IRRIGATION IN LAKE COUNTRY

ELEMENTARY SOCIAL STUDIES

Lake Country MUSEUM & ARCHIVES
11255 Okanagan Centre Rd. W.
Lake Country, BC V4V 2J7

ACTIVITY OVERVIEW:

1. Students will explore how the early community met the water requirements for their farms
2. Specifically looking at the Seaton Reservoir and the Oyama Flume
   a. We recommend showing Arnold Trewhitt's 'Flume' video
3. Students will then work in teams to build their own irrigation systems

BIG IDEA: We shape the local environment, the local environment shapes who we are & how we live; the pursuit of valuable natural resources has played a key role in changing the land, people, & communities of Canada.

COMPETENCY:

Significance, continuity and change, cause and consequence.

CONTENT:

Key events & developments in the local community; characteristics of the local community that provide organization & meet the needs of the community; relationship between humans & their environment

WHAT WILL WE KNOW:

- History of irrigation in the Okanagan, specifically Lake Country
- How the land has been reshaped for agricultural use

FURTHER INQUIRY:

Field Trip Suggestions

1. Jack Seaton Park
2. Lake Country Museum and Archives

We respectfully acknowledge that the land on which the Lake Country Museum is situated, where this lesson was developed, is on the unceded territory of the Syilx (Okanagan) Peoples.

Lake Country Heritage and Cultural Society

11255 Okanagan Center Road West

Lake Country, BC V4V 2J7

Irrigation in Lake Country

Learning Objective(s)	Students will hear a narrative about Lake Country settlers establishing irrigation for their farms and community, specifically the Seaton Reservoir and the Oyama flume. Students will then apply what they have learned to create their own system to move water around the valley.
Suggested Grades	Elementary
ACTIVITY	
Materials	● 2 paper/Styrofoam cups for each group ● plastic straws ● popsicle sticks ● tape ● glue ● any other materials that you think would aid students in their design ● towels (in case of spills)
Introduction	Water plays an essential role for both the environment and human needs. After going through the lesson on the flume with the class tell them that you are giving them the challenge of designing an irrigation system that can transport water from a reservoir down to a plot of farmland (from a desk to the floor). Showing the value of irrigation through the following activity will allow students to develop a deeper understanding of what people like John Wesley Arnold had to design and build in order to make the land in the valley suitable for growing other plants. Students can work in groups or individually for this activity and need to build a design that they think will work to move the water before the water is poured into the first cup. Make sure the students know that since we are trying to conserve water that their transport system must be relatively spill proof. (we don't want to waste such a precious resource) Before the designing begins ask your students a few questions ● Which way does the water move? Towards the top or bottom? ● How can we influence the movement of the water? ● How can we make sure all the water gets down to the bottom safely?

	*You may find it beneficial to draw up a visual on the board and relate that to the items they have available to them (i.e. the cup that starts with the water is your reservoir at the top of the hill).
Building the irrigation system	Allow the students to come up with their own design. You could suggest students draw out their design plans before beginning to build. Once each student/group has finished, begin testing the irrigation systems. Does the water make it from the reservoir to the plot of land? Was there any spillage? If there was, have the class brainstorm together what can be changed/added. Want a more complicated task? Have students try to design a way to get the water into two different cups
Historical Context	Link to video narration In the 1860s, settlers began planting fruit trees in the Okanagan. This was tricky for them because the land was so dry. The Okanagan area was so dry it became known as the "Interior Dry Belt!" The farmers had access to an incredibly large body of water known as the Okanagan Lake, but because of the long, tall hills and the water's inability to flow uphill, the farmers had to come up with another plan. At the top of the hills, there were some hollowed lakes, one of them is where Jack Seaton park is now. The farmers decided to take water from these smaller lakes at the top of the hill. The farmers built streams using ditches, pipes, and a special contraption called a flume, to direct the water to flow down to their farms. Since the amount of water was limited, competition for it was intense, and only the first to apply got the first water right from that source. At first, agricultural water rights were generally taken out by individuals. This changed in the Okanagan as development companies came on the scene at the beginning of the 20th century and opened up blocks of land for settlement. To sell the land, these companies had to provide irrigation water and so applied for water rights. Usually, these rights were turned over to water companies composed of the land purchasers thus giving those users control of their water. (A flume is an above ground trench meant to transport water from one place to another.) One of the people behind building these new water flumes was a man known as John Wesley Arnold. John was born in Ontario and traveled all the way across Canada to the Lake Country area in 1910. He was married to a lovely woman named Lucinda Yott and had two young sons, Arthur and Nelson. He built the flumes to transport the water all around Lake Country and then at night he worked on building a home for him and his family.

	There was a reservoir near the top of the ridge on Camp Road just west of the entrance to Seaton Park. It is overgrown now, but an old section of wooden irrigation pipe leading from this reservoir can still be seen sticking out of the bank above Tyndall Road near Camp Road. Without the flumes and other waterways, Lake Country could not have had any orchards or fruit trees that we have today, and the land would revert to its natural state of bunch grass and pine trees. This was truly an amazing accomplishment. (Taken in part from Ken V. Ellison in "Irrigation" from *Spirit of Lake Country: Heritage and Culture*)
Further Inquiry	• Watch "Flume: The story of the original irrigation system in Oyama, BC" • Read "Irrigation and the Beginning of Agriculture" • Read "Irrigation is King" *Field Trip Suggestions* Visit **Jack Seaton Park** in Lake Country: 1960 Camp Rd. There was a reservoir near the top of the ridge on Camp Road just west of the entrance to Seaton Park, though it is now overgrown. An old section of wooden irrigation pipe leading from this reservoir can still be seen sticking out of the bank above Tyndall Road near Camp Road. Jack Seaton Park is also a great area for a number of outdoor activities to do with the class. **Lake Country Museum and Archives** The Museum has a wide range of exhibits and activities for your class to take advantage of. There is also a playground and field behind the building and the lake nearby that students can make use of for various activities. There may be the opportunity for a guest lecturer to visit your classroom or be present at the museum with the knowledge of more local history stories. If interested, please contact the Museum ahead of time.