THEME:	Watershed
SCOPE & SEQUENCE UNIT:	What's your watershed address?
OBJECTIVE:	We all live in a watershed
ACTIVITY:	Find your watershed address

Notes:	In-class activity
Teacher Prep.:	Download atlas of Canada (see below) and print for students and overhead copy. Though not critical, if possible obtain a digital map of your local area and its watersheds from a municipal or provincial government office.
Time:	50 minutes

Skills:

- Reading
- Critical & creative thinking
- Ecological literacy
- Writing & oral language

Objectives:

- To orient to a map
- To see a landscape as a watershed
- To understand that everyone lives within a watershed
- To recognize that Canada is a country with a lot of freshwater rivers and lakes and is surrounded by oceans on three sides

Background Information:

An upper reach of a large watershed can be named as a separate watershed, as watersheds are identified in a hierarchical approach. A first order creek or river (being one in the upper reaches) shares a separate watershed from another first order creek or river on the other side of the valley, for example. Yet each flows into the same bigger river that combines the entire area of both watersheds together – like tree branches coming into the same trunk, or the fingers on a hand coming into the same palm – each is individual yet part of the same big system. Within a hierarchical approach, watersheds can be defined very locally or on a continental scale.

Vocabulary:

Watershed: an area of land in which all water eventually drains into the same river, lake or water body. A small watershed can be part of a bigger watershed.

Materials:

Access to internet, computer lab else class projector

If projecting in the classroom, download map of Canada's watersheds (see below), print out student copies and overhead copy; otherwise use computer lab with projection of facilitator's computer while students follow along on theirs.

If projecting - coloured markers - for students, for overhead.

Introductory Discussion:

Start with a very brief animation of a watershed. Watershed animation – 10 sec http://techalive.mtu.edu/meec/demo/Watershed.html

Project the atlas of Canada. <u>http://atlas.nrcan.gc.ca/site/english/maps/archives/poster/watershed_bassin_versa</u> <u>nt</u>

Orient to the image asking students for their knowledge of points of interest; consider provinces and territories, capital cities, mountain ranges, land types, major rivers and lakes, and oceans. Determine how the watersheds are defined geographically (land contours of major mountain ranges, major rivers and basins. With each ocean watershed identify major rivers. Notice the basin drainage into Hudson Bay and the closed watersheds that do not flow to an ocean. (If using paper maps have students use markers to delineate some of these features on their map.) (If you are also using an overhead projector as well, switch to the overhead and delineate features with students so that they can follow along with you and mark their own maps.) Have students identify their ocean watershed. Zoom in on the map for finer definition of the local watershed. Students fill out their student page. (If you have obtained a copy of your local region with the watersheds marked, use this image for even finer definition of student watershed address.

Have students complete the Student Page.

Reflection Discussion:

Dialogue with students following their explorations on the Internet site and maps as to what defines a watershed. (landscape and contour of land, gravity). Dialogue on parts of a watershed, as in upper or lower tributaries, going from regional map to continental map.

Student Page:

My Watershed Address

Resources:

Natural Resources Canada – The Atlas of Canada – Discover Canada's Watersheds <u>http://atlas.nrcan.gc.ca/site/english/maps/archives/poster/watershed_bassin_versa</u>nt/#download

use this site interactively or download the map (see bottom of webpage) and use as a pdf

Poster map, "Discover Your Watershed", by CWF, Canadian Wildlife Federation, www.wildeducation.org

http://www.cwf-fcf.org/en/resources/posters--handouts/posters/watershed.html this is the same map as above but you can order it as a poster for free, at CWF (Canadian Wildlife Federation)

Resources – Gulf Islands Specific:

Waterscape Gulf Islands Poster.pdf Map of Salt Spring Island.pdf

See also: <u>Cusheon Watershed Management Plan</u> <u>St. Mary Lake Watershed Management Plan</u>

Name:	Date:

(mm/dd/yyyy)

My Watershed Address

Canada has _	ocean watersheds.
The names c	of Canada's ocean watersheds are:

Canada also has some closed watersheds.

A cl	osed	watershed	l	
	0000			

My ocean watershed address is ...

On a smaller scale, my watershed address is ...

More locally, my watershed address is...