



# **Securing our water supply**

# **Quakers Hills to Prospect Reservoir**

Greater Sydney is reliant on rainfall for water supply, with 85 per cent of our water coming from rainfall and the remaining 15 per cent from desalination. To better protect against droughts and climate change, we need more rainfall independent water sources to support population and housing growth, and to support our water future. Combined with our existing assets, purified recycled water (PRW) can help safeguard our city's water needs for future generations.

## What is purified recycled water?

PRW is water recycled from industry and homes (including from kitchens, showers and toilets) that has been purified to meet strict Australian Guidelines for Water Recycling to supplement drinking water sources (such as rivers and dams). It could provide up to 25 per cent of Greater Sydney's water needs by 2056 ensuring a resilient water supply. While PRW will be new for Greater Sydney, it is not new technology with 35 places around the world using it.

# Outskers Hill Prospect Reservoir Prospect Reservoir Prospect Reservoir Prospect Reservoir Prospect Reservoir Prospect Reservoir

## **Project overview**

Sydney Water is planning a proposed PRW scheme as a part of upgrades to our existing Quakers Hill Water Resource Recovery Facility. The scheme will allow us to use water that would otherwise be sent out to the ocean. Instead of wasting this water, we can treat it to the highest standards using ultrafiltration, reverse osmosis, ultraviolet light disinfection with advanced oxidation and finally chlorine contact disinfection. Water leaving the PRW Treatment Plant would mix with water from Warragamba Dam and Upper Nepean Dam in Prospect Reservoir before being treated again at the Prospect Water Filtration Plant. This triple treated water would provide high quality water to meet growing demand for the future.

### The project involves:

- expanding wastewater treatment capacity
- improving the quality of wastewater at Quakers Hill with advanced treatment processes
- · a new Purified Recycled Water Treatment Plant
- new pipelines to transfer PRW from Quakers Hill to Prospect Reservoir
- new pipelines from Quakers Hill to Sydney Water's Northern Suburb Ocean Outfall Sewer (NSOOS) to transfer brine
- mixing PRW with raw water at Prospect Reservoir



The project will help achieve a range of objectives for economic development, population and housing growth, water resilience and environmental protection. It supports the NSW Government vision for the Greater Sydney Water Strategy as well as initiatives for more housing across our region.

### **Project benefits**

1 A cost effective climate resilient water source

- **2** Better outcomes for the Hawkesbury-Nepean River system
- 3 High quality water using proven technology used around the world
- 4 Reduced likelihood of severe water restrictions

### Who will receive PRW?

PRW will be added to Prospect Reservoir to mix with dam water before being re-treated at the Prospect Water Filtration Plant, which supplies drinking water to more than 80 per cent of Greater Sydney.

### **Planning approvals**

Any decision to include PRW in our water supply involves government regulations and approvals, community consultation as well as ongoing compliance with water supply regulations. All water in our network must meet drinking water guidelines and is continuously monitored.

If approved, PRW will become part of the water supply from 2031. We are preparing an Environmental Impact Statement (EIS), to be on display late 2025 for public comment. The EIS will provide detail on the economic, environmental, and social impacts and benefits of the project.

### **Have your say**

There are a range of ways you can get involved, using the QR Code below.

- · Tour at our PRW Discovery Centre
- · Request a presentation or briefing
- · Join us at events in person, or online
- · Subscribe for e-updates
- Share your views through our survey
- · Make a submission to the project team

Feedback will help us improve the project planning. We will keep you informed and report on community feedback through our page.



### **Contact us**

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# **Project timeline**

Planning								
		Procureme	nt					
				Delivery				
							Operational	
2024	2025	2026	2027	2028	2029	2030	2031	2032