

What is a public drinking water source area?

Drinking water is an increasingly precious resource in WA. Our drinking water comes from a combination of surface catchments (stored in dams), groundwater resources (accessed by bores), desalination and water recycling.

The department takes great care to identify and protect areas from where drinking water is sourced. These 'public drinking water source areas' (PDWSAs) safeguard the availability and quality of water so we can enjoy safe, reliable, affordable, good quality drinking water now and in the future.

PDWSAs protect surface and groundwater sources from contamination, including chemicals, nutrients, fuels, waste, litter, turbidity (cloudiness) and harmful microbes (pathogens). Pathogens can cause outbreaks of illness and hospitalisation, and in extreme cases can cause death – even in developed countries like Australia. Contaminated water costs a lot more to treat and supply. This is why it's so important to protect PDWSAs and stop them from becoming contaminated.

In WA, we strive for low intensity activities in PDWSAs, so the chance of contaminating our drinking water is reduced. Our <u>Land use compatibility tables</u>, developed with state and local government planners and the broader community, outline appropriate activities in PDWSAs.

Protecting our drinking water sources

We all have a role to play in protecting our sources of drinking water.

The department is responsible for protecting PDWSAs under legislation. It plays a pivotal role in ensuring that activities in PDWSAs are appropriate and prepares drinking water source protection reports for each PDWSA in WA, of which there are about 140.

The Water Corporation is responsible for surveillance in most PDWSAs. Rangers make sure that risks to water quality are addressed, via regular inspections of water infrastructure and catchments, promoting public awareness and issuing infringements if required.

Other government agencies such as the departments of Planning, Lands and Heritage; Health; Biodiversity, Conservation and Attractions; Local Government, Sport and Cultural Industries; along with local government, all have a role in supporting PDWSA protection.

Most Western Australians living in cities and towns consume water that comes from PDWSAs, so protecting them is everyone's responsibility. The department can advise anyone working in agriculture, business or industry about how to conduct their operations to ensure the protection of drinking water sources.

Here are some measures we can all take to help safeguard drinking water supplies when living, working and recreating in PDWSAs:

• Respect signs:

Don't swim or recreate in drinking water reservoirs. Fines may also apply.

- Use fertilisers sparingly: Fertilise according to manufacturer's instructions, to reduce leaching of nutrients.
- Reduce chemical use:

Minimise the use of pesticides and other chemicals, opt for natural alternatives where possible. For example, remove weeds by hand or use steam instead of herbicides.

- Dispose of contaminants thoughtfully: Recycle or dispose of unwanted chemicals, oils, fuels and solvents through approved collection facilities.
- Maintain on-site sewage treatment systems:

Ensure your system is effectively managed and inspected regularly to prevent leaks. Do not dispose of chemicals or pool water into these systems.

• No littering:

Dispose of garden and household rubbish thoughtfully. Put rubbish in bins and if there are no bins, bring it home with you. Report littering via www.kabc.wa.gov.au

See anything suspicious?

Report any waste dumping, contamination or chemical spill immediately to the Pollution Watch hotline on 1300 784 782 or the Water Corporation's emergency line on 13 13 75 so it can be cleaned up before it soaks through the soil and into the drinking water source.





Priority areas guide land uses and activities

The department assigns three different priority areas within PDWSAs.

Priority 1 (P1) areas are usually assigned over crown land covered with native vegetation, and are managed to avoid water quality risks. Most land uses and activities are inappropriate in P1 areas.

Where it is not possible to assign a P1 area due to existing land uses or zoning, the department assigns priority 2 (P2) and priority 3 (P3) areas.

P2 areas are normally assigned over rural land and are managed to minimise water quality risks. Low to medium intensity activities such as rural lifestyles and grazing can occur.

P3 areas are generally assigned over urban land, with the aim of managing water quality risks. Residential, commercial and light industrial uses can occur. In the Perth metropolitan area, strategic rezoning sometimes results in special priority 3* (P3*) areas, which recognise the increased risks to water quality and additional best management practices are required.

Protection zones

To safeguard areas closest to drinking water sources, protection zones surround water extraction points. Reservoir protection zones extend 2 km on the upstream side of a reservoir and include the water body itself. Wellhead protection zones surround production bores with a 500 m radius in P1 areas and a 300 m radius in P2 and P3 areas. Special protection measures apply in these zones.



Living and working in public drinking water source areas

Am I living or working in a drinking water source?

To find out if you are living, working or recreating in or near a PDWSA, check out our <u>PDWSA mapping</u> tool. If you are, please follow these tips and make sure your land uses and activities match the <u>Land use compatibility tables</u>.

Want to know more?

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