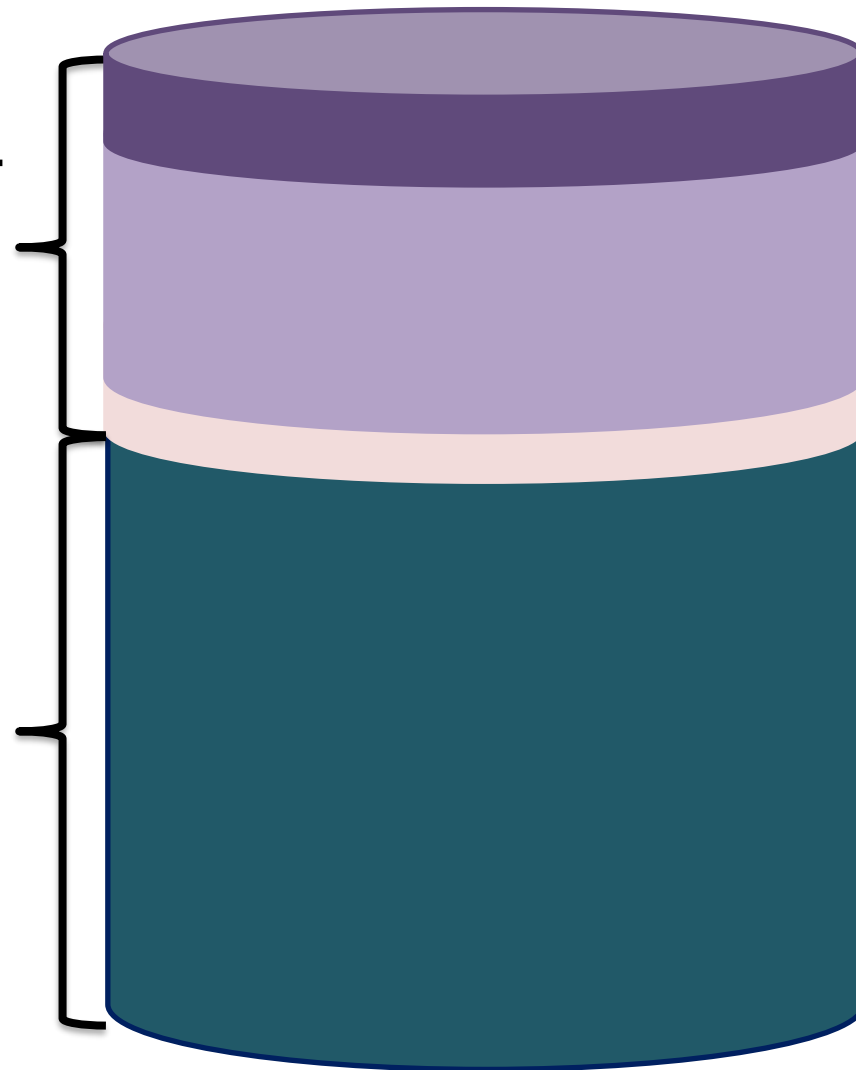






Albany groundwater area-allocation limit setting

Note: Schematic only, not proportional to scale

ALLOCATION LIMIT
(water that can be taken out and used)
~30-40%

Water that is not taken out
~60-70%



-  Water that can be licensed to anyone
-  Water that is licensed or reserved for public water supply
-  Water that is taken but does not need a licence
-  Water that remains in the ground or in a watercourse for ecological, cultural or community needs



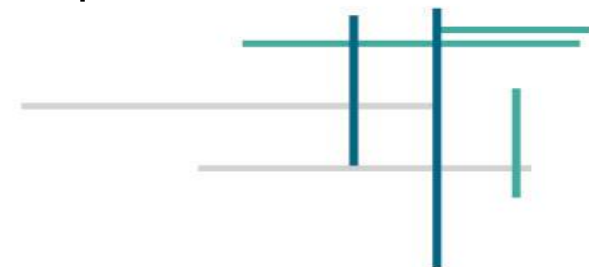
Developing the *Albany and hinterlands water allocation plan*

- Groundwater dependant values and risks
- Plan outcomes and objectives
- Current monitoring results and level of risk- determining Environmental Water Requirements (EWRs) and salinity targets
- Allocation limit review
 - Incorporating drying climate into water availability
 - numerical model runs – relative impacts (water level, salinity)
- Licensing policies
- Monitoring and measuring against performance indicators



Albany and hinterland plan consultation

- Meet key agencies with key interest
 - Water Corporation, DBCA, GSDC ongoing
 - DPIRD, SCNRM, DPLH still to come
 - City of Albany, Shires of Denmark and Plantagenet
- Meet stakeholders with key interest
 - Traditional owners – Mineng People
 - Torbay Catchment Group
 - Licensees, landowners, developers, drillers, any other people expressing interest
 - Write to licensees, stock and domestic users
 - Write to landowners to inform them of plan development and requirement to licence (hinterland artesian)
- Formal process on plan release – 3 month public comment period





Useful references:

- Albany and hinterlands water allocation plan webpage: <https://www.water.wa.gov.au/planning-for-the-future/allocation-plans/south-coast-region/albany-and-hinterlands>
- Meeting demand : Water Supply planning webpage <https://www.water.wa.gov.au/planning-for-the-future/meeting-demand/water-supply-planning>
- How we manage water resources in a changing climate webpage: <https://www.water.wa.gov.au/planning-for-the-future/allocation-plans/managing-water-in-a-changing-climate>
- Garden bores in WA webpage: <https://www.water.wa.gov.au/urban-water/bores>
- How do I apply for a water licence? <https://www.water.wa.gov.au/licensing/water-licensing>
- Water data: <http://wir.water.wa.gov.au/Pages/Water-Information-Reporting.aspx>
- Healthy Estuaries WA: <https://estuaries.dwer.wa.gov.au/>
- South West Rivers WA: <https://rivers.dwer.wa.gov.au/southwest/>