Helping the Hydro





Amelia Tingle, Hannah Billett and Myra Jones



Uranquinty Public School

Creative Catchment Kids

Creative Catchment Kids is an initiative of Wirraminna Environmental Education Centre. It aims to improve engagement between our funding partners and school students by providing opportunities for positive and authentic ventures that encourage students to develop creative solutions to agriculture and natural resource management issues.

www.wirraminna.org/creative-catchment-kids/

Wirraminna Environmental Education Centre

The Wirraminna Environmental Education Centre is located in Burrumbuttock, north of Albury in southern NSW. Since 1995, the centre, which is adjacent to Burrumbuttock Public School, has provided opportunities for discovery and learning about the natural environment, the ecology of the local woodlands and the beauty of native plants.

www.wirraminna.org

Enviro-Stories

Enviro-Stories is an innovative literacy education program that inspires learning about natural resource and catchment management issues. Developed by PeeKdesigns, this program provides students with an opportunity to publish their own stories that have been written for other kids to support learning about their local area.

www.envirostories.com.au

Helping the Hydro

Authors: Amelia Tingle, Hannah Billett and Myra Jones Teacher: Jessica Fuller School: Uranquinty Public School

This book has been published as part of the 2015 Creative Catchment Kids program and associated with Enviro-Stories, a PeeKdesigns education program. For more information about sustainable energy use, head to the Wirraminna website for your copy of the Energy and Water Saving Education Kit for Schools.

Energy and Water Saving Education Kit

The Energy and Water Saving Education Kit for schools is designed for Stage 2 and 3 students to help them understand how energy use and water used can impact on climate change. The kit contains teacher notes and lessons on sources of energy and energy saving, electricity consumption and saving water.

www.wirraminna.org/sustainability-trailer/



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What is hydroelectricity?

Hydroelectricity is a form of electrical energy that is generated from the falling water of reservoirs, flowing rivers, streams or waterfalls. A lot of water that is used in hydroelectric farms comes from dams or lakes. Most of the time, there is a huge dam wall and the controlled release of water helps with things such as irrigation, human consumption, industrial use, aquaculture and hydropower.





How does hydropower work?

Hydropower relies on the amount of electricity generated from each power plant, and on the quantity of the flowing water and the height which it falls.

Hydroelectricity is generated when falling water is channeled through water turbines. The pressure of the flowing water on the turbine blades then rotates a shaft. This shaft drives an electrical generator and converts the motion into electrical energy.

Converting water into hydroelectricity!

Hydroelectricity is a renewable and reliable energy source. When water flows or drops it turns large spinning wheels in the dam that harness the kinetic energy (movement energy). This kinetic energy can then be turned into electricity.

The first water wheels were used 2,000 years ago and the technology has since been refined to become very efficient in electricity.



The main Hydro Farms around Australia





Helping the environment

Hydro power plants are very helpful to the environment, because water is sustainable and renewable. Hydro power plants can be found next to water sources such as lakes, dams or rivers. Rain fills the dams and we take the water and turn it into energy.

The history of hydro farms

Humans have been harnessing water to perform work for thousands of years. The Greeks used water wheels for grinding wheat into flour.

The evolution of the modern hydropower turbine began in the mid 1700s.





Amelia Tingle, Hannah Billett and Myra Jones 2015 Year 4 and 6, Uranquinty Public School

CONGRATULATIONS

Wirraminna Environmental Education Centre and the Creative Catchment Kids Program won the 2015 NSW Junior Landcare Team Award and will be competing in the 2016 National Landcare Awards.



Programme

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Services