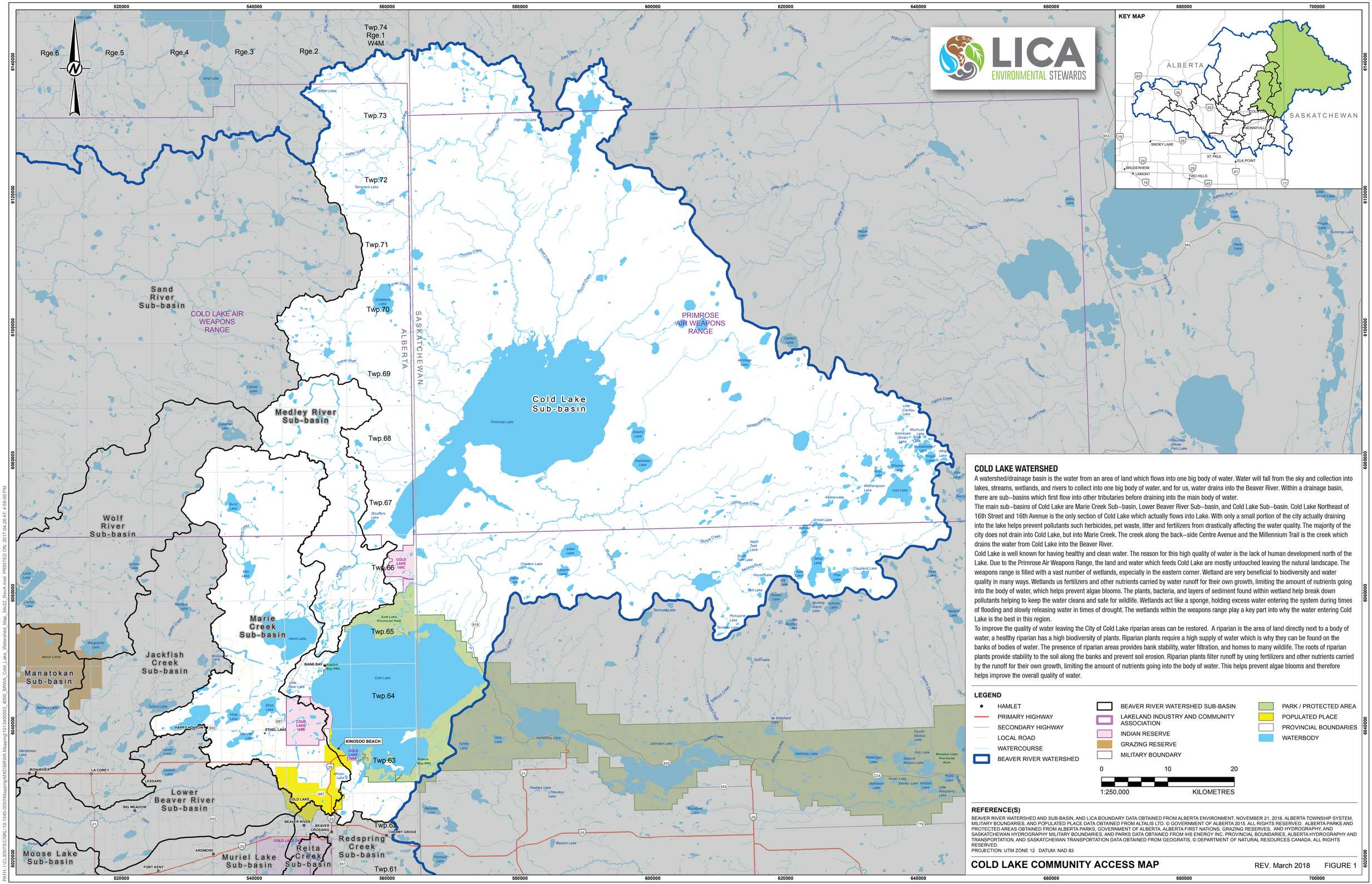

COLD LAKE WATERSHED

A watershed/drainage basin is the water from an area of land which flows into one big body of water. Water will fall from the sky and collection into lakes, streams, wetlands, and rivers to collect into one big body of water, and for us, water drains into the Beaver River. Within a drainage basin, there are sub–basins which first flow into other tributaries before draining into the main body of water.

The main sub–basins of Cold Lake are Marie Creek Sub–basin, Lower Beaver River Sub–basin, and Cold Lake Sub–basin. Cold Lake Northeast of 16th Street and 16th Avenue is the only section of Cold Lake which actually flows into Lake. With only a small portion of the city actually draining into the lake helps prevent pollutants such herbicides, pet waste, litter and fertilizers from drastically affecting the water quality. The majority of the city does not drain into Cold Lake, but into Marie Creek. The creek along the back–side Centre Avenue and the Millennium Trail is the creek which drains the water from Cold Lake into the Beaver River.

Cold Lake is well known for having healthy and clean water. The reason for this high quality of water is the lack of human development north of the Lake. Due to the Primrose Air Weapons Range, the land and water which feeds Cold Lake are mostly untouched leaving the natural landscape. The weapons range is filled with a vast number of wetlands, especially in the eastern corner. Wetland are very beneficial to biodiversity and water quality in many ways. Wetlands us fertilizers and other nutrients carried by water runoff for their own growth, limiting the amount of nutrients going into the body of water, which helps prevent algae blooms. The plants, bacteria, and layers of sediment found within wetland help break down pollutants helping to keep the water cleans and safe for wildlife. Wetlands act like a sponge, holding excess water entering the system during times of flooding and slowly releasing water in times of drought. The wetlands within the weapons range play a key part into why the water entering Cold Lake is the best in this region.

To improve the quality of water leaving the City of Cold Lake riparian areas can be restored. A riparian is the area of land directly next to a body of water, a healthy riparian has a high biodiversity of plants. Riparian plants require a high supply of water which is why they can be found on the banks of bodies of water. The presence of riparian areas provides bank stability, water filtration, and homes to many wildlife. The roots of riparian plants provide stability to the soil along the banks and prevent soil erosion. Riparian plants filter runoff by using fertilizers and other nutrients carried by the runoff for their own growth, limiting the amount of nutrients going into the body of water. This helps prevent algae blooms and therefore helps improve the overall quality of water.

LEGEND

- HAMLET
- PRIMARY HIGHWAY
- SECONDARY HIGHWAY
- LOCAL ROAD
- WATERCOURSE
- BEAVER RIVER WATERSHED
- BEAVER RIVER WATERSHED SUB-BASIN
- LAKELAND INDUSTRY AND COMMUNITY ASSOCIATION
- INDIAN RESERVE
- GRAZING RESERVE
- MILITARY BOUNDARY
- PARK / PROTECTED AREA
- POPULATED PLACE
- PROVINCIAL BOUNDARIES
- WATERBODY

0 10 20

1:250,000 KILOMETRES

REFERENCE(S)

BEAVER RIVER WATERSHED AND SUB-BASIN, AND LICA BOUNDARY DATA OBTAINED FROM ALBERTA ENVIRONMENT, NOVEMBER 21, 2016. ALBERTA TOWNSHIP SYSTEM, MILITARY BOUNDARIES, AND POPULATED PLACE DATA OBTAINED FROM ALTALIS LTD. © GOVERNMENT OF ALBERTA 2015. ALL RIGHTS RESERVED. ALBERTA PARKS AND PROTECTED AREAS OBTAINED FROM ALBERTA PARKS, GOVERNMENT OF ALBERTA, ALBERTA FIRST NATIONS, GRAZING RESERVES, AND HYDROGRAPHY, AND SASKATCHEWAN HYDROGRAPHY MILITARY BOUNDARIES, AND PARKS DATA OBTAINED FROM IHS ENERGY INC. PROVINCIAL BOUNDARIES, ALBERTA HYDROGRAPHY AND TRANSPORTATION, AND SASKATCHEWAN TRANSPORTATION DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.

PROJECTION: UTM ZONE 12 DATUM: NAD 83

COLD LAKE COMMUNITY ACCESS MAP

REV. March 2018 FIGURE 1

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