

## **COMMUNITY WATER PROJECT**

### **Report from Ogilvie High School**

#### **BACKGROUND:**

The Grade 7 Science syllabus at Ogilvie includes a unit which looks at the interaction of living things and their environment. Since water is such an important part of this environment we study the chemistry, unique nature and environmental importance of water in our world. We also investigate the value and uses of water and issues such as its misuse, recycling and conservation.

The focus of this water investigation for class 7W1 in 2006 was the water usage within the school.

#### **THE PROCESS:**

The class consisted of 29 students ranging in age from 12 to 13 years.

They were divided into 4 groups of 7 to 8 students and each group was given a task to perform.

They had to research and prepare material about one aspect of water use within our school community, which consists of 1197 people; students, teachers and non-teaching staff. The class had approximately 2 weeks to complete their research.

The findings of the class were presented to the Principal, Mrs. Judy Timbs, representative of the School Association, Mr. Frank McCann and government representative Mr. Doug Parkinson, as part of Science Week celebrations in August 2006. They also produced posters and displays to help raise the awareness of water conservation within the school. Data from the water usage audit was utilised to help prepare and submit a submission for a Federal Government Community Water Grant. Ogilvie High School was successful in receiving a grant, which has been used to install water saving devices around the school. These include spring loaded taps, dual flush toilets and soil moisture sensors.

#### **THE FUTURE:**

The class have taken ownership of the project and followed it through in their Society and History and Literacy classes this year. They helped organise the launch of the Community Water Grants by Senator Eric Abetz at Ogilvie.

The proposal is for them to do another audit in 2008 and use the data to make further recommendations to school management about water conservation in the school.

Ogilvie High School was also successful in being chosen as one of twelve pilot schools in Tasmania to participate in the Australian Sustainable Schools Initiative (AuSSI). We will develop a whole school environment plan and the community water project will be an on-going focus of this plan.

Heather Omant  
Learning Area Leader  
Ogilvie High School



**OGILVIE HIGH SCHOOL  
COMMUNITY WATER PROGRAM**

**ASSESSING:** Scientific Inquiry

**BACKGROUND**

We have learned that water is a very important chemical that is essential for all living things. It is recycled in nature by means of the water cycle but water is a precious commodity which we should conserve and use wisely.

Our school community uses and wastes water all the time in a variety of ways. We will be investigating the manner in which water is used and means by which we can help with this as individuals and as a school.

**WHAT TO DO**

You will be allocated to a group and given a task to perform which looks at different aspects of water usage around our school.

We will survey this usage, research and make suggestions which will help the Ogilvie High School community. We have access to the laptops and computers in W9 over the next two weeks to help with our investigations.

After performing the task your group will report back to the rest of the class about your findings, research and suggestions.

You have approximately two weeks to work on your tasks.



Heather Omant- Ogilvie High School

2006

## **TASK ONE**

### **THE WATER USED BY FLUSHING TOILETS**

Flushing toilets in the school use a large amount of water. Our toilets are older ones and most are single flush.

#### **WHAT TO DO**

- ❖ Make a list of the number of toilets in each block within the school. You might like to allocate a different area for each person to survey.
- ❖ What type of toilets are they- single flush or dual flush?
- ❖ Research the amount of water which is used each time the toilets are flushed and estimate how much water is used daily in each block and as a school as a whole.
- ❖ Project this to estimate the usage over the school year.
- ❖ Research the amount of water which can be saved by using dual flush toilets- use information on the internet and from plumbing suppliers.
- ❖ Find out the approximate cost of replacing all the school toilets with more water efficient ones.
- ❖ Make a group recommendation which you can present to the class.



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## **TASK TWO**

### **THE WATER USED BY TAPS**

There are many taps within the school, in the toilets, the kitchens and the science laboratories.

### **WHAT TO DO**

- ❖ Survey the different areas of the school which use taps.
- ❖ List the different types of taps and estimate what the water usage is:
  - during a single use
  - over the day
  - over the school year
- ❖ Research alternative tap types and the difference in water use, for example automatic turn off taps in the toilets.
- ❖ Estimate how much water could be saved by changing the taps.
- ❖ Estimate the cost of replacing the taps with more water efficient ones.
- ❖ Prepare a group report to present to the class.



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## **TASK THREE**

### **THE IRRIGATION SYSTEM**

Watering our school grounds uses a large amount of water. There are automatic sprinklers in place which work on a timer, but you may have noticed that the grass is watered in wet weather as well as dry.

### **WHAT TO DO**

- ❖ Survey where there are sprinklers around the school and show them on a map.
- ❖ List other ways in which water is used in the garden and grounds, such as hand held hoses
- ❖ Estimate how much water is used by irrigation. You may have to ask Mrs. Voss in the office if she can give you this information.
- ❖ Research other alternative types of sprinklers which reduce water usage.
- ❖ Find out the difference wetness sensors would make to the weekly and yearly water use on irrigation.
- ❖ Are there any other suggestions which would help, like drought resistant grass? Would it be cost effective to replace existing grass?
- ❖ Prepare a report to present your group findings to the class.



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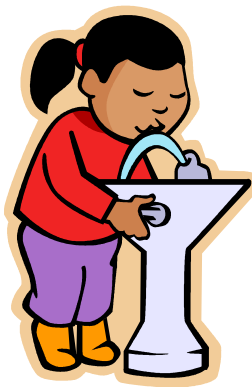
## TASK FOUR

### COMMUNITY AWARENESS

The school community as a whole can help reduce water usage in many ways. These can include turning off taps when not in use, turning them off more quickly and reporting any unnecessary wastage of water.

### WHAT TO DO

- ❖ Make up a survey for students and staff about their attitude and use of water around the school. Don't make it too complicated- for example pick ten important questions to ask.
- ❖ Analyse these results and make up a report about them.
- ❖ Make posters to put in areas around the school where water is being used.
- ❖ Put notices on the daily news sheet and *In Touch*.
- ❖ Report your findings back to the class.



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