## **Lesson Plan**



### Grade: 5 & 6

### Where does our water come from?

#### Students will be able to:

- understand where their drinking water is sourced and treated
- learn the meaning of water catchment
- understand the connection between land use and water quality

#### **Lesson Details:**



#### Where does your drinking water come from?

Have students research where their drinking water is supplied from.

Students can email their local TasWater Education Officer on education@taswater.com.au with their town details to receive advice about the water supply and treatment plant.

Contact your local Natural Resource Management group to understand what activities occur in the catchment that may impact water quality.



### 2. What is a catchment?

Ask the students to find a definition for the term water. catchment. Why is it important to understand where their water is sourced from. Have them illustrate their water catchment and some impacts on water quality. Share with the class.



#### Plan a tour of a water treatment plant

Students can see first hand that water straight from the river isn't as clean as they think it is. From early 2016, some of TasWater's water treatment plants will be open for tours.

Teach students the meaning of each of the "tion" words that are integral to effective water treatment.

- coagulation
- flocculation
- filtration
- pH correction
- aeration
- chlorination
- fluoridisation

#### **Curriculum Links** Grade 5

#### Science

ACSHE083

#### Literacy

- ACELY1976
- ACELY1704
- ACELY1707

#### Geography

- ACHGK029
- ACHGS033
- ACHGS034
- ACHGS035
- ACHGS038

#### Grade 6

#### Science

- ACSSU094
- ACSHE100

#### Literacy

- ACELY1816
- ACELY1714
- ACELY1717

#### Geography

- ACHGS040
- ACHGS041
- ACHGS042
- ACHGS045

#### Organising Ideas (Cross Curr.)

- OI.5
- **OI.7**
- **OI.8**



<sup>•</sup> Date: July 2015



# Lesson Plan



#### Lesson Details continued:



### 4. Create a water source project.

Get students to create a poster that illustrates the water source, land use, treatment plant, reservoirs, reticulation and their home. A detailed explanation should be provided at each stage including an analysis of some of the land use impacts along the way. TasWater's Education Officer can talk about land use and river health.

## 5. Fast water facts.

Learn some interesting facts about drinking water in Tasmania.

- TasWater own and manage the water supply systems in Tasmania
- There are 76 drinking water systems
- 5,993 km's of water mains
- Over 200,000 water connections
- 60 water treatment plants and dosing stations
- We operate 930 pumps
- 46% of the total number of drinking water supply systems are provided to communities of less than 500 customers
- water treatment plants are very expensive to build
- The Tasman Peninsula has no reticulated water supply by **TasWater**
- It was cheaper to pipe treated water to Lilydale from Launceston rather than construct a new water treatment plant
- Drinking water is sourced from 46 catchments covering an area of approximately 18% of Tasmania

#### **Lesson Reflection:**

- 1. Why should we be aware of where our water is sourced from?
- 2. What are the steps of the water treatment process?
- 3. Describe where water is sourced from and treated prior to arriving at your school.
- 4. What are the chemicals used in the water treatment process?



### Did you know?

Many Tasmanian's receiving water from TasWater do not know where their supply is sourced from or where it is treated.

#### More Information

Contact our Education Officers who can visit your classroom and share some engaging water activities with your students. Alternatively visit our website, complete an online request form and our Education Officers will contact you.

Email: education@taswater.com.au

Website: www.taswater.com.au

#### **Additional Activities**

Water was the first thing explorers searched for when deciding where to settle in Tasmania. Have students research the settlements of Hobart, York Cove, Emu Bay and Tarleton - what do they all have in common? Explain why water was important beyond human consumption. Note major centres on the mainland - they are all settled by a river.



• Date: July 2015

