Our river valley, once a transportation corridor and source of mineral riches, is now spectacular parkland. The valley also is a window into Edmonton’s geological landscape or geosphere. In our geoscape, we see geological forces carving the valley, creating resources and hazards, geological layers opened like the pages of a book for reading and a trek and remarkable view. Continue to see where and study these facts and learn to control our future.

**Geoscapes**

**FLOODING: all washed up**

**VALLEY FORMATION: first chapter then closer**

The North Saskatchewan River begins in a valley carved by the underlying sediments and rock around 11,800 years ago. Early in the geological history, the river began to create the valley where we now live. The valley is 19 km wide and 20 km long, and is 500 m deep. The valley is the result of a combination of the river’s erosional and depositional processes. The river has been in the valley for 11,800 years and is still carving it.

**RESOURCES**

**River Valley Geology**

**LET'S RIDE**

The geological history of the river valley is rich and varied. It includes the formation of the valley, the development of the river bed, and the deposition of sediments. The valley is a prime example of the role of the river in the development of the landscape. The river valley is a place of great natural beauty and is a valuable resource for the people who live in it.

**Geological Time**

**Regional Resources**

**ENERGY & MINERALS: the Edmonton region has it all**

The Edmonton region is rich in energy resources and minerals. It is home to some of the world’s largest and most productive oil and gas fields. It is also home to a variety of other energy sources, such as coal, natural gas, and wind.

**COAL & GAS: energy from fossils**

**GLACIAL GEOLOGY**

**CLAY: the new Frontier**

**GROUNDWATER**

The Edmonton region is rich in water resources. It is home to a variety of water bodies, including lakes, rivers, and wetlands. The region is also home to a variety of water-related industries, such as the production of water-related products and services.

**SUNSHINE IN THE VALLEY: all year long**

**RIVER FLOWS: water - what flow direction**

**RESOURCES**

**DRAINAGE AND SAND: the foundation of our society**

The drainage and sand resources of the river valley are important for the development of the region. They are used for a variety of purposes, such as construction, agriculture, and recreation.

**GLACIER WALL**

The ice age in the Edmonton region is a time of great change. It is a time when the landscape was shaped by the movement of ice sheets. The ice age ended around 11,800 years ago, but the effects of the ice age can still be seen in the landscape today.

**GLACIOTECTONIC: On schrinking**

The ice age in the Edmonton region was a time of great change. It was a time when the landscape was shaped by the movement of ice sheets. The effects of the ice age can still be seen in the landscape today.

**GROUNDWATER**

The groundwater resources of the river valley are important for the development of the region. They are used for a variety of purposes, such as drinking water, irrigation, and industrial uses.

**SET THE TABLE: with water**

The Edmonton region is rich in water resources. It is home to a variety of water bodies, including lakes, rivers, and wetlands. The region is also home to a variety of water-related industries, such as the production of water-related products and services.

**DRAINAGE AND SAND: the foundation of our society**

The drainage and sand resources of the river valley are important for the development of the region. They are used for a variety of purposes, such as construction, agriculture, and recreation.

**GLACIER WALL**

The ice age in the Edmonton region is a time of great change. It is a time when the landscape was shaped by the movement of ice sheets. The ice age ended around 11,800 years ago, but the effects of the ice age can still be seen in the landscape today.

**GLACIOTECTONIC: On schrinking**

The ice age in the Edmonton region was a time of great change. It was a time when the landscape was shaped by the movement of ice sheets. The effects of the ice age can still be seen in the landscape today.

**GROUNDWATER**

The groundwater resources of the river valley are important for the development of the region. They are used for a variety of purposes, such as drinking water, irrigation, and industrial uses.