

Investigation 2.A: Societal Uses of Water

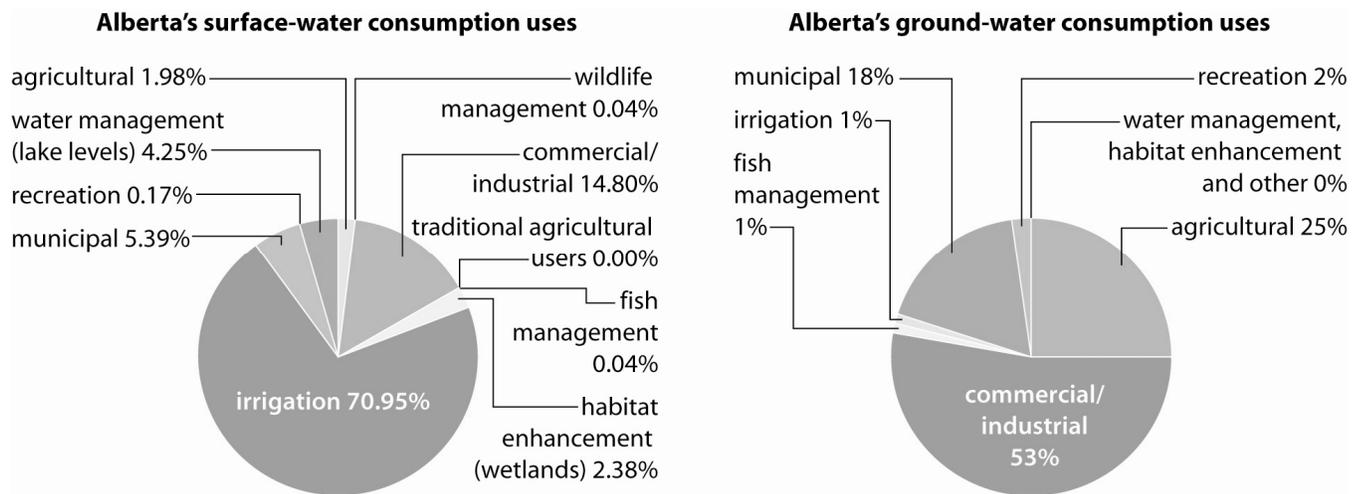
Purpose: Determining water use by different sectors of society.

Issue

About 97.5 percent of the water that is consumed in Alberta comes from surface water, such as the water in lakes and rivers. The rest of the water that is consumed comes from ground water, which collects when rain or melted snow filters down through the ground and accumulates underground in large gaps in the rocks.

Gathering Data and Information

1. In a group, choose one of the categories of water use in Alberta that is shown in the pie graphs.



Answer the following questions:

- How much water (in L) is used for this purpose?

- What are some ways (if any) to reduce the use of water for this purpose?

- Is water quality affected? If so, what can be done to restore water quality?

CHAPTER 2	Investigation 2.A: Societal Use of Water (cont'd)	BLM 2.1.7
HANDOUT		

4. One solution to meeting the demand for irrigation in drier regions of Alberta is to use pipelines to divert water from other parts of the province. Evaluate the arguments for and against doing this:

Benefits	Costs
The diversion would allow for the growth of economically important crops.	The removal of large amounts of water from a particular source (bulk water removal) would be permanent.
The diversion would allow for the growth of important food crops.	Ecosystems that depend on the source of the diverted water could be negatively affected.
Rural communities could use the diverted water in their homes and town buildings.	Diversion could introduce species, such as parasites, from the water source into ecosystems in the other region.

- a) With your classmates, discuss whether the risks of diversion outweigh its benefits.
- b) What questions would you pursue to evaluate, more thoroughly, the risks and benefits of a diversion strategy for a specific rural area?