

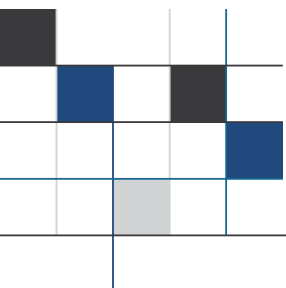
Policy

Use of mine dewatering surplus

Formerly Strategic policy 2.09

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Foreword

The Department of Water and Environmental Regulation (the department) has made a policy framework for all our regulatory documents. The framework has a clear and structured document hierarchy. It guides the department and our stakeholders on how to use the documents.

We have created a new format for this document to show where it sits within the framework.

We have not changed the content of this document and it remains the department's position.

For more information on the policy framework, see our website at www.dwer.wa.gov.au

This document was previously published in May 2013.



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1. Strategic policy

1.1 Background

Mines that extend below the watertable need to undertake dewatering to allow the extraction of mineral resources. They must first use dewatering volumes to mitigate any environmental impacts. They may then use the water on the mine site in fit-for-purpose ways (e.g. dust suppression and ore processing) and, if required, for the mining camp.

Thus mine dewatering surplus is the volume of water from a mine dewatering operation which is surplus to the water requirements of a particular mine (see section 1.4).

Once they meet these needs, it is the usual practice for operators to dispose of the water by aquifer injection or discharge to watercourses. Yet this water is a potential resource that could support other mining operations or sectors, such as irrigated agriculture, industry, or recreational and social needs in the community. We recognise that these are opportunistic uses linked to the mining process, and that a range of factors influence the security of supply. These factors include dewatering profiles, the mine schedule, the mining industry's economic health and development near the mine.

Until recently, it appeared that section 85(1)(c) of the *Mining Act 1978* (WA) restricted the use of mine dewatering surplus for non-mining applications. The Department of Water and Environmental Regulation (the department) and Department of Mines, Industry Regulation and Safety (DMIRS) have since decided that neither the *Mining Act 1978* nor the *Rights in Water and Irrigation Act 1914* (WA) impedes the use of mine dewatering surplus. Proponents will still need to obtain the relevant approvals that authorise use of the water (see section 2.3).

Some State Agreements say how operators must use mine dewatering surplus. These usually put limits on use. However, most State Agreements refer only to the *Rights in Water and Irrigation Act 1914* and are silent on the use of mine dewatering surplus. For these State Agreements, proponents may supply the surplus water to third parties. But they must first obtain the relevant approvals.

We administer more than 200 licences to take water for dewatering purposes across Western Australia. Total dewatering volumes exceed 300 GL per year. This figure is likely to increase as new and existing mines target mineral resources below the watertable. Some mines will have more water than they need. Others may have none, or not enough and require additional supplies.

This policy outlines the Government of Western Australia's position on the use of mine dewatering surplus. It identifies ways to use the surplus for non-mining purposes, and outlines the approvals that proponents must obtain.

The policy also describes the characteristics of mine dewatering surplus and its limitations.



The policy links to the *Western Australian water in mining guideline* (DoW 2013), which guides proponents through the approvals process for water issues for the life of the mine.

1.2 Position statement

The State Government supports the appropriate use of mine dewatering surplus beyond individual mining operations. This is because it presents significant opportunities for local communities and the state.

To realise the benefits of this potential water resource, this policy promotes and encourages the appropriate use of dewatering surplus from mining operations for other purposes.

As opportunities arise, we will work with proponents and other agencies to consider options for the productive use of this water.

1.3 Objectives and guiding principles

This policy's objectives are to:

- acknowledge that mine dewatering surplus is valuable and can benefit the state, its industries and towns
- identify the characteristics of mine dewatering surplus
- recognise the issues related to its use for purposes other than the particular mining project.

We have developed this policy in line with the following water resource management principles, which are to:

- optimise the use of all available water resources
- foster opportunities to develop innovative solutions to use water efficiently and effectively
- encourage high-value uses of water to maximise benefits to the community, industry and the state
- use the available mine dewatering surplus efficiently and effectively
- provide an enabling policy setting for meeting the water needs of communities and industries (i.e. operational, potable, social, recreational, cultural and environmental)
- promote the fit-for-purpose use of water.

1.4 What is mine dewatering surplus?

We encourage mine operators to use water effectively and efficiently. The *Western Australian water in mining guideline* (DoW 2013) guides proponents through several strategic and operational issues to address 'whole of mine life' water issues. This process aligns with Environmental Protection Authority (EPA) and our own approvals



processes – Part IV and Part V of the *Environmental Protection Act 1986* (WA) respectively.

The guideline includes a method and approach for proponents to manage mine dewatering volumes. It encourages beneficial use over disposal.

Proponents must first use mine dewatering volumes to:

- mitigate environmental impacts
- support fit-for-purpose onsite activities (e.g. processing, dust suppression and mine camp use).

Any dewatering volumes that remain after proponents meet these needs make up the mine dewatering surplus.

The mining guideline gives proponents the following options to dispose of this water:

- transfer the water to meet other demands, including those of other proponents in the area and public water supply
- inject back into an aquifer at sites the proponent determines and we agree to
- controlled release into a designated watercourse or wetland (either through a pipe or overland) the proponent determines and we agree to.

Proponents should work through these options to determine how to manage their remaining mine dewatering surplus, in consultation with relevant agencies (see Appendix 2). They should also consider other complementary economic or innovative options for the surplus.

2. Implementation

2.1 Determining surplus volumes

Proponents should follow the *Western Australian water in mining guideline* (DoW 2013). The following information supplements the guideline.

During the feasibility stage of a mining proposal, proponents should work with the department and DMIRS, as well as other relevant agencies, to ensure they meet the regulations for use of mine dewatering surplus.

Proponents must use the following steps to determine the volume, if any, of their mine dewatering surplus.

Estimate dewatering needs

The proponent should estimate the dewatering volumes for their mining operation. They need a section 26D licence under the *Rights in Water and Irrigation Act 1914* to construct wells and investigate groundwater for dewatering.



Mitigate the environmental impacts

Mining operations must be environmentally acceptable. The proponent should determine the environmental requirements in the mining lease and surrounding area, and estimate the dewatering volume they may need to return to the environment, e.g. by injecting water back into the aquifer or augmenting reduced environmental flows in groundwater-dependent watercourses or wetlands. They should work with us to make these determinations. Proponents may need to refer their projects to the EPA for environmental approval.

Meet mine-site water needs

Mining operations need water for various purposes such as dust suppression, washing of equipment, mineral processing and drinking water supply. Proponents should estimate these needs as accurately as possible. We prefer that proponents meet some or all of these needs through dewatering activities. But we recognise that sometimes only high-quality water and treatment or other sources are appropriate. The *Western Australian water in mining guideline* (DoW 2013) advises proponents to give us a water balance during the project's preliminary phase, to identify the mine-site water needs.

Determine the mine dewatering surplus

The mine dewatering surplus is the volume of water remaining, if any, after the proponent has met the environmental and mine-site water needs (as outlined above and in section 1.4).

The proponent may use the surplus water for other purposes or give it to another user. If there is no demand for the water, the proponent may need to use an environmentally acceptable way to dispose of it (e.g. by reinjecting it back into the aquifer or controlled release into waterways).

2.2 Facilitating the use of mine dewatering surplus

The proponent should tell us about any surplus water as early as possible. This allows the proponent, other government agencies and us to consider opportunities for using that water. When seeking a groundwater licence, the proponent should tell us about any expected surplus volumes during project scoping – Stage B in the *Western Australian water in mining guideline* (DoW 2013). The proponent may agree with a third party to provide access to the surplus water. The proponent and the third party must both obtain all the relevant approvals for use of the water. These agreements are private business-to-business arrangements and government agencies are not involved. Any third party wishing to use mine dewatering surplus must know they can only access the water during the mine's life or other such period that the mine operator determines. The quality and quantity of water available may also vary over time. See section 2.5 for more detail on these issues.

Proponents should give us information about the surplus water in a letter or in the company's operating strategy linked to the groundwater licence – see *Policy: use of*



operating strategies in the water licensing process (DWER 2019). They should include:

- the volume of mine dewatering surplus
- the timeframe of surplus water availability
- water quality of the mine dewatering surplus
- expected changes to water volume and quality during the mine's life
- any other plans for use of the surplus water (e.g. if the mining company has made any agreements with other water users)

See Stage D of the *Western Australian water in mining guideline* (DoW 2013) for a discussion about operating strategies.

2.3 Regulatory requirements

To dewater a mine, proponents must obtain from us a licence to take water. Under section 5C of the *Rights in Water and Irrigation Act 1914*, proponents must have a licence in nearly all mining tenure, from artesian wells in all parts of the state, and from non-artesian wells in certain proclaimed areas of the state. To be eligible to hold a licence to take water, the proponent must have legal authority to access the land from which the water is to be taken.

The licence to take water does not give a proponent any particular powers or rights to access land or build works. It only gives a statutory authority power to take and use water, subject to the licence. These may include several conditions that restrict how the proponent may dewater the mine and that stipulate uses for the water (e.g. a condition that says the proponent must reinject dewatering volumes or supplement wetlands to meet environmental requirements).

A proponent may consider options to use mine dewatering surplus at any time during the mine's life. But we prefer they consider other uses for the surplus water during the mine's initial environmental impact assessment.

If a proponent wants to use mine dewatering surplus for purposes other than those integral to the mining operation, they or the third party may need to obtain additional approvals. These may include, but not be limited to the following:

- **When a proponent wants to supply surplus water to another party.**
If this supply is a water service and originates in a controlled area, they will need to obtain a licence as a water service provider under the *Water Services Act 2012* or an exemption from licensing under that Act. Outside controlled areas, a proponent does not need a water services licence (supply licence) but must notify the Economic Regulation Authority (ERA) if it intends to provide a water service. The *Water Services Act 2012* also enables us to grant works powers relevant to infrastructure (bores, water treatment and pipeline) construction.



- **When a proponent intends to use the surplus water for drinking.**
We may proclaim the source area as a public drinking water source area (PDWSA) under the *Country Areas Water Supply Act 1947*. In such cases, we set limits on land use activities in these areas.
- **When a proponent's surplus water may adversely impact the environment**
Under Part IV of the *Environmental Protection Act 1986*, the EPA may need to assess the proposal if adverse environmental impacts are possible (e.g. if the water is for irrigated agriculture in an environmentally sensitive area, associated fertiliser and chemical use may be an issue). The Minister for Environment may impose Ministerial Conditions in such cases.
- **When a dewatering proposal triggers a prescribed premises category.**
We will need to ensure the premises has a works approval or a licence in line with Part V of the *Environmental Protection Act 1986* and schedule 1 of the *Environmental Protection Regulations 1987*.
- **When surplus water is for a pastoral lease for agriculture or horticulture**
Under the *Land Administration Act 1997*, the Pastoral Lands Board may need to issue a permit that authorises the pastoral lessee to conduct a restricted range of agricultural or horticultural activities.

Third parties must know if they can legally access the land from where the surplus water is to be taken. The two main considerations are:

- What is the underlying land tenure?
- Does this land tenure mean that further approvals are needed to construct the infrastructure for transporting the water?

Some grants of tenure or works approvals may trigger issues relating to native title or obligations to obtain other legislative approvals, such as those under the *Environmental Protection Act 1986* or *Aboriginal Heritage Act 1972*.

If the third party does not have legal access to the land from where the surplus water is to be taken, they can make an agreement with the mine operator. This may be that the mine operator constructs and maintains any infrastructure on its tenement.

The mining company and the third party must reach these decisions together.

See Appendix 1 for more detail about the regulatory requirements.

2.4 Opportunities to use mine dewatering surplus

Many opportunities to use mine dewatering surplus exist throughout the state. In 2009, the Pilbara Cities vision outlined a goal for Karratha and Port Hedland to reach populations of 50,000 each by 2035. The Newman sub-regional centre would support these major settlements with an expanded population of up to 15,000. The towns of Tom Price, Onslow and Wickham are also expected to grow in population, which will turn them into major towns by 2035. This would significantly increase water demand in this region, not only for urban consumption but for associated industry and mining. Mine dewatering surplus may supplement other water supplies to some extent, although temporarily.



In the state's south-west, mine dewatering surplus could be used to supplement water supplies for new developments or to expand existing industries in areas where all the available water is fully allocated or where water scarcity exists. However, mine dewatering surplus would not be a permanent supply, given its availability is linked to a mine's operational life and is at the discretion of the mine operator that holds the water licence.

Some of the opportunities we envisage for the use of mine dewatering surplus are outlined below. See Section 2.3 for the regulatory requirements.

Use on other mine sites

Some mines need additional water for their processing operations, dust suppression or for drinking. They could use dewatering surplus from nearby mines instead of establishing new borefields to obtain a water supply for these purposes.

Mine rehabilitation and closure

When rehabilitating a mine site, generally operators must re-establish native vegetation over large areas or refill mine voids (pit lakes). They could use mine dewatering surplus for the water needed to rehabilitate those areas.

Agriculture and horticulture

Agricultural and horticultural enterprises near mines could use mine dewatering surplus for irrigation, rather than establish new borefields.

Yet the water supply will only be available as long as the mine is operating. Such enterprises and the mine operator must consider this issue in their planning phase. Proponents should mitigate the risk of third parties expecting an ongoing source of water during development of the water management outcomes and by considering the cumulative impacts. See the *Western Australian water in mining guideline* (DoW 2013) for more details.

Town drinking water supply/community amenities

Mines that operate near towns may provide mine dewatering surplus for drinking water, public open space, swimming pools or sporting facilities. The demand for drinking water is likely to continue beyond the mine's life, an issue the mine operator and towns must consider in the planning phase. However, use of the surplus may offer some scope to delay the need for new water sources, and time to investigate supply options.

Power production (cooling purposes)

Mine dewatering surplus may have suitable quality and volume for cooling power plants – reducing demand on water resources, as well as infrastructure and operational costs (e.g. borefield construction). This option is more suited to a power plant belonging to the mine operator which may be nearby. However, depending on the location, the surplus could also be used for cooling regional power plants.



Industrial use

Mine dewatering surplus could be used to support related mining operations or to maintain port and railway transport facilities, depending on the mine's location and presence of infrastructure such as pipelines. The surplus would also need to be sufficient and predictable and of suitable quality.

Another potential use might be to control dust on port stockpiles.

2.5 Considerations for using mine dewatering surplus

Proponents wishing to access mine dewatering surplus should consider the following.

Variability in supply

Proponents must reconcile the variability of supply with the reliability the user requires. For example, the user may need a constant and predictable volume of water throughout the year (for process-related activities or cooling of power plants) or predictable volumes over a given season (irrigated agriculture).

Mine dewatering volumes may vary both in the short and long term, depending on several factors. The amount of water the mine uses may also vary over time, affecting the surplus volume available for other purposes. It is therefore important for proponents to determine mine-life dewatering profiles and update these as required. Third parties must be aware of the potential variability in supply.

Reliable delivery

Generally a proponent owns and operates the bores for dewatering and its primary concern will be its mining and dewatering operations. Third parties should take such commercial and operational issues into account when developing agreements with mining companies to access dewatering surplus.

Cumulative impacts

When making plans for mine dewatering surplus, proponents must consider the potential for adversely impacting other water users, existing water resources and the environment. For example, if they intend to supply surplus water for irrigation near its mining operations, this may result in water infiltrating back into the mine area, which would mean additional dewatering.

Water quality

Possible uses for mine dewatering surplus will vary depending on the quality of the water available. This may vary over the mine's life as water is abstracted from different parts of the mine and from different depths. Water pumped from mine sites may contain metals leached from mineral resources and introduced chemicals (e.g. hydrocarbons from machinery or nitrates from explosives).

Proponents must test the water to ensure it is suitable for the proposed end use. They may need to treat it to bring it up to the required standard. This may add to the cost of using the water.



Availability of water after mine closure

A mine's life (i.e. duration of the mining operation) may vary from a few years to 25 years or longer, depending on the size of the resource. When mining operations stop, generally dewatering operations will too. Sometimes water abstraction will need to continue for environmental reasons.

Third parties wishing to use mine dewatering surplus beyond the mine's life must develop plans for continuing or replacing the water supply. This is most relevant to long-term developments such as irrigated agriculture, potable water supply and large industries.

It may be possible to use the water supply, or part of it, beyond mine closure. When proponents do their contingency and transition planning, they should assess the potential to continue using mine dewatering surplus to prevent possible water contamination post mine closure.

Cost

Proponents should assess the cost of using mine dewatering surplus as a water supply against the cost of establishing a new water supply. In some cases, the cost of building infrastructure to allow the use of dewatering surplus may be significant. These costs are generally a factor of distance to demand. The most feasible and cost-effective opportunities are likely to be near the mining operations. A shorter distance between the mine and the demand centre reduces the distribution costs, because shorter pipelines, and less supporting infrastructure and roads are needed.

Pipeline route

Proponents must legally secure land access for the route their pipeline will follow. They should consider native title issues and access for the construction of roads, maintenance facilities, pumping stations etc. See the *Land Administration Act 1997* or the *Mining Act 1978* for more information.

Pipeline ownership

This refers to the building and operational aspects of the pipeline and associated infrastructure. The proponent and any third party must agree on pipeline ownership by contract. For important pipelines that require significant state involvement, a State Agreement may be necessary. Proponents may also need works approvals for pipelines, borefields and associated infrastructure under the *Water Agencies (Powers) Act 1984*.

Third-party logistics

The proponent may also need to overcome logistical issues by agreement when supplying water to a third party (e.g. to another mine owned by a different company). These issues may include site access and conflicts with site operations and schedules. They may also need to consider safety issues.



Mining companies will need to look at ways to overcome these issues if they are to create opportunities for using dewatering surplus and ensure maximum community benefit.

Trading of mining operations

Proponents must assess the security of dewatering supply in the context of mining tenements and mining projects being sold or traded. Water users that depend on continued access to mine dewatering surplus should ensure their agreement with a mine operator addresses the possibility of it being traded to another entity.



Appendices

Appendix 1 - Legislative framework

The Appendix outlines the Acts that regulate different aspects of mine dewatering surplus. These Acts provide for land access to mining operations, grant access to the groundwater resources, ensure the environmental impacts are managed, and provide for agreements between the government and individual companies. Each of these Acts combine to ensure the appropriate management of mine dewatering surplus.

Commonwealth legislation

Commonwealth Native Title Act 1993

Mine dewatering surplus proposals must comply with the future acts provisions under the *Native Title Act 1993*. If the proposed use of the land is different to that allowed under the existing land tenure, then depending on the kind of land tenure involved, fresh native title processes may be required.

Environment Protection and Biodiversity Conservation Act 1999

This Act focuses on matters of national environmental significance. It covers threatened species, ecological communities and threatening processes. This Act considers any critically endangered, conservation dependent, endangered, vulnerable or threatened species that depend on groundwater (including groundwater-dependent ecosystems) or endangered ecological communities. These considerations may influence environmental water requirements and hence mine dewatering surplus volumes, or the location of infrastructure.

Western Australian legislation

The *Rights in Water and Irrigation Act 1914* and the *Mining Act 1978* both govern the use of water extracted from mining tenure. The primary issue usually relates to third-party access to the mining tenement. The third-party may address this by making an agreement with the proponent, whereby the proponent builds and maintains any infrastructure on the mining tenement.

Mining Act 1978

The *Mining Act 1978* is the primary legislation that regulates mining activities in Western Australia. Mining tenements granted under this Act permit the holder to undertake mining activities and associated works within that tenement.

The Act does not present any impediment to the use of mine dewatering surplus for non-mining related purposes, as long as the proponent or third-party obtains the appropriate approvals.



Rights in Water and Irrigation Act 1914

The *Rights in Water and Irrigation Act 1914* provides for licences for the taking and use of water from certain sources (including underground water sources) and for the construction of bores. It applies to artesian wells throughout the state and non-artesian wells in proclaimed groundwater areas.

A licence to take water under section 5C may include conditions to manage the impacts of taking the water. For example, the licensee may have to reinject water to an aquifer or supplement wetlands to meet environmental requirements. They may also have to develop an operating strategy that includes details about how they will manage the dewatering surplus.

Proponents must have legal authority to access the land to take water. The licence to take water does not give the licensee a right of access or works powers.

Section 26D provides for licences to construct or alter wells. This is to manage bore construction and protect water resources.

Country Areas Water Supply Act 1947

When potable water supply is the intended use for mine dewatering surplus, the source area may be proclaimed as a PDWSA. This area may include the catchment areas of surface water sources (reservoirs) and the recharge and abstraction areas of groundwater sources. They are presently proclaimed as water reserves or catchment areas under the *Country Areas Water Supply Act 1947*.

By-laws under these Acts regulate the land uses and control potentially polluting activities within PDWSAs.

Most PDWSAs have a drinking water source protection plan that identifies any contaminating risks to the water source and provides strategies to protect the drinking water source. Any new drinking water source (including mine dewatering surplus) may need a drinking water source protection plan.

Environmental Protection Act 1986

The EPA and the Minister for the Environment consider proposals that may have a significant effect on the environment by way of the environmental impact assessment process under Part IV of the *Environmental Protection Act 1986*. The department is responsible for regulating environmental harm and waste laws and administers licences for prescribed premises, works approvals and clearing permits under Part V of the Act and the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 and Environmental Protection Regulations 1987.

The EPA may need to assess a proposal to use dewatering surplus under Part IV of the Act and the Minister for the Environment may impose Ministerial Conditions. Where a dewatering proposal triggers a prescribed premises category, as set out in Schedule 1 of the Environmental Protection Regulations 1987, it must be assessed under Part V of the Act and in accordance with a works approval or a licence. The



Environmental Protection Act 1986 overrides all inconsistent state legislation (see section 5 of the Act).

State Agreements

At present about 50 active State Agreements grant rights to land access and prescribe the activities that may occur there. Depending on the provisions of individual State Agreements, a mine operator may have an explicit right to supply surplus mine dewatering volumes to third parties. Moreover, some State Agreements have special provisions for the mine operator to supply water to a third party, such as for drinking water purposes. State Agreements also override inconsistent other laws, other than the *Environmental Protection Act 1986*.

Health Act 1911 (WA)

Proposals to use mine dewatering surplus for non-mining purposes may be regulated under the *Health Act 1911*. This would be where the proposed end use of the surplus water from dewatering activities has the potential to affect human health.

Land Administration Act 1997

The Pastoral Lands Board issues permits under the *Land Administration Act 1997*. These permits authorise pastoral lessees to conduct a restricted range of agricultural or horticultural activities.

Mining leases may be granted over pastoral leases. Water taken from land covered by both a mining tenement and a pastoral lease may be used for either mining or agricultural/horticultural purposes. However, the proponent must meet the requirements of the *Mining Act 1978* and *Land Administration Act 1997* and obtain the relevant permits.

Pastoralists may apply for a permit from the *Pastoral Lands Board*, under section 119 or 120 of the *Land Administration Act 1997*, to use pastoral land for agricultural/horticultural purposes or grow non-indigenous species. It is up to the lessee to ensure they comply with all relevant legislation. In cases where the lessee has agreed with a mining company to use mine dewatering surplus, they may need a licence to take water (see Rights in Water and Irrigation Act above). While not a formal requirement, it is wise to note such arrangements in the permit application.

Aboriginal Heritage Act 1972

This Act protects places and objects in Western Australia that are important to Aboriginal people because of connections to their culture (Aboriginal sites). This Act is relevant to those needing access to Aboriginal sites for works activities (e.g. pipeline construction) that could destroy such sites.

Water Services Act 2012

The *Water Services Act 2012* regulates the provision of water services.



Proponents wishing to use the dewatering surplus to provide a service (e.g. public drinking water supplies, water supply for electricity or irrigation services) will need a water service provider's licence under the *Water Services Act 2012* or be granted an exemption under that Act.

Water service licences are issued by the Economic Regulation Authority. Exemptions are administered by the Department of Water and Environmental Regulation. The *Water Services Act 2012* also enables the granting of works powers that are relevant to pipeline construction.

Water Agencies (Powers) Act 1984

Licensed water service providers wishing to construct water supply infrastructure, to use the dewatering surplus to provide a service, may have to comply with works approvals provisions under this Act.

Appendix 2 - Roles of State Government agencies

The role of each State Government agency and its legislative responsibilities related to the use of mine dewatering surplus is outlined below.

Department of Water and Environmental Regulation

Water regulation

The department regulates and manages the state's water resources. It manages water for use, protects dependent ecosystems, and promotes the sustainable and efficient use of water by ensuring that licensees comply with the terms and conditions of their licences.

The department encourages proponents to engage early on strategic issues such as the use/disposal of surplus water, given the complexities of surplus water arrangements. It encourages a 'whole of mine life' approach. The *Western Australian water in mining guideline* (DoW 2013) guides proponents through several steps to address water issues. This process aligns with the EPA and the department's approvals processes – Part IV and Part V of the *Environmental Protection Act 1986* respectively.

The department administers the following relevant legislation:

- *Rights in Water and Irrigation Act 1914*
- *Country Areas Water Supply Act 1947*

There may be some constraints to development associated with mining activities when the land use activities occur in a sensitive area (e.g. in PDWSAs). See the Department of Planning's 2003 *State planning policy 2.7: Drinking water source protection policy*.

Environment regulation and the Office of the EPA

The department protects and conserves the state's environment on behalf of the people of Western Australia. Its key responsibilities are to conserve biodiversity, and



protect, manage, regulate and assess many aspects of the use of the state's natural resources. The department helps develop environmental protection policies, manages the environmental impact assessment process and carries out regulatory functions to achieve better environmental outcomes. It also manages contaminated sites and coordinates pollution incident responses.

The department administers Part V of the *Environmental Protection Act 1986*. This part of the Act regulates the discharge of dewatering surplus (i.e. as a waste) from prescribed premises. The Office of the EPA supports the Minister for Environment to administer parts III and IV of the *Environmental Protection Act 1986*. Part IV is discussed further in Appendix 1.

Economic Regulation Authority

The ERA is Western Australia's independent economic regulator. It regulates monopoly aspects of the gas, electricity and rail industries and licenses service providers for gas, electricity and water. The ERA seeks to maintain a competitive, efficient and fair commercial environment, particularly where businesses operate as natural monopolies, for the benefit of the Western Australian community. It strives to promote fair prices, quality services and choice.

Where a mining company is supplying water to another party, it may need to obtain a licence from the ERA in accordance with the *Water Services Act 2012*. This type of licence sets minimum service standards. Exemptions from the licensing requirements of the *Water Services Act 2012* are administered by the Department of Water and Environmental Regulation.

Department of Jobs, Tourism, Science and Innovation (DJTSI)

DJTSI supports the successful delivery of key government industrial and infrastructure initiatives. It is responsible to:

- develop and coordinate significant state projects
- co-ordinate approvals processes for major resources, industrial and infrastructure projects across government
- negotiate and manage State Agreements between development proponents and the State Government
- enable the development of strategic industrial land and infrastructure to meet industry needs
- provide strategic policy advice on state development issues
- promote and attract investment in Western Australia
- advise and help Western Australian businesses with global export activities.

DJTSI has a role in negotiating State Agreements with individual companies. Sometimes it helps make arrangements for third-party access to mine dewatering surpluses in these negotiations.



Department of Mines, Industry Regulation and Safety (DMIRS)

DMIRS manages the state's mineral, petroleum and geothermal resources. It works to attract private investment in resources exploration and development. It provides geoscientific information on minerals and energy resources, and manages equitable and secure titles systems for the mining, petroleum and geothermal industries. It administers several Acts, of which the *Mining Act 1978* is relevant to alternative uses for dewatering surplus.

Section 24 of the *Mining Act 1978* requires Ministerial-level consultation for mining tenement applications applied over PDWSAs (gazetted water reserves or catchment areas).

Department of Health (DoH)

The DoH is responsible for public health in Western Australia. This includes managing health concerns around water quality, particularly drinking water. It administers the *Health Act 1911 (WA)*.

Department of Primary Industries and Regional Development (DPIRD)

DPIRD manages the Royalties for Regions initiative, key projects such as the Pilbara Cities vision, and regional development matters including state and pastoral lands functions.

DPIRD also supports the state's agriculture, food and fibre sectors to be sustainable and profitable. It works with the state's agribusiness industries to meet the increasingly demanding standards for food safety and quality, and sustainably produced fibre products.

DPIRD has a role in proposals to use mine dewatering surplus for agriculture/ horticulture, helping to ensure sustainable use of land and water resources in a changing climate.

Department of Planning, Lands and Heritage (DPLH)

Water infrastructure construction works may destroy Aboriginal sites. This is relevant to provisions in sections 17 and 18 of the *Aboriginal Heritage Act 1972* that DPLH administers. DPLH is responsible for the Act's day-to-day administration and all questions about Aboriginal sites should be directed to it.



Shortened forms

DMIRS	Department of Mines, Industry Regulation and Safety
DOH	Department of Health
DWER	Department of Water and Environmental Regulation
DJTSI	Department of Jobs, Tourism, Science and Innovation
DPIRD	Department of Primary Industries and Regional Development
EPA	Environmental Protection Authority
ERA	Economic Regulation Authority
PDWSA	public drinking water source area



References

ARMCANZ & ANZECC 1994, *National water quality management strategy: Policies and principles – a reference document*, Paper no. 2, Agriculture and Resource Management Council of Australia and New Zealand and Australian and New Zealand Environment and Conservation Council, Canberra.

National Water Commission 2011, *Integrating the mining sector into water planning and entitlements regimes*.

Department of Planning 2003, *State planning policy 2.7: Drinking water source protection policy*.

Department of Water 2013, *Western Australian water in mining guideline*, Water licensing delivery series, report no.12.

Department of Water 2019, *Policy: Use of operating strategies in the water licensing process*.