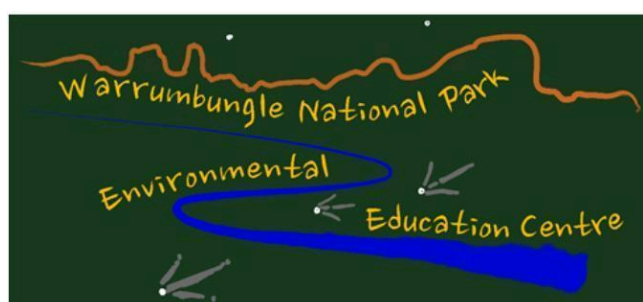


# CASTLEREAGH CONNECTIONS

restoring and caring for our Castlereagh River

## Stage 4 - Program



Education

**With Optimism, education and connection we give students an opportunity to make a difference by connecting them to our Castlereagh River, creating respect, and resilient custodians of our community for a positive change.**

Healthy rivers create a microclimate that benefits wildlife, fish and agriculture by reducing air and water temperatures in hot weather, and protecting biodiversity when it is cold.

Healthy rivers play an important role in reducing the effects of climate change. Riparian soils and leaf litter store large amounts of carbon and are significantly better at reducing nitrates than terrestrial soils.

Healthy rivers increase our vitality and connection to nature,  
who we are and how we live!

### **Inquiry and Focus Question**

- What approaches can be used to sustainably manage water resources and reduce water scarcity?



We acknowledge the Aboriginal people and recognise their continuing connection with, and knowledge about, land, waters and community. We pay our respects to them and their cultures; and to Elders past, present and emerging.



# PROGRAM OUTLINE

## DAY 1: Exploring the Castlereagh River

### Canoe trip

Students canoe down the Castlereagh discussing what this would have been like before Coonabarabran was settled and how the weirs have affected the biodiversity for both flora and fauna.

### Visioning

Visioning is a meditative exercise where we imagine what the Castlereagh could be like and how it can be improved. In this visioning exercise students come back to the Castlereagh River when they are 30 years old and imagine what the Castlereagh River looks and feels like.



## DAY 2:

### Morning Session

### Water quality and survey for Birds, Rubbish and Flora

Students will be divided into two groups and each group will rotate to do both activities.

**Group 1:** Groups will be walking along the path along the Castlereagh to get extensive data for the surveys. Students will also be collecting endemic (plants found naturally in this area) seed to create seed bombs.

Each group will be given survey sheets, binoculars, gloves, LLS guide to weeds in Western NSW and the book on local flora 'Warrumbungle Wildflowers'.

**Group 2:** Using dip nets we will research the amount of water macroinvertebrates which will determine the health of the Castlereagh. We will also test the ph and turbidity.

**Turbidity** is the measure of relative clarity of a liquid. It is an optical characteristic of water and is a measurement of the amount of light that is scattered by material in the water when a light is shined through the water sample. The higher the intensity of scattered light, the higher the turbidity.

## Afternoon Session

### Brainstorming and Painting

#### Brainstorming

Students are divided into small groups to discuss how to make the Castlereagh River a better place for all (animals, people and plants). Students are then brought into a large group where we start to make a bigger plan of what we can do to improve the Castlereagh and who may be interested in being involved on this journey.

#### Painting

Draw the river as you see it improved. Draw from above (a birds eye view) and then draw one that has all the finer details.







Assist students with getting their ideas from their head onto paper. Working with colour mixing, shape, form and design using light and dark.









## Class research

- Cultural Connection and local aboriginal history to the Castlereagh
- Coonabarabran Land Care
- Significance of reintroduced plants, care and planting
- Town beautification Committee
- Stories regarding the Mary Jane Cane Bridge (for Coonabarabran Students only)
- River biodiversity and importance of habitat.
- What is the community's vision?
- Making seed bombs with endemic seed

## NSW CURRICULUM LINKS:

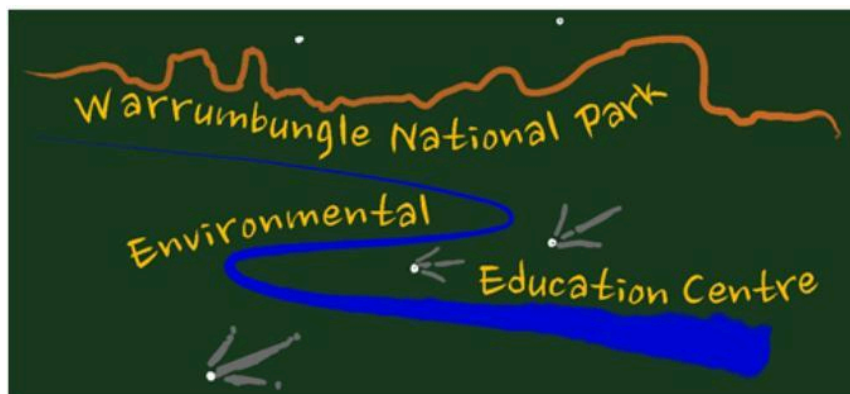
Outcomes	Content
<p><b>PDHPE</b></p> <p>applies and refines interpersonal skills to assist themselves and others to interact respectfully and promote inclusion in a variety of groups or contexts PD4-10</p>	<p><b>Students</b></p> <p>perform routines that connect movements, eg using rolling actions, weight transferring, flight, landing and balancing to explore centre of gravity and stability  </p> <p> adopt inclusive practices when participating in physical activities, for example:(ACPM048)</p> <p>use interpersonal skills to complete a movement task, eg a partner balance, partner passing strategy or team strategy   </p>
<p><b>Science</b></p> <p><b>SC4-4WS</b></p> <p>identifies questions and problems that can be tested or researched and makes predictions based on scientific knowledge</p> <p>Related Life Skills outcome: SCLS-4WS</p> <p><b>SC4-6WS</b></p> <p>follows a sequence of instructions to safely undertake a range of investigation types, collaboratively and individually</p>	<p><b>WS4 Students question and predict by:</b></p> <ol style="list-style-type: none"> <li>a. identifying questions and problems that can be investigated scientifically (ACSYS124, ACSYS139)</li> <li>b. making predictions based on scientific knowledge and their own observations (ACSYS124, ACSYS139)</li> </ol> <p><b>WS6 Students conduct investigations by:</b></p> <ol style="list-style-type: none"> <li>a. collaboratively and individually conducting a range of investigation types, including fieldwork and experiments, ensuring</li> </ol>



	<p>safety and ethical guidelines are followed (AC SIS125, AC SIS140)</p> <p>b. assembling and using appropriate equipment and resources to perform the investigation, including safety equipment</p>
<p><b>GEOGRAPHY</b></p> <p>describes processes and influences that form and transform places and environments GE4-1</p> <p>explains how interactions and connections between people, places and environments result in change GE4-3</p> <p>discusses management of places and environments for their sustainability GE4-5</p>	<p><b>Students</b></p> <p>investigate how the operation of the water cycle connects people and places, for example:  explanation of water flows within a catchment area <b>MS</b> </p> <p>investigate the economic, cultural, spiritual and aesthetic values of water for people, including Aboriginal and Torres Strait Islander Peoples and/or peoples of the Asia region, for example:  (ACHGK041)  </p> <p>description of the ways water is used by people eg agricultural, commercial, industrial and recreational uses <b>VR</b>   </p>
<p><b>VISUAL ARTS</b></p> <p>explores the function of and relationships between artist – artwork – world – audience 4.2</p> <p>recognises and uses aspects of the world as a source of ideas, concepts and subject matter in the visual arts 4.4</p> <p>investigates ways to develop meaning in their artworks 4.5</p>	<p><b>Students</b></p> <p>use their cultural and community identities and social perspectives of interest to them in the development of ideas and interests to represent the world in the making of art</p> <p>investigate the works of selected artists as an aspect of their artmaking practice</p>



**THANK YOU FOR BEING PART OF  
CASTLEREAGH CONNECTIONS, CARING FOR  
AND RESPECTING OUR EARTH AND RIVERS.**



Education