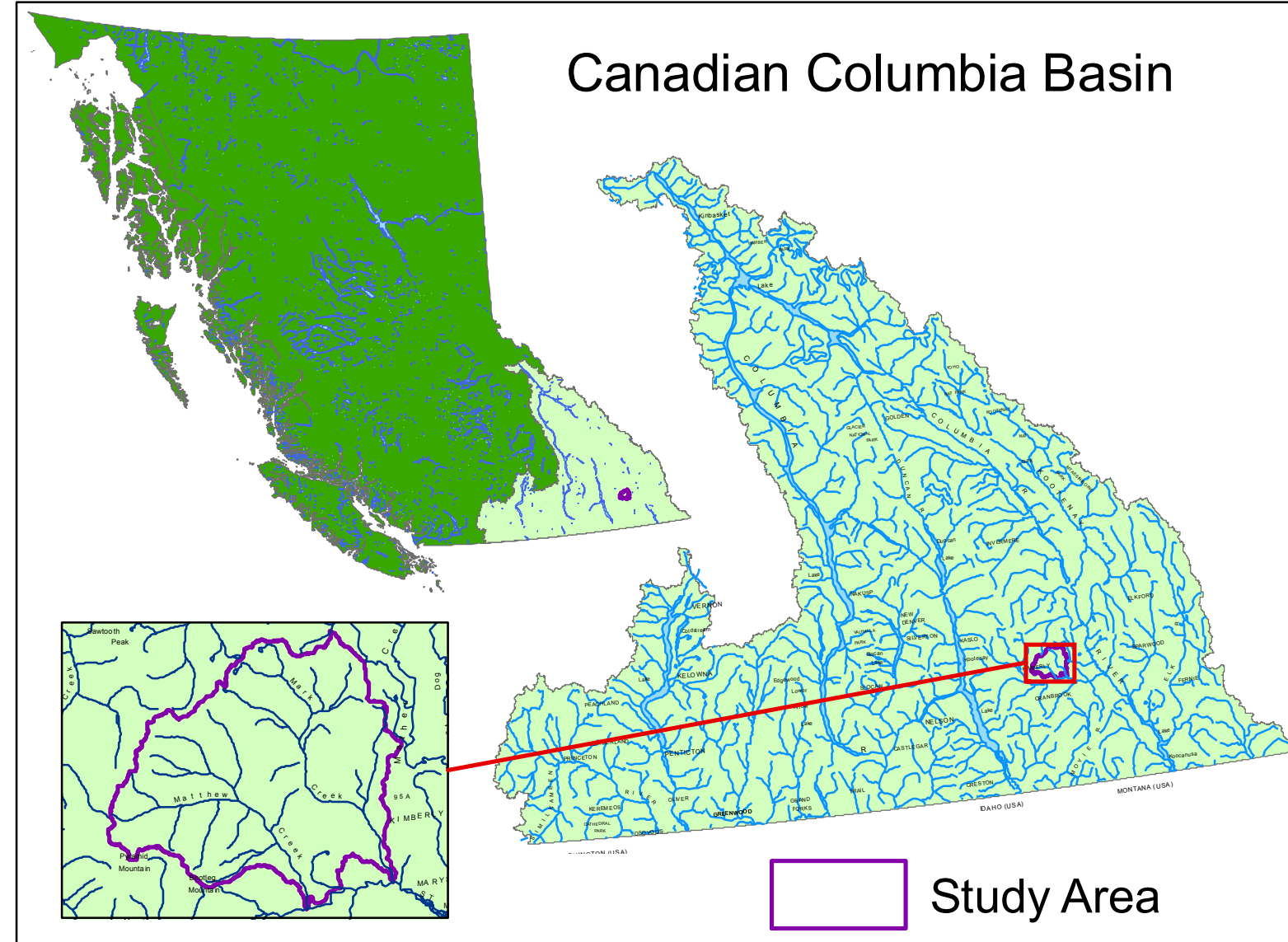
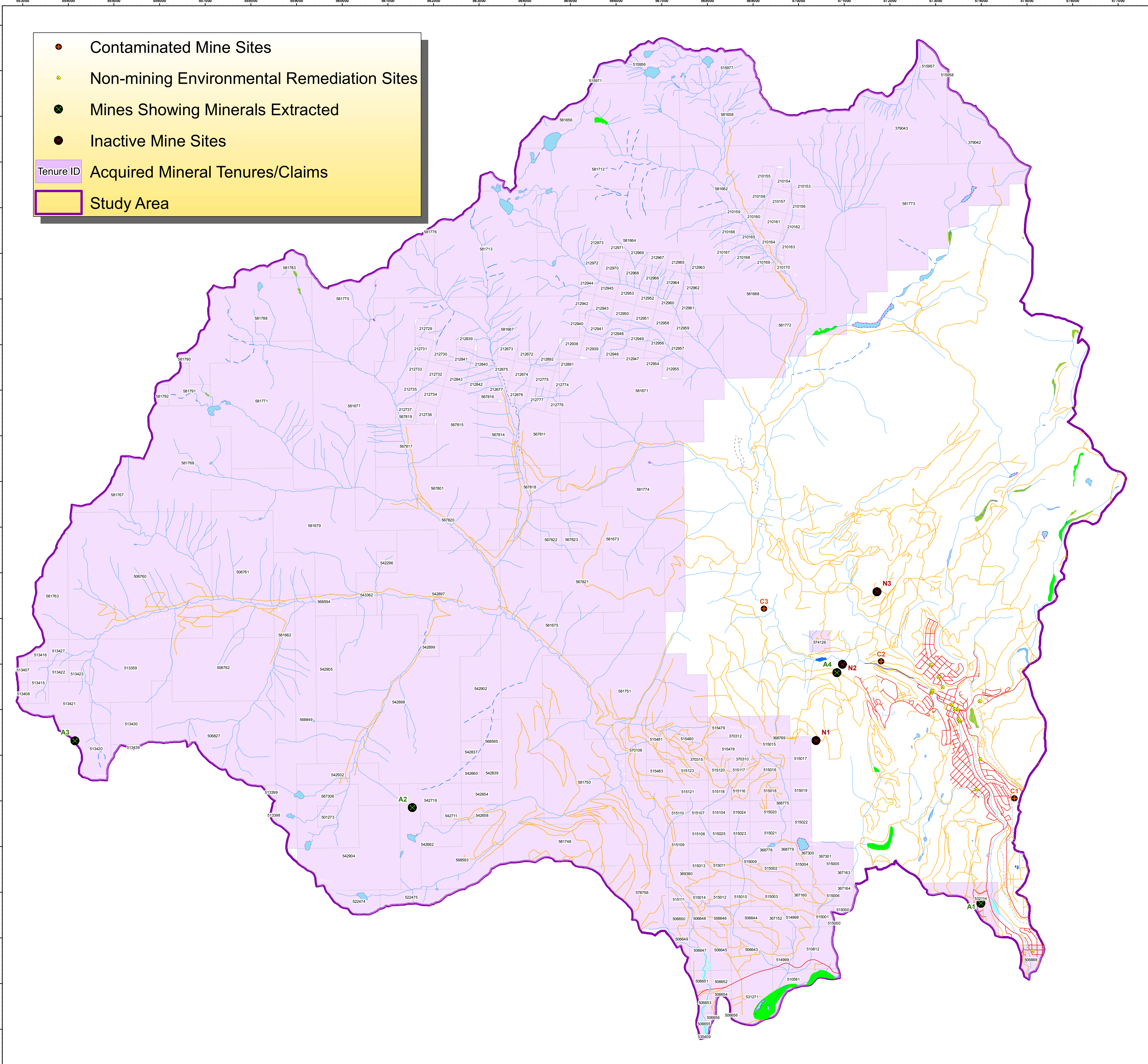


Mining Activity and Site Contamination in Mark Creek and Matthew Creek Watersheds



This study area comprises of Mark Creek, Matthew Creek and other adjacent watersheds and the purpose of this map is to effectively illustrate mineral tenures/claims and contaminated sites at the landscape level within and surrounding these watersheds.

75% of the study area has mining tenures claimed by mining companies or individuals. Teck Cominco has a large mining history in the region with the most notable being the Sullivan Mine which has produced some 17 million tonnes of zinc and lead in the past 92 year history. The Sullivan Mine site and other related Teck Cominco properties account for the five contaminated mine sites listed below and the types of ore generally sought after consists of heavy and precious metals. More information related to environmental condition of land can be found at BC Online's Site Registry at https://www.bconline.gov.bc.ca/site_reg.html. More information related to specific tenure claims illustrated in the map can be obtained by searching Mineral Titles Online BC at <http://www.mtonline.gov.bc.ca>.

Mining operations site contamination can both degrade water quality if proper actions are not taken. Considering this area's past, present and future activities, there is high potential for concern and close monitoring of water quality is advised. Future analyses with more complete data could provide useful information such as distances between mine sites including tailing piles and pond and water bodies as well as determining tenure ownership and claims that are in the process of becoming operational mines. Another useful analysis could show distanced between contaminated sites and water bodies as well as what geological surfaces exist beneath the sites and the water table.

Watersheds Study Area (ha)	33,041.7
Number of Tenures	253
Tenure Size Range - Hectares (ha)	1.3 - 961.1
Average Tenure Size (ha)	96.8
Area of Tenures - Hectares (ha)	24,734.7
% of Watershed Tenured	75%

Contaminated Mine Sites	
Location	Map Label
Cominco - Sullivan Concentrator	C1
Cominco Lower Mine Yard	C2
Stemwinder	C3

Mines Showing Minerals Extracted		
Mine Name	Map Label	Minerals
Omineca (L 5270)	A1	Copper
Bootleg	A2	Silver, Lead
Gold Ledge	A3	Lead, Gold
Dean-Allover	A4	Lead, Zinc

Inactive Mines		
Mine Name	Map Label	Minerals
North Star Mine	N1	Lead, Zinc, Silver, Copper
Stemwinder	N2	Zinc, Lead, Silver, Gold
Sullivan	N3	Lead, Zinc, Silver, Tin, Copper, Gold

- Road (Gravel, Unimproved, Overgrown)
- Road (Paved, Undivided or Divided)
- Bridge
- Rail Line
- Trail
- Canal
- River or Stream - Definite
- River or Stream - Indefinite
- Lake - Intermittent
- Dam
- Marsh
- Swamp
- Lake - Definite
- Reservoir - Definite
- River or Stream - Definite

Data Sources
Mining Data: BC Ministry of Energy, Mines and Petroleum Resources
Land and Resource Data Warehouse
TRIM Data: BC Ministry of Agriculture and Lands
Integrated Land Management Bureau
Orthophoto: BC Ministry of Agriculture and Lands
(Circa 2005) Integrated Land Management Bureau

Datum: NAD 83
Projection: UTM Zone 11 N
Date: April 29, 2008
Produced by: Selkirk Geospatial Research Centre (Chris Gray)

