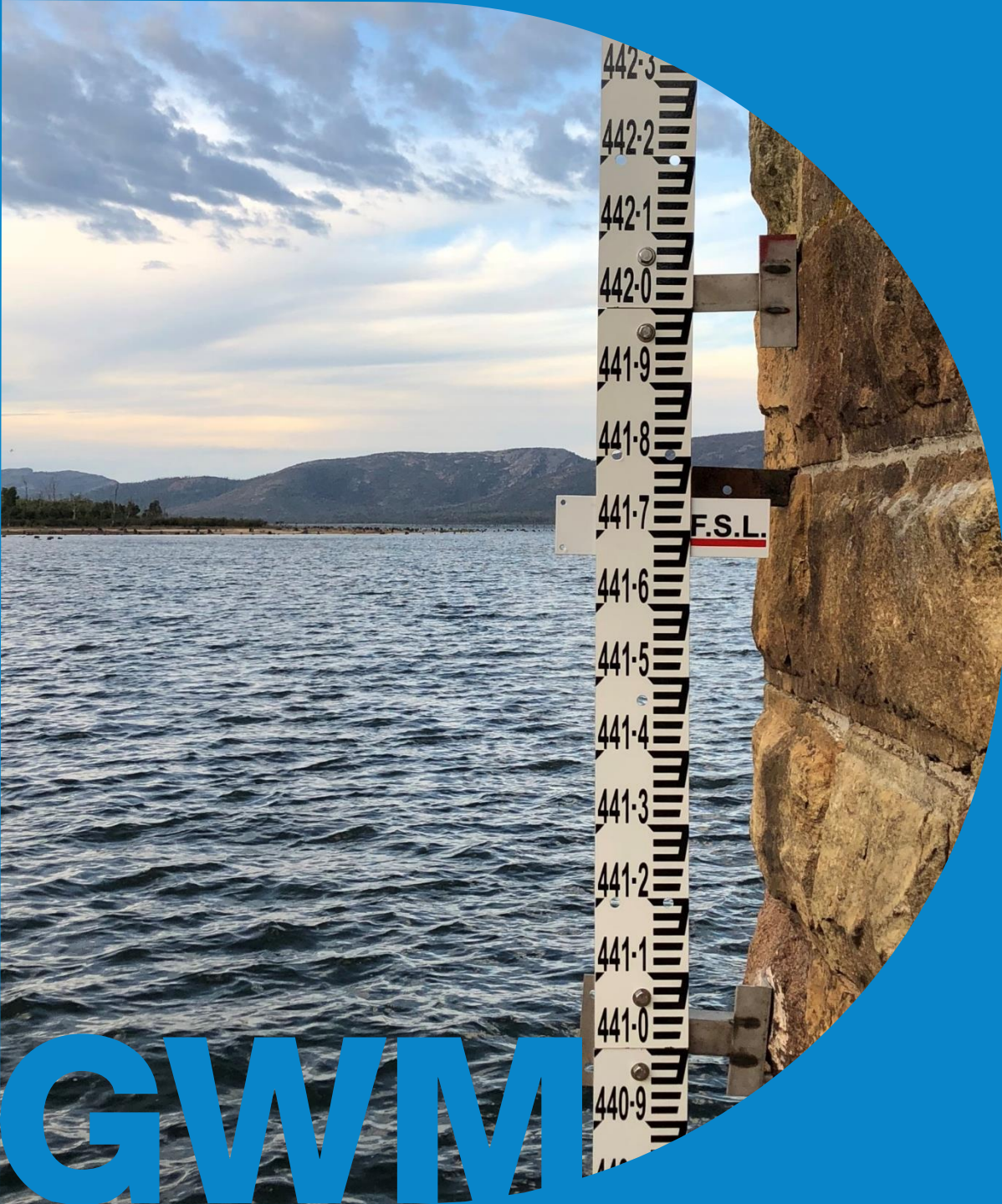


# Infrastructure Investment Strategy

Nick Mumford  
Executive Manager Infrastructure



GWM



# Background

- The water supply for the region is substantially secured by the Northern Mallee and Wimmera Mallee Pipeline.
- Northern Mallee Pipeline
  - Constructed over a period of 10 years 1992-2002.
  - Was primarily a water efficiency initiative but also about water quality.
  - Engineering was based on smaller pipes transferring water to open storages.
  - No consideration for recreation or environmental water.
  - We have been retrofitting the Northern Mallee to better match the service from the Wimmera Mallee Pipeline.
- Wimmera Mallee Pipeline
  - Feasibility Study developed in early 2000's
  - Interim Business Case developed 2003-2005
  - The Wimmera Mallee Pipeline was the catalyst for the merger of WMW and Grampians Water.
  - The Interim Business Case was developed with the foresight of the Northern Mallee Pipeline and made provision for growth and recreation water.

# Background

## Wimmera Mallee Pipeline - Interim Business Case

- 103 GL of water to be saved
  - 83 GL to environment
  - 20 GL to growth with target industries being
    - intensive agriculture
    - viticulture and
    - mining (mineral sands)
- Improved water security (96% reliability)
- Access to recreation water was committed as part of the project scope.
- \$440 million project was ultimately funded as a \$688 million project.

Wimmera Mallee Pipeline completed in three and a half years and has been serving the region for fifteen years with regular expansion.



# Long Term Water Resource Outlook

- In the 2022-2027 Water Supply Demand Strategy GWMWater identified some potential supply challenges under some of the more extreme climate scenarios if all three mineral sands developments progressed to full scale mining operations.

Figure 11: Comparison of estimated water availability and projected urban and rural pipeline demand to 2070 for Grampians supplied systems (no supply to large commercial users)

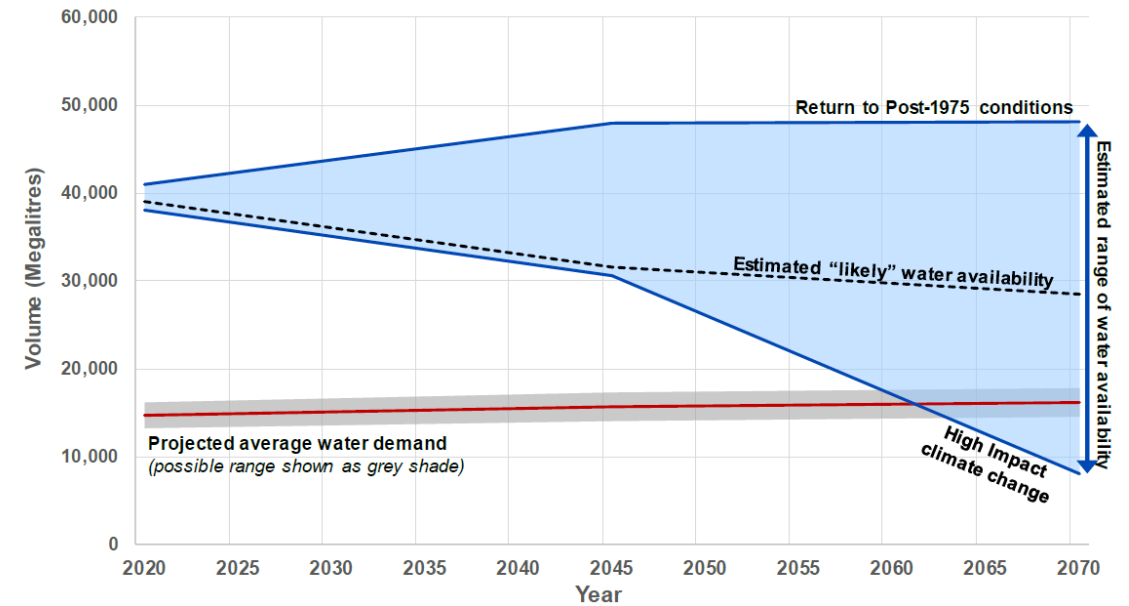
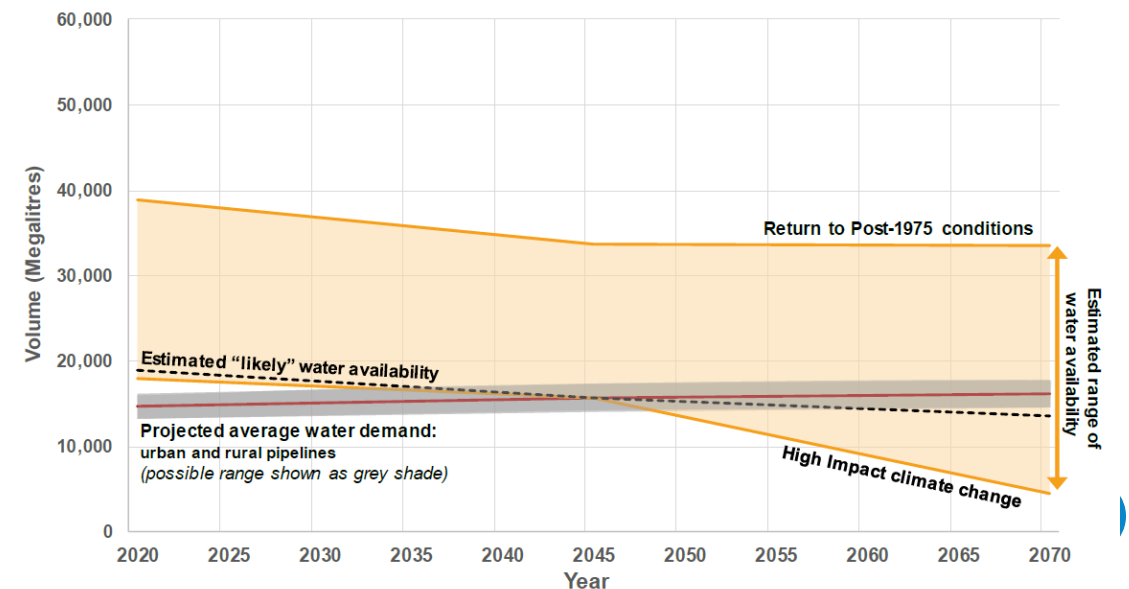


Figure 12: Comparison of estimated water availability and projected urban and rural pipeline demand to 2070 for Grampians supplied systems under full supply to large commercial users and sale of all Growth Water



# Water Supply Security Augmentation

## Water Supply Security Augmentation – Strategic Options Assessment (2024)

- Objective to provide new water into the system
  - New resources (ground water)
  - Connection to adjoining systems (Murray River and Warranga Channel)
  - Water savings from the existing system (Piping channels)

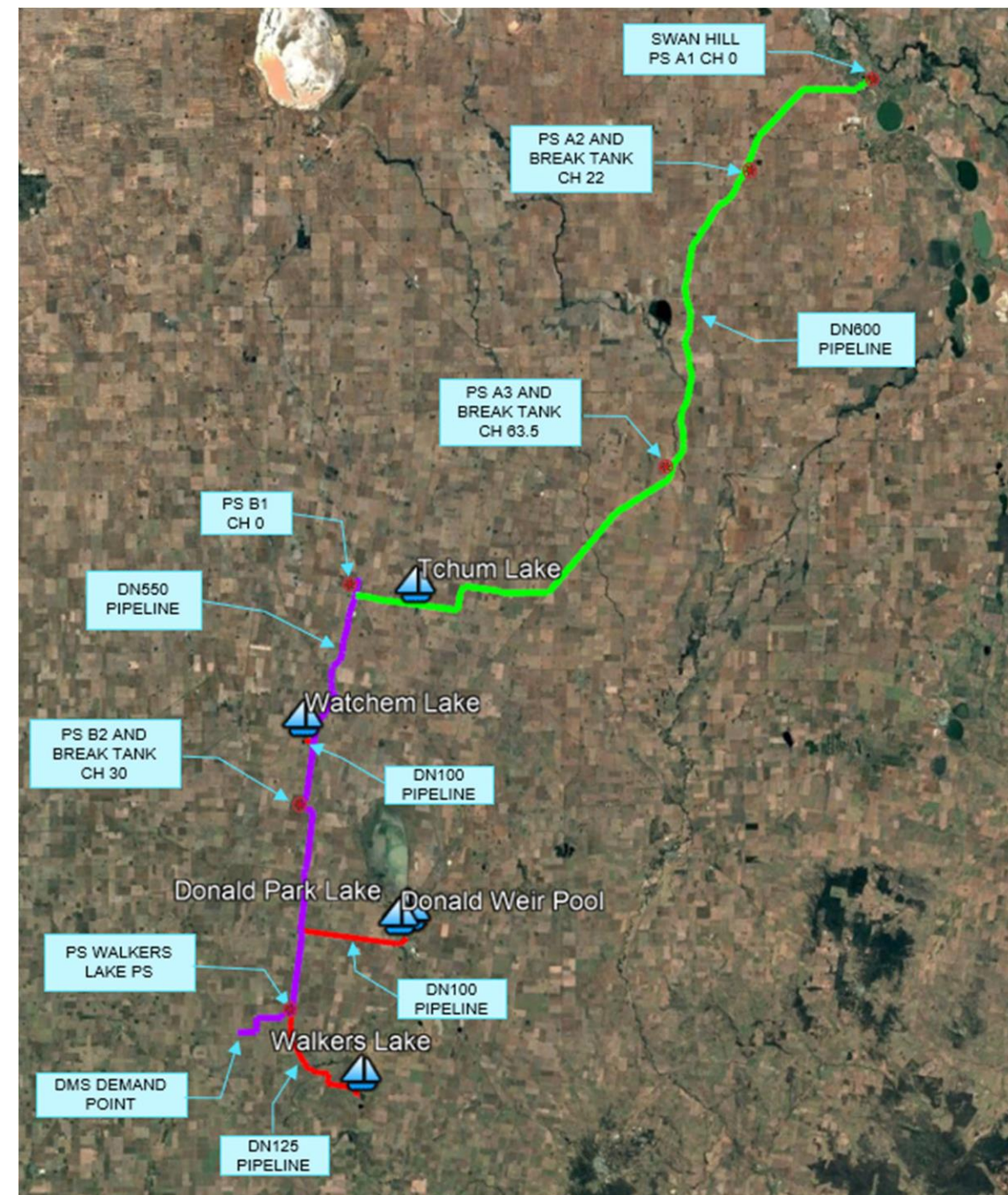
# Interconnecting Pipeline – Murray System

**Designed flow** ~ 22 – 31 ML/day

**Supply volume** ~ 8 – 11.5 GL/year

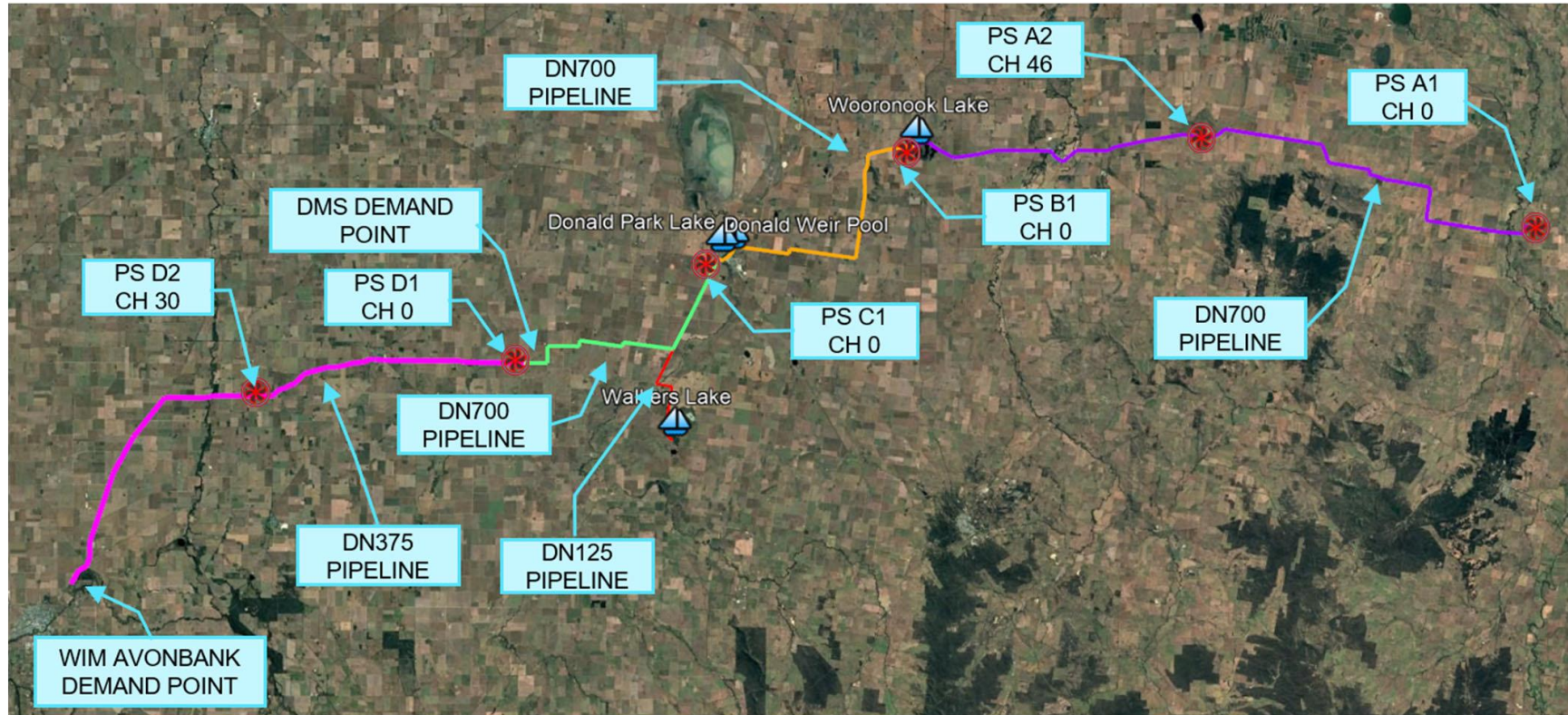
**Advantages:** Large supply volume, water considered fit-for-purpose, supply source relatively secure (HRWS)

**Disadvantages:** Capital investment, Implementation timeframe



# Interconnecting Pipeline – Goulburn System

OFFICIAL



**Designed flow** ~ 22 – 31 ML/day

**Supply volume** ~ 8 – 11.5 GL/year

**Advantages:** Large supply volume, water considered fit-for-purpose, supply source relatively secure (HRWS)

**Disadvantages:** Capital investment, Implementation timeframe

# Infrastructure Investment Strategy

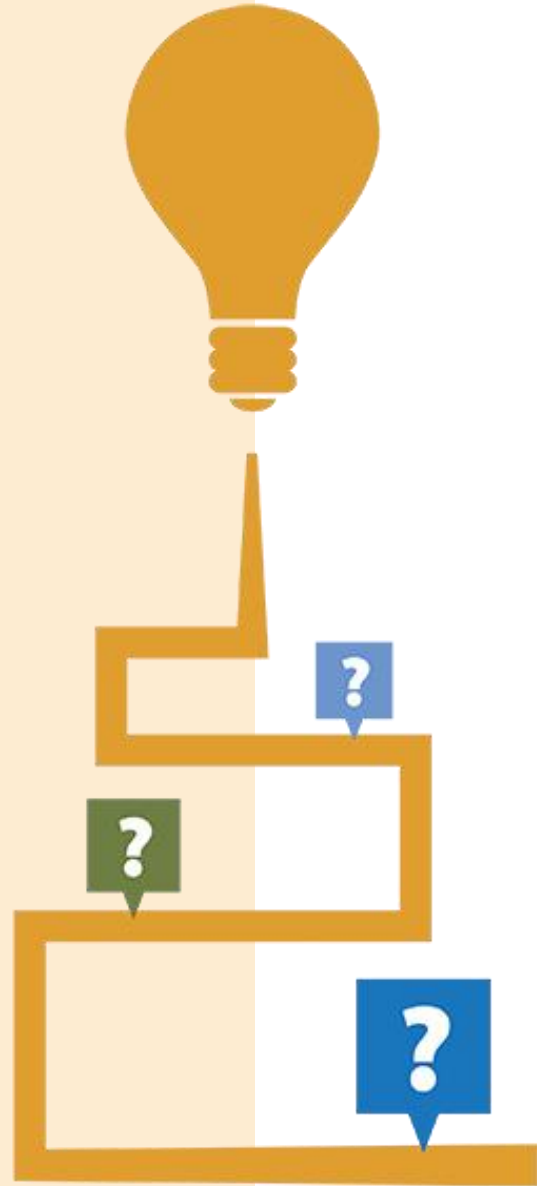
- Outlook for next 25 years of infrastructure
- Building on Water Supply Augmentation Options
- DEECA funded - \$300K with matching funds from GWMWater
- All major users online
  - Mineral Sands
  - Viticulture
  - Intensive Ag
- Pipelines across GWMWater footprint
  - Southern Wimmera North Pyrenees Rural Pipeline
  - West Grampians Rural Pipeline



# Infrastructure Investment Strategy

## Goals and Objectives -

- Develop a long-term infrastructure strategy aligned with regional development, water supply security and climate change,
- Support the region and communities by providing products and services that enable agriculture, mining, urban growth and renewable energy,
- Modernise our operations and infrastructure such that our headworks and pipeline networks efficiently supply fit-for-purpose water where it is needed,
- Facilitate cultural and environmental water flows, in consultation with traditional owners and authorities.
- Call out uptake of allocations for mineral sand mines within the region. Expansion of D&S pipeline networks across the GWMWater footprint



# Project Plan

	Stage	Description
1.	Project Plan and Scope	Description of deliverables, procurement and milestones
2.	Stakeholder Engagement Strategy	Engagement of stakeholders as identified
3.	Water Source Forecast Report	Assessment of the water sources, their quality and how climate change will impact this.
4.	Water Demand Forecast Report	Assessment of current demand and how this is forecast to change with growth and development.
5.	Groundwater Investigation	Investigation of ground water availability in identified areas, with specific focus in the Grampians region
6.	Infrastructure Gap Analysis	Identifying infrastructure that aligns fit for purpose water
7.	Project Feasibility and trigger assessment	Assess technical and financial feasibility of infrastructure. Establish trigger points for infrastructure projects
	Rural Pipeline Extensions	Detailed assessment of the SWNEP and West Grampians pipelines
	Horsham Water Supply Resilience	Options for improving resilience of potable water to Horsham, with consideration to WIFT
	Fit-for-purpose water from Warranga Channel	Assessment of infrastructure to utilise Warranga Channel in various scenarios
	Piping of Headworks Channels	Assessment of replacing major headworks channels (e.g. Rocklands, Taylors, Mt Zero, Moora) with pipeline
8.	Project Completion and Close out	Collation of all previous works and presentation of the infrastructure projects required to meet the next 25 years of demand.

# Stakeholder Engagement

Creation of detailed Stakeholder Engagement Strategy underway

Key Stakeholders Include -

- Local Governments
- Boarder Government Agencies
  - DEECA
  - Invest Victoria
  - AgVic
  - Victorian Environmental Water Holder
- Local water user groups and advocacy groups
- Cultural Partners
  - Register Aboriginal Parties
  - First People State Relations

GWMWater will continue to provide progress updates and consult through our Stakeholder Workshops.



# Questions



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