



# WATER CYCLE MANAGEMENT

## OUR PLACE IN THE WATER CYCLE...

Humans are a part of the natural water cycle. The amount of water that we need, however, means that we have created technological systems to supply our water to us, and to take our wastewater away. In other words, some of the water from the natural water cycle is diverted to meet our needs.

Ideally, we return our wastewater into the natural water cycle with minimum effects. We also take the smallest amount out of the natural water cycle as possible. (See Info Sheet 4: The Water Cycle to learn more about the natural water cycle.)

### Water Supply

In this region, Rous County Council is the government authority primarily responsible for water supply. It provides water to over 100,000 people in the local government areas of Lismore, Ballina, Byron and Richmond Valley.

Rous County Council provides a secure water supply for human needs whilst also ensuring that sufficient water remains for the healthy functioning of aquatic ecosystems.

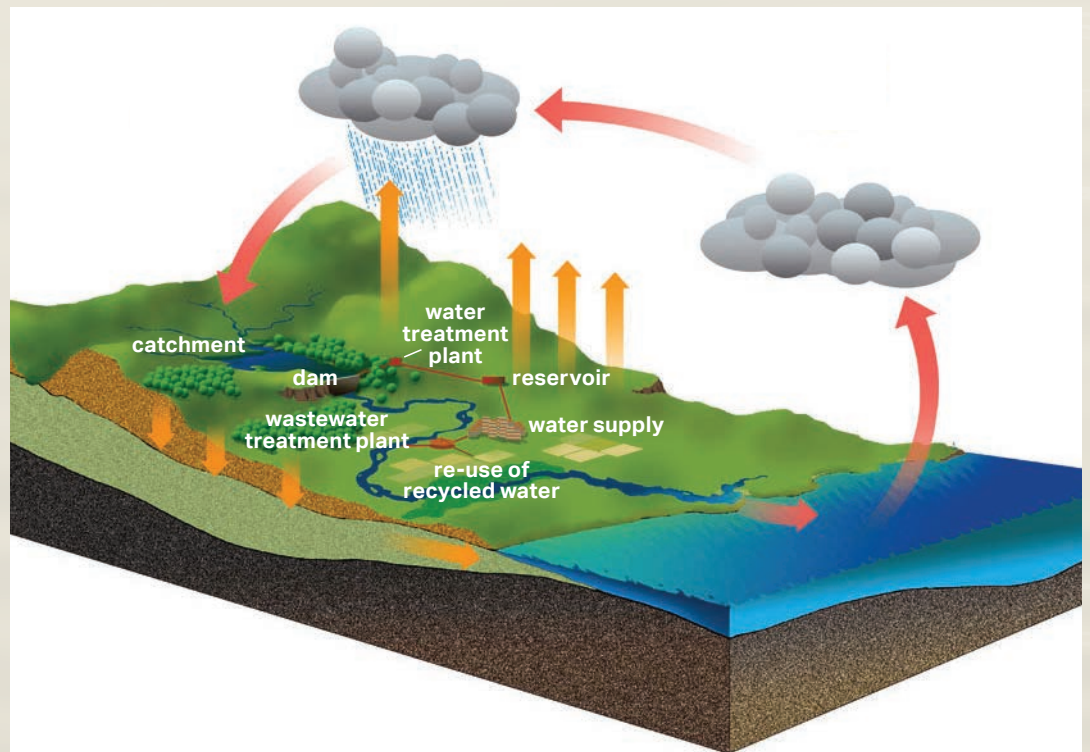
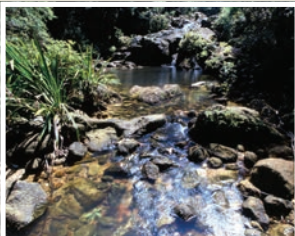
The diagram shows Rous County Council's main activities and responsibilities within the context of the natural water cycle.

### Rous County Council Manages:

- **Catchments** - the areas of land that catch our water supply
- **Dams** - the health and maintenance of the dam and its infrastructure
- **Water Filtration** - providing water quality safe for drinking by humans
- **Reservoirs** - smaller water storage areas closer to urban centres



- **Distribution System** - the system of water mains and pipes
- **Environmental Flows** - amount of water flowing into creeks downstream from the dams
- **Demand Management and Water Recycling** – encouraging people to use less water from the dam, and to use rainwater or 'recycled' wastewater wherever possible.



Rous County Council... careful managers of our water supply.

## Keep reading on this Water Walk to find out what you can do to help!



### Wastewater Management

The local governments of Lismore, Ballina, Byron and Richmond Valley are responsible for effective management of our wastewater.

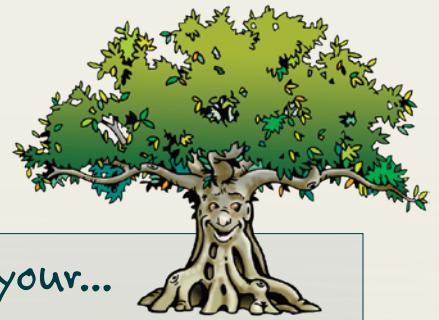
- They operate wastewater treatment plants for sewage, including artificial wetlands for polishing treated wastewater, and reusing biosolids;
- They manage our stormwater (ie, the water that flows down stormwater drains); and
- They regulate wastewater from industrial and agricultural uses.

### Integrated Water Cycle Management

As you can see on the diagram, water and wastewater are a part of the same cycle and therefore need to be managed in an integrated way. Many government organisations, private businesses, community groups and individuals (that means you!) all play their part in this integrated water cycle management. We all need to work together to keep our water and environment healthy.



### TRY THIS!



#### Learn with your...



"Which bit of water cycle management do you think is the most important and why?" (**Hint:** This could be a bit of a trick question to get you thinking!)



"What could happen if we didn't share water between human and environmental needs? What could you see happening? How would you feel about this?"



"Locate where your house would be on the drawing of the water cycle (e.g. in the town labelled 'water supply'). Use your finger to trace the path of water that you drink. First, follow where it goes once it goes down your drain. Second, ask yourself where the water comes from?" (**Hint:** It should go around full circle, first in one direction, then in the other)

**Learning objective:** To understand the humanmodified water cycle and the importance of its responsible management. To understand Rous County Council's role and responsibilities within an integrated water cycle management context.

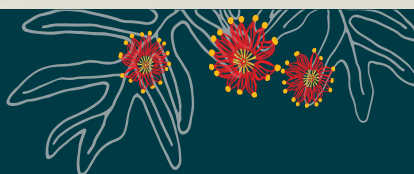


(Sources: World Book Encyclopedia; DPWS web-site; Sydney Water web-site; Sydney Catchment Authority web-site; Water Talk Fact Sheet produced by Ballina Shire Council)

For further information contact:

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These information sheets were originally prepared for Rous County Council by Sustainable Futures Australia in liaison with Widiabul elders. © Rous County Council and Sustainable Futures Australia 2007. This is an educational project for the protection of water land, and for reconciliation.

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