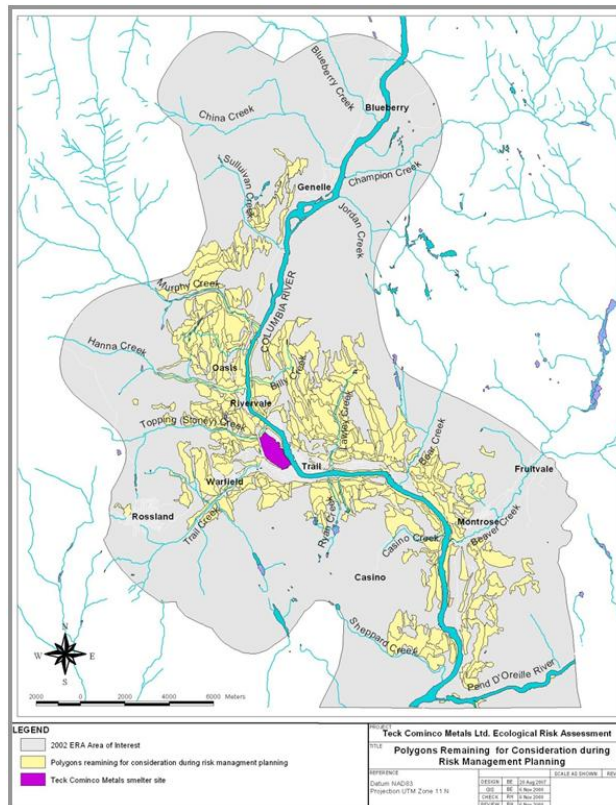


What is the Lower Columbia Ecosystem Management Program (LCEMP)?

The Lower Columbia Ecosystem Management Program (LCEMP) is a collaborative approach to assess, rehabilitate, conserve and enhance land-based wildland ecosystems, including wetland and riverbank or creekbank areas, in the LCEMP area. The LCEMP arose out of the need for Teck to address ecological impacts in a portion of the [ecological risk assessment \(ERA\)](#) study area around the Trail smelter. The ERA study area was divided into polygons (smaller areas) for detailed assessment. The ERA of land-based ecosystems concluded that plant communities in wildland areas may be impacted from historical smelter emissions in up to 7,860 hectares (the total area of the yellow polygons in the figure below). A polygon was identified as impacted if at least 10% of the polygon's area had an impacted plant community. The total area classified as impacted (to be considered for remediation and restoration) is approximately 5,330 hectares. Wildlife may be affected when there are changes in their habitat, so changes in the plant communities also can affect wildlife diversity or abundance. Ecological impacts attributable to historical smelter emissions were ruled out for the remainder of the ERA Area of Interest (grey area in figure below).



Impacted Areas Based on the Ecological Risk Assessment



Remediation and restoration strategies will be considered for the areas highlighted in yellow in the figure above. However, it may not be feasible to remediate or actively restore some of these areas, either because the area is inaccessible (e.g., steep gradient, no roads to the area), or because site conditions preclude successful remediation and restoration. These areas may need to be offset by restoration or conservation activities in other areas.

Realistic remediation and risk management options to address ecological risks include:

- natural regeneration and monitoring;
- habitat or habitat element inventory, protection, enhancement or creation (in upland, wetland and riparian settings);
- establishment of wildlife nest or roost boxes, platforms, lodges, dens, basking sites, etc.;
- weed inventory and control;
- ecosystem rehabilitation through soil amendments and/or silviculture treatments (e.g., planting, selective tree thinning, pruning, brushing, prescribed fire);
- forest health and disease management, research and monitoring;
- access control and use restrictions and monitoring;
- listed animal or plant species inventories, research and monitoring (Species at Risk);
- interpretive signage or public education/awareness initiatives; and,
- establishment of conservation covenants, stewardship agreements or other conservation approaches.



Who oversees the LCEMP?

The LCEMP is overseen by a Steering Committee that includes participation by BC Ministry of Environment, Ministry of Forests, Lands and Natural Resource Operations, local Regional Districts (Kootenay Boundary and Central Kootenay), the Kootenay Conservation Program, the Columbia Basin Fish and Wildlife Compensation Program, as well as Teck and its consultants. The purpose of the Steering Committee is to oversee and provide technical assistance and recommendations regarding LCEMP through the development, implementation and subsequent performance monitoring phases of the program, and, to support the Ministry of Environment approval process under the Contaminated Sites Regulation. There also will be opportunities for input from other stakeholders including the general public.



Example Projects and Activities

Example projects and activities will be updated from time to time. A current project is:



Yellow-breasted Chat Habitat Restoration. The yellow-breasted chat is an endangered bird that nests in the area. Teck is funding restoration treatments on lands that provide critical habitat for this bird. This work is being conducted in partnership with the Waneta Terrestrial Compensation Program. In 2014, over 300 native shrubs were planted, other shrubs were pruned to enhance re-sprouting, and undesirable invasive plants were removed, all to

improve the chat habitat. Fencing was established to exclude livestock and promote recovery of the shrub communities.

How can I get more information?

For more information about LCEMP, contact:

David DeRosa, Teck Metals Ltd. Superintendent, Ecosystem Projects, at (250) 364-4336 or David.DeRosa@teck.com.

