**teacher guide**

**Water 2:**

**Water sources**

# Components

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|  | NAME | DESCRIPTION | AUDIENCE |
|  | *Water sources*teacher guide | This guide explains use of the learning object about water sources and schemes in Western Australia. | teachers |
|  | *Where’s our water?*learning object | This contains information about water supply schemes in Western Australia. Students will use it to extract information for a report. | students |
|  | *Investigating water sources*worksheet | This template may be used to help students structure their information gathering from the learning object. | students |

Purpose

Students **Explore** information about water sources and supply in different areas of Western Australia.

# Outcomes

Students:

* understand WA’s drinking water supply comes from a variety of sources, and relies on different technologies;
* understand there are a range of factors, including climate, geology and population, that influence availability and type of water source in a region;
* realise water requires treatment when it leaves and returns to the water cycle, that is, before and after human use;
* analyse and collate text, graphical, and tabular information; and
* communicate their understanding in a meaningful visual form using digital media.

# Activity summary

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| ACTIVITY | POSSIBLE STRATEGY |
| Students choose one town and investigate its water source and supply by collecting a range of relevant information from the learning object, *Where’s our water?* | small groups |
| Students prepare a presentation of information they’ve collected (e g poster, power point, iBook …). See **Teacher notes** below for guidance. | small groups |
| Students present to the whole class. | small groups |

Teacher notes

**Background to *Where’s our water?***

The learning object presents information on water supply schemes for seven towns and their local areas. Information is presented in sections that relate to the anthropometric water cycle and is in a variety of relevant formats.

Working in small groups students need to navigate the learning object, interpret the information, distil what is relevant and re-present it to the rest of the class.

If different groups look at different towns (supply schemes) then an understanding of different types of schemes for different regional areas and different climate bands of Western Australia, will be achieved.

Water supply schemes included in the learning object are:

* Kununurra
* West Pilbara, represented by Karratha
* Geraldton
* Laverton
* Integrated Water Supply Scheme, represented by Perth
* Margaret River
* Lower Great Southern Supply Scheme, represented by Albany

Each scheme area has an introductory screen with a brief description and an image.

Use the structured data collection worksheet, *Investigating water sources*, if you think students need a template to investigate the learning object.

**Creating a presentation**

Students can use a program such as PowerPoint, Impress (Open Office), Photoshop or iBook Author to put together a presentation of slides or a poster to present to the rest of the class with or without verbal presentation. Students should share out the tasks.

Tips to share with students for creating a good poster (or slides).

* A poster is visual: it should have more images than text.
* Layout: consider your background and borders. Space around text makes it easier to read.
* Readability: break up and space out text using column and line breaks, and use bullet points.
* Readability: make fonts big enough. E g 70 point for title, 24 point for normal text.
* Visual interest: consider the variety of graphics you can use such as charts, graphs, photos, maps and illustrations.
* Consider integrating compatible digital media elements where possible, such as audio, video, Google maps or other apps.
* Lay it out so that the logical flow is like reading a book: left to right and top to bottom.

# Technical requirements

The teachers guide and worksheet require Adobe Reader (version 5 or later), which is a free download from [www.adobe.com.](http://www.adobe.com/) The worksheet is also available in Microsoft Word format.

The learning object requires a modern browser (eg Internet Explorer 8 or later, Google Chrome, Safari

4.0+, Opera or Firefox). It can be placed on a web or file-server and run either locally or remotely in a web browser.

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# Associated SPICE resources

*Water 2: Water sources* may be used in conjunction with related SPICE resources to to teach the topic of water supplies in Western Australia.

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| DESCRIPTION | LEARNING PURPOSE |
| *Water (overview)*This learning pathway shows how a number of SPICE resources can be used in teaching students about how Western Australia secures its water supply. |  |
| *Water 1: Finding water*A video shows a range of potential ideas for how water could be supplied to people living in Western Australia. | **Engage** |
| *Water 2: Water sources*Students use an interactive learning object to explore water sources in a number of regions across Western Australia. | **Explore** |
| *Water 3: Water supply*Students play a board game to investigate the economic, social and environmental factors that must be considered when planning a sustainable water supply. | **Explain** |
| *Water 4: Recycling water*Students investigate the Water Corporation’s groundwater replenishment scheme by conducting background research, an experiment and a survey. | **Elaborate** |