

# Black Cottonwood–Water Birch

*Populus balsamifera ssp. trichocarpa* - *Betula occidentalis*

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**Disclaimer:** Very little information is currently available for this rare plant community. This species account was primarily developed using plant identification guidebooks and Dennis Lloyd biogeoclimatic zone classifications.

## Conservation Status

Included in Section 7 Notice: No

Designated as Identified Wildlife: No

Federally Designated (COSEWIC): No

Species identified in Kamloops, Lillooet or Merritt SFMP: **Yes (Kamloops)**

## Description

- Very dry hot plant community dominated by black cottonwood (*Populus balsamifera ssp. trichocarpa*) that occurs in valley bottoms on high bench floodplain deposits.
- Found only in the BGxh1/07 and PPxh2/07 zones.
- The shrub layer is characterized by water birch (*Betula occidentalis*) and Nootka rose (*Rosa nutkana*). Depending on the site, red-osier dogwood (*Cornus sericea*) or common snowberry (*Symphoricarpos albus*) can also be dominant in the shrub layer.
- The herb layer is variable, usually including star-flowered false Solomon's-seal (*Maianthemum stellatum*), and a variety of other herbs such as horsetail (*Equisetum hyemale*), common sweet-cicely (*Osmorhiza berteroi*), American vetch (*Vicia americana*), and *Viola* spp. Agronomic sup-species of Kentucky bluegrass (*Poa pratensis*) may become dominant with increased disturbances.
- NOTE: This is a rare plant community with limited distribution.



Black cottonwood. Photo: H.W. Phillips



Water birch

### Forest Districts

**Cascades, Kamloops**, Okanagan Shuswap

### BEC Zones

BGxh1/07 (not present in Kamloops TSO)

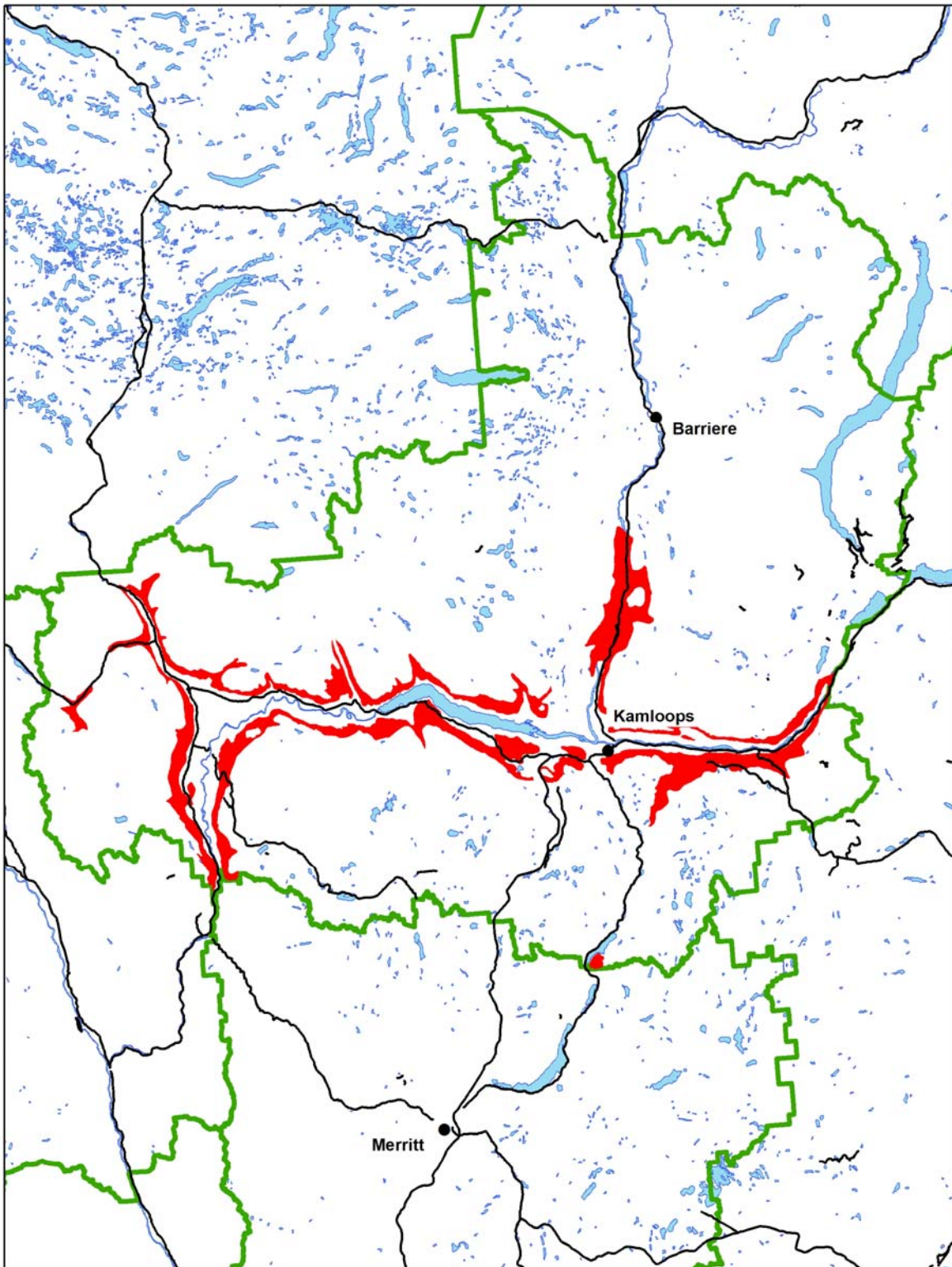
PPxh2/07

### Elevation

Not available

### Important Habitat Features

- Soils are medium to coarse in texture with a seasonally high water table (occurring within 1 m of the soil surface).
- The moisture regime is subhygric to hygric and the nutrient regime is medium to very rich.
- Soils are generally Orthic or Gleyed Cumulic Regosols.
- Refer to the following map for the location of the BEC zones where this plant community may be found.



Location of PPxh2 in the Kamloops TSA

### **Additional Information**

Very rare plant community with a restricted distribution within a very small range, which extends along the floodplains of the South Okanagan River from Summerland to the United States border and east along the Similkameen River to the Ashnola. Within the Ponderosa Pine subzone, its range extends along floodplains of the Fraser River from Lytton to north of Lillooet, along floodplains of the lower Yalakom River to Bridge River, and southeast along the Nicola River to Coutlee.

### **Management Recommendations**

The following management recommendations are generalized due to the limited information available for this plant community.

Budget permitting, develop a habitat model to help identify high value habitat found within your areas of interest. The complexity of the model, and therefore its accuracy, will be dependent on budgetary constraints.

Where this plant community is found:

- Retain a qualified plant ecologist (Registered Professional Biologist) to confirm the presence of the plant community and determine the extent of the local population.
- Establish a no harvest buffer zone and a management zone large enough to maintain ecological site conditions associated with this plant community, including undisturbed forest structure, substrate, and associated microclimate. The size of this buffer will vary based on specific site conditions and should be determined by the qualified plant ecologist (Registered Professional Biologist).
- In the no harvest buffer zone:
  - Do not build roads or trails.
  - Do not harvest or salvage except to support restoration measures with silvicultural treatments that are recommended by a qualified plant ecologist (Registered Professional Biologist).
  - Do not remove non-timber forest products.
  - Do not use pesticides.
- Minimize impacts to vegetation, soils, and hydrology when operating in the management zone adjacent to this plant community, particularly during road development and maintenance.
- Prevent the introduction and spread of invasive species.
- Allow for the processes of litter accumulation, renewal, and microbiotic crust development.
- Maintain a diversity of natural disturbance regimes.

## References

Lloyd, D.A, K. Angove, G.D. Hope, and C. Thompson. 1990. A Guide to Site Identification and Interpretation for the Kamloops Forest Region. Ecosystems Research Branch. 399pp.

Lloyd, D., M. Ryan, N. Brand, M. Doney, V. Larson, and J. MacDonald. 2005. Site Classification for 52 Biogeoclimatic Units in the Southern Interior Forest Region. Draft. BC Ministry of Forests. Available online at: [ftp://ftp.for.gov.bc.ca/RSI/external!/publish/Dennis\\_Lloyd\\_BEC\\_Materials](ftp://ftp.for.gov.bc.ca/RSI/external!/publish/Dennis_Lloyd_BEC_Materials)

Ministry of Forests and Range. 2006. Biogeoclimatic Ecosystem Classification Program. Accessed online from <http://www.for.gov.bc.ca/hre/becweb/>

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