

# The Well

Tap into water education

## Visiting the Adelaide Desalination Plant



Thank you for booking a tour of the Adelaide Desalination Plant with SA Water. Participants will go behind-the-scenes to explore the process of desalination.

**Location: 15 Chrysler Road, Lonsdale**

**Contact: [thewell@sawater.com.au](mailto:thewell@sawater.com.au)**

### Before your visit

- Read the information in this teacher's guide.
- Arrange transport to and from the desalination plant.
- If needed, download our [Visitor accessibility guide for the ADP and Kauwi Centre](#), designed to support and prepare those with accessibility requirements. Share this guide with any students or guests that might benefit.
- Advise the SA Water education team about any accessibility requirements.

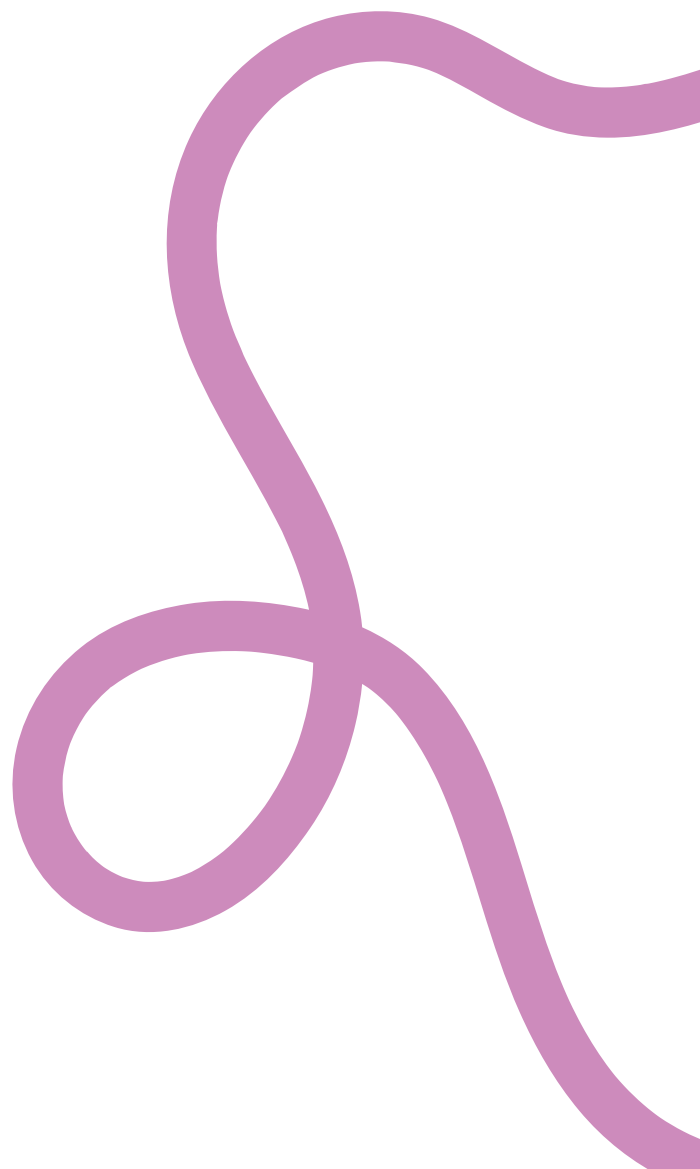
If after booking, your excursion is not approved by the school, please get in touch to cancel your booking as early as possible, so another group may have the opportunity to book.

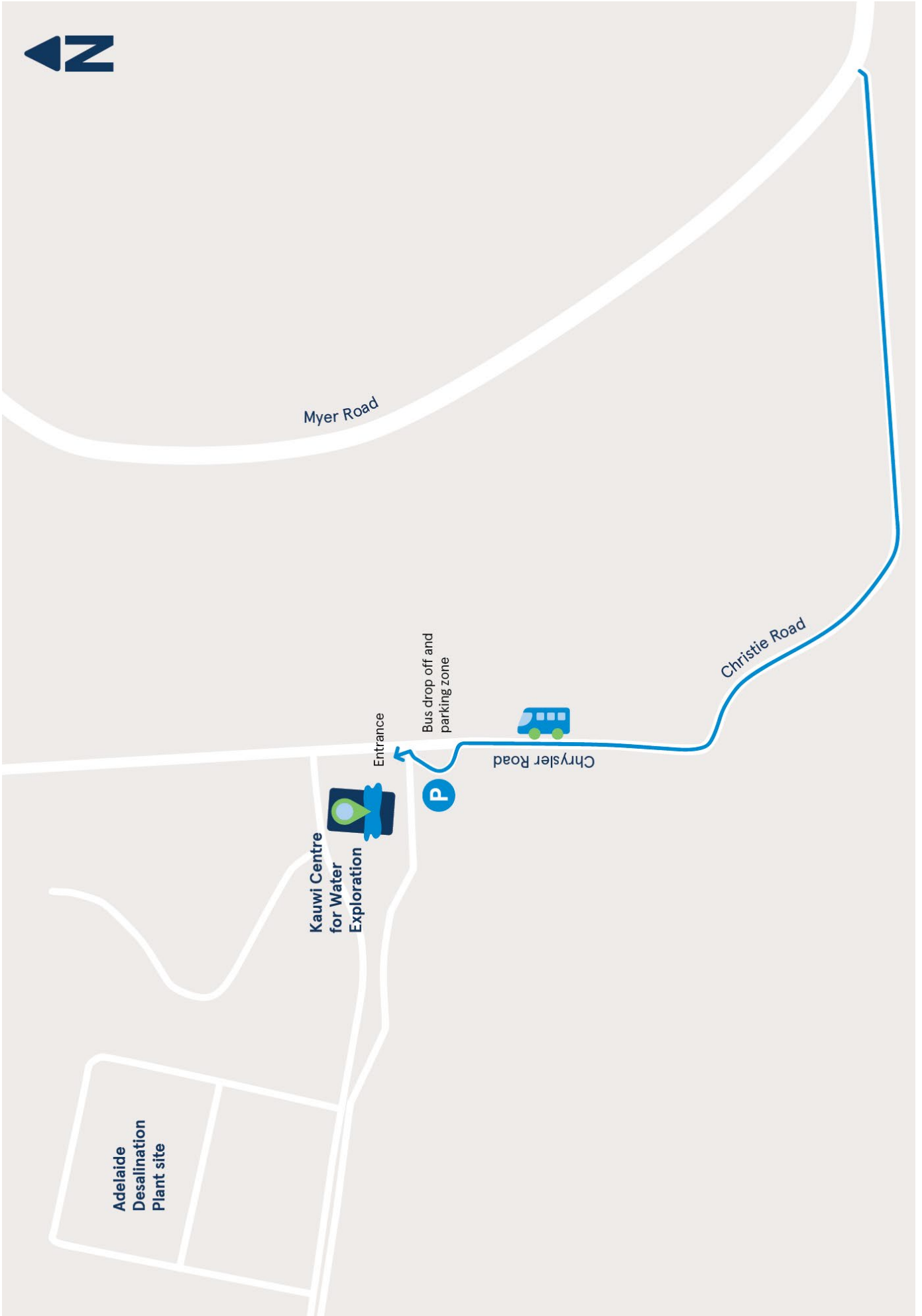
### Important safety information

- Flat and enclosed footwear must be worn by all attendees. We will also provide hi vis vests, which must be worn for the site tour.
- There is no smoking allowed on site.
- Children in Year 3 or below (or aged 8 and under) are not permitted on tour.
- Visitors unable to participate in the tour cannot remain in the Kauwi Centre unaccompanied.
- SA Water has a zero drug and alcohol policy. Random testing may occur at any time.
- The Desalination Plant is an active worksite with trucks and vehicles travelling on the service roads. It is not possible to enter the site by foot.

### Transport and parking

- Bus drivers are required to come on tour and transport your group through the facility. Please make sure that this is made clear to them prior to the day.
- Drivers will need to complete a brief safety induction on arrival. This takes about 10 minutes and requires them to read important safety information, and provide their driver's license.
- There is a bus parking area south of the main gate on Chrysler road. Please let your driver know to look out for this park. If they pull into the main gate, they will need to reverse back out and move to the bus park.
- SA Water offers reimbursement of bus hire up to 25% for regional and disadvantaged schools. This is subject to approval and is assessed on a case-by-case basis. For details, please contact us at [thewell@sawater.com.au](mailto:thewell@sawater.com.au).





## What to expect

1. On arrival, park your school bus in the bus parking area and make your way through the garden into the Kauwi Centre where you will meet your tour facilitator from our education team. Your driver can complete the safety induction at this time.
2. You may like to have a short recess and bathroom break. You can sit on the bench out the front or on the back terrace to eat. Bags can be stored in our bag room. There are displays and information around the Kauwi Centre to look at.
3. We start with a welcome, and introduction to SA Water. We'll discuss what we do, our water sources in South Australia, and the reasons the Adelaide Desalination Plant was built.
4. Next, we'll watch a short video about the desalination process and answer any remaining questions. This intro section in the Kauwi Centre typically lasts 30-40 minutes.
5. We get ready for the site tour by putting on hi vis vests. Bags can be left in the Kauwi Centre.
6. We hop back on your school bus for the site tour. Most of the tour is from the bus, with various stops to describe what happens at each stage of the process.
  - The site tour is from a bus because it is a large site, and importantly a working site. We are mindful of operations and maintenance work, and ensure we follow safety protocols at all times.
7. We hop off the bus at the last stop to see inside one of the main process buildings. Depending on site activities, this may either be through a viewing window or inside one of the buildings. The site tour lasts 45-60 minutes altogether.
8. We return to the Kauwi Centre at the end of the tour to return hi vis vests and wrap up the excursion. If you'd like to allow extra time to complete activities in the Kauwi Centre before leaving, please let us know ahead of time.

## Optional activities

- Bring printed copies of the [Kauwi Centre worksheet](#) if you want students to complete this optional activity. This worksheet is best for students in Years 4-6.
- Students are encouraged to ask questions and read information around the Kauwi Centre. You may like to ask students to:
  - Make note of interesting facts they have learned, or the steps of the desalination process.
  - Write down questions they think of during the tour for further research.
  - Complete an activity you have developed.



## Risk assessment

Sports, adventure, camps and excursions risk assessment for additional hazards		
Hazard identification (What is the issue of concern?)	Risk controls (What are you doing to eliminate or reduce the risk?)	Risk (With all controls in place)
Trip and fall hazards	<ul style="list-style-type: none"> <li>Use handles to get on and off bus</li> <li>Wide, flat paths with no stairs throughout site</li> <li>Handrails available near Kauwi Centre entrance</li> <li>Identify curbs and ledges in carpark</li> </ul>	
Exposure in an outdoor environment	<ul style="list-style-type: none"> <li>Walk on the wide, flat paths provided to avoid the scrub</li> <li>Bring medication for any students with bee or insect allergies. Take first aid kit if following the walking trail</li> <li>Bring water bottles (water available in Kauwi Centre)</li> <li>Wear sunscreen and hats for outdoor time</li> <li>Wear warm clothes during cold weather</li> <li>Outdoor time is limited as we utilise the Kauwi Centre and bus for the tour. However if you'd like to reschedule due to extreme weather, please let us know.</li> <li>Bring medication for any students with allergies</li> </ul>	
Working site with vehicles, machinery, and chemicals	<ul style="list-style-type: none"> <li>PPE must be worn while on site (flat closed shoes, hi vis vest)</li> <li>Pay attention to activity in surrounding area</li> <li>Look both ways before walking onto any roads</li> <li>Always stay together as a group and listen to your guide</li> <li>Guides have completed safety inductions</li> <li>Bus drivers are required to complete safety induction before driving on site</li> </ul>	

WHS Risk Assessment Matrix		Consequences				
		First aid Personal support or counselling	Medical or dental treatment	Hospital emergency department (out-patient)	Admitted to hospital (in-patient)	Death, permanent disabling injury
Likelihood	<b>Certain:</b> to occur at some stage	Medium	High	High	Extreme	Extreme
	<b>Likely:</b> to occur	Low	High	High	Extreme	Extreme
	<b>Possible:</b> could: reasonably occur	Low	Medium	Medium	High	Extreme
	<b>Unlikely:</b> to occur	Low	Low	Medium	High	Extreme
	<b>Rare:</b> Not expected to occur	Low	Low	Medium	Medium	Extreme



## Investigate further

Explore online resources to extend student learning before and after your visit to the ADP. Below you'll find key questions for students to discuss, and resources that will help students learn the answers. Resources vary and may be appropriate for primary or secondary students.

Key questions	Resources
<b>What is desalination?</b>	<ul style="list-style-type: none"><li>View our <a href="#">playlist of 9 short videos</a> about the ADP, including an animation of the reverse osmosis process, and underwater footage of the marine environment around the outfall diffuser.</li><li>This animated <a href="#">video by Amoeba Sisters</a> explains osmosis in simple terms.</li></ul>
<b>How does the Adelaide Desalination Plant work?</b>	<ul style="list-style-type: none"><li>Explore our <a href="#">virtual tour</a> of the Adelaide Desalination Plant</li><li>Take the <a href="#">Project Desalination</a> challenge and build your own desalination plant. You'll need to learn about each step in the desalination process to be able to build your own plant, and to get the tick of approval from our water quality scientists.</li></ul>
<b>What is water security?</b>	<ul style="list-style-type: none"><li>UN Water <a href="#">definition and infographic</a></li><li>The Department for Environment and Water page on <a href="#">water security</a> and <a href="#">water security statement</a></li></ul>
<b>When was the millennium drought and what were the local impacts?</b>	<ul style="list-style-type: none"><li><a href="#">Frequently asked questions</a> about the millennium drought in South Australia.</li><li><a href="#">Historical drought data</a> from the Bureau of Meteorology</li><li>Students could interview a family member about what they remember from this period (including water restrictions).</li></ul>
<b>Why does our water need to be treated (filtered and disinfected?)</b>	<ul style="list-style-type: none"><li>View our <a href="#">Water Quality</a> video series to learn how we use a multiple barrier approach to protect water quality and ensure we have access to safe, clean water.</li><li><a href="#">Water access and sanitation for all</a> is one of the UN Sustainable Development Goals.</li></ul>
<b>Where does our water come from at home and school?</b>	<ul style="list-style-type: none"><li>Look up <a href="#">Your drinking water profile</a> to see your local water sources and what's in your water. Compare your water to other locations in South Australia.</li></ul>
<b>What else does SA Water do?</b>	<ul style="list-style-type: none"><li>Explore our huge range of <a href="#">learning resources</a> on The Well site.</li><li><a href="#">Operation Aqua</a> is a real-time management game that puts you in control of our water network. Can you keep the water flowing to almost 1.5 million residents of Adelaide? You'll need to look after customer needs, keep an eye on cost, manage water sources with a changing climate, and keep up the maintenance of our network.</li></ul>
<b>How can we learn about water in Aboriginal and Torres Strait Islander history and culture?</b>	<ul style="list-style-type: none"><li>Australia's first people have nurtured a deep understanding of water systems and places for many thousands of years. The five episodes of our <a href="#">Water Wisdom series</a> share knowledge through the voices of Adnyamathanha, Ngarrindjeri, Boandik, Kurna, and Barngarla people.</li></ul>