

# FESTIVAL PROGRAM

WELCOME to the 2023 Children's Gngangara Groundwater Festival. This year's program covers all of the engaging workshops that will be offered. Each class will be timetabled into three sessions, one from each stream, as well as the interclass challenge and introductory Mega Water Session.



## introductory session

### MEGA WATER SESSION

Our opening show aims to inspire, amuse and challenge your students as they are introduced to the basics of groundwater, what it is and why it's so important. This session ensures that all students have the same basic understanding of groundwater prior to participating in the individual class workshops.



## interclass challenge

### BUCKET BRIGADE

This popular activity encourages students to think about their water usage as they move the amount of water a person uses in a day from one point to another as a team. The competition is great fun and the pre- and post-discussions help the students understand more about their water-use choices.



## geology stream

### EDIBLE AQUIFER

Students will explore the concept of water movement through different types of substrates such as sand, clay, rocks and gravel in this tongues-on activity! As they build (and eat!) their very own edible aquifers, students will gain an understanding of confining layers, water tables and aquifer geology.



### GROUNDWATER SPIDER

This activity provides students with a fun and easy way to understand the geology of an aquifer. As students build their own edible aquifers out of ice cream, ice and lemonade, they learn about confining layers, contamination, recharge and water tables.



# Festival Program

*"When the well is dry, we know the worth of water."*

– BENJAMIN FRANKLIN



## water quality stream

### **DANGER IN OUR TOWN**

Have your students got what it takes to become the town's 'Contamination Busters'? In this problem-solving activity, students build their own model towns and discuss types of land uses that can cause pollution of groundwater before probing their models to determine the source of contamination of the community's water supply.



### **FISH OLYMPICS**

In this active learning experience, students gain an understanding of water pollutants, and how they negatively impact the natural environment. Learning about surface water contamination and wildlife habitat deterioration, students will understand that just because something looks good doesn't mean that it is.



### **POLLUTION, POLLUTIOFF**

After constructing their own landscape, students will be able to see first-hand how human actions can pollute an environment. They will become familiar with some of the problems groundwater pollution can cause and learn about pollution prevention and clean-up.



### **WETLAND WONDERS**

In this engaging and exploratory session students will look at the role wetlands play in cleaning our water and discover some surprising similarities between wetlands and the human body.



### **WHAT'S FOR LUNCH**

Phosphorous is a key nutrient contributing to algal blooms in the Swan River. Students will discover how our daily activities contribute to the amount of phosphorous entering the river then, as they become part of an aquatic food chain, they will see first-hand how algal blooms affect the plants and animals that live there. Delivered by SERCUL.





# Festival Program

## conservation stream

### EVERY DROP COUNTS

In this prop-filled activity, students will take part in a game of chance to see how much water they can save or waste in different areas of the house before coming up with their own solutions to saving water at home.

### FLUSH IT!

Introducing students to the “Three Ps” in an active race, this activity provides an understanding of what can, and can’t, be flushed down the toilet. Students will classify waste according to the appropriate method of disposal.

### FROG-O-LOGIC

Applying what they know about groundwater, frogs and the environment, students will negotiate their team’s frogs across our giant game board to get from Bennett Brook’s headwaters, all the way to the Swan River.

### LITTER RELAY

In this bin-teresting relay, students will identify the five options for solid waste management: source reduction, composting, recycling, waste-to-energy and landfills. They will explore common methods of municipal waste management and how they vary in different areas.

### ROOT PURSUIT *New!*

Can your banksia reach the groundwater before summer? Learning about our local banksia woodlands and how they are dependent on groundwater, they will explore the impact of dropping groundwater levels as they race their roots to water before it’s too late!

### WATER WAYS *New!*

How many places can water travel and be stored during its journey through the water cycle? Students will chart the complex path water takes as they discover that new water cannot be created and how little is fresh water.

### WOULD YOU LIKE SALT WITH THAT?

Using increasingly salty liquorice, students will discover the effect that increased levels of salinity have on our native vegetation. They will also explore how salinity occurs and how management options can be used to combat some of these issues.



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## free time fun!

As always, there will be a great line-up of fantastic, fun, FREE TIME activities for you class to enjoy during your scheduled lunch break and 'Free Time' sessions. Here is just some of what you can see and do this year:

- Beat out a tune on the African drums
- Get your face painted or an airbrush tattoo!
- Meet some birds of prey or get up close to a python - if you dare!
- Make and take your own memorabilia at Badge Bazaar and Eco Bags
- See the impact we have on the environment at the Boot River and Wacky Wetlands
- Create an insect hotel or get your hands dirty making a Seed Bomb to take home and put in your garden!

Be sure to visit the 'Hardwater Café' where our Water Waiter will provide the ultimate taste test - to determine which of your students have the most discerning taste when it comes to water!

Please note: Students must be supervised in this area. So please bring as many parent helpers as possible along on the day. The smaller the group, the more choice the kids will have to participate in the Free Time activities they want to do!

**Finally, a big thank you to our 2023 Festival sponsors and all of our fantastic volunteers!**



Government of Western Australia  
Department of Water and Environmental Regulation



## CURRICULUM LINKS

All Groundwater Festival activities link to one or more of these strands:

Year Level	Subject	Strand	Year Level Focus
Year 4	Science	Science Understanding	Biological Sciences Earth and Space Sciences
		Science as a Human Endeavour	Use and Influence of science Nature and development of science
Year 5	Science	Science Understanding	Biological Sciences
		Science as a Human Endeavour	Use and Influence of science Nature and development of science
Year 6	Science	Science Understanding	Biological Sciences Chemical Sciences Earth and Space Sciences
		Science as a human endeavour	Use and Influence of science Nature and development of science
ALL	Science	Science Inquiry Skills	Questioning and predicting, planning and conducting, processing and analysing data and information, evaluating and communicating.
	Cross-curriculum priorities	Sustainability	Systems OI.2, OI.3 World Views OI.4 Futures OI.7, OI.9