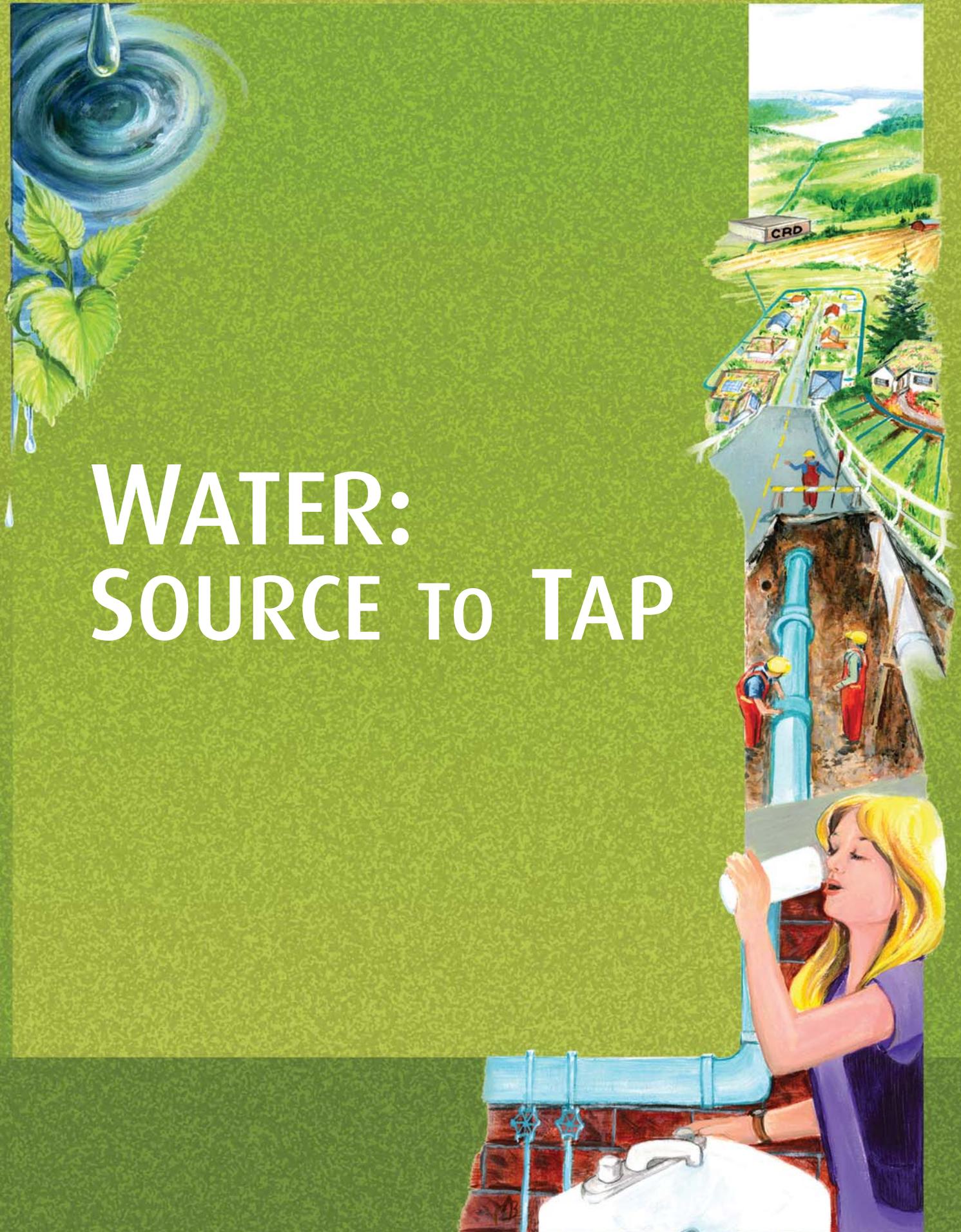


WATER: SOURCE TO TAP



GREATER VICTORIA WATER SUPPLY WATERSHEDS PROVIDE MOST OF THE WATER WE USE EVERY DAY. This section is intended to further the student’s understanding of how drinking water moves from the Greater Victoria Water Supply Area (GVWSA) into our homes, schools, and businesses. The disinfection and distribution of water from the reservoirs is explored in addition to how this precious resource is managed.

Water flows from Sooke Reservoir through a series of pipes to disinfection facilities and then through another pipe network into the homes, schools, and businesses of the Greater Victoria area. Our drinking water begins its journey at the southern end of Sooke Reservoir and enters the intake tower where it is screened through stainless steel screens. From the intake tower, most of the water passes through two pipelines to the Head Tank and then through the 8.8 km long Kapoor Tunnel to the Japan Gulch Disinfection Facility. The Greater Victoria Drinking Water Supply System actually uses two disinfection facilities: the large one at the Japan Gulch Disinfection facility which disinfects all of the water in the Greater Victoria Drinking Water System except for Sooke and East Sooke, and a small one at Sooke River Road which disinfects the water for Sooke and East Sooke. From these facilities, the disinfected water is distributed via thirteen municipal and electoral area drinking water distribution systems. Once the water reaches the homes, schools, and businesses of the Greater Victoria, it is our responsibility. Sustaining this critical resource requires each of us to use water with care.

Water quality professionals use knowledge of water’s unique physical and chemical properties to design effective water treatment systems. Because water can dissolve substances easily, it can pick up contaminants. Water quality professionals design disinfection processes to deal with any water contaminants and to maintain high water quality for our taps. Water quality is one of the critical aspects of managing our drinking water supply.

Water is an important natural resource and its management is critical to a variety of stakeholders. Most water supply and watershed management approaches focus on “best practices” that are intended to maintain healthy ecosystems for present and future generations. However, protecting and supplying high quality drinking water is a complex challenge in which land use, government regulation, and everyday water use by people all play a role.

THIS SECTION CONTAINS FIVE ACTIVITIES FOR STUDENT LEARNING:

- *Greater Victoria Drinking Water: From Source to Tap*
- *Water Treatment in Greater Victoria*
- *Decisions, Decisions: Tap or Bottled Water*
- *Water Monitoring Around the World*
- *Lake at Stake*

