# Km Zero at k'ak'maplqs Native Plant Restoration and Stewardship

2019

Native plant restoration was the first phase of work undertaken to convert this area from rail yard to trailhead. What we learn about native plant restoration here can help inform restoration of other natural areas or landowners wishing to switch to low maintenance, drought resistant landscaping.

2020

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**Healthy ecosystems promote healthy life.** This is our inspiration for helping to restore and care for the trailside environment.

> Michelle Jefferson, Trail Stewardship Lead Friends of Okanagan Rail Trail

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# Restoring dryland ecosystems is no easy task, but has many benefits.

At Km 0, extra effort has gone into giving nature its best chance.



# Our approach:

1. Working from the Ground Up - Soil De-compaction and Enhancement. Compacted gravel fill areas were dug up, topsoil and compost (<u>RDNO Gro</u>) was mixed in, and the loosened soil was placed to create a 'rough and loose' surface. The hummocky soil may look messy, but it helps slow and hold water, minimize sediment runoff, and create varied levels of light and moisture for plant diversity.

## 2. Creating Site Diversity.

Boulders and logs were placed randomly along prepared areas to create a diversity of micro-conditions to support plant and wildlife variety. (These are not ornamental gardens, but the best conditions for natural plant communities to create their own beauty.)

### 3. Choosing native plants adapted to local conditions.

Twenty three different species of native trees, shrubs, perennials and grass plugs, as well as a native grass seed mix were supplied by an Okanagan native plant nursery. A surprise early snowfall in late October created a unique challenge, but did not stop the contractors from planting nearly 500 plants within 3 days!

### 4. Caring for the Plants as they are becoming established.

Native plants are a great choice for low maintenance, water wise gardening, but they do need some help to get started. The Km 0 restoration plan recommended irrigation for the first 2-3 years until the trees and plants are well established. That is why you will see plastic totes on the hillside and drip irrigation lines. The new planting area will also need to be monitored for invasive weed infestation, and treated as appropriate until a robust native plant community becomes established.

# **Enriched with Indigenous Knowledge.**

The Okanagan Indian Band has generously shared Indigenous and cultural knowledge to help advise site restoration, and to include plants of cultural significance. Stories of traditional uses and cultural values will be part of site interpretation. If you are interested in indigenous cultural gardens, consider a visit to <u>k'nmaĺka? sənqâĺtən garden</u> at Okanagan College (Vernon).

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From the sqilx<sup>w</sup>/syilx Okanagan perspective,  $tmix^w$  is the nsyilxc<del>on</del> word that most closely translates as "ecology."  $tmix^w$  includes everything alive-the land, water, insects, people, animals, plants and medicines. Underneath all of the  $tmix^w$  is  $tmx^wula?x^w$  -"the land"-the core spirit from which all of creation arises and which unites everything.

The sqilx<sup>w</sup>/syilx take a holistic perspective to look after the environment. They believe everything is connected and needs to be kept in balance. The needs of  $tmix^w$  and  $tmx^wula?x^w$  can be achieved when we work together to directly participate in protecting and restoring the environment.

- excerpt from 'Building Climate Resiliency in the Okanagan'







# What to Look For

# **Perennials**

Here are some of the perennials you can find at Km 0. Many are used by birds, bees and other wildlife, and/or have cultural significance for use as traditional foods, medicines or technology with the sqilx<sup>w</sup>/syilx. Several species of grasses can also be found here.

> Common Name Latin name sqilx<sup>w</sup>/syilx name where known (Source: <u>Okanagan College</u>) Some identifying features

Round Leaf Alumroot Heuchera cylindrica *vititemní*4p A mounding perennial with flower stalks that produce delicate bell shaped white/ yellow flowers in June/July.











### Common White Yarrow Achillea millefolium kwətskwətswixwups

**Brown Eyed Susan** 

Yellow petals with orange to

red center; blooms in spring.

Gaillardia aristata

**Pasture Sage** 

Artemisia frigida

mitl'mn



### **Creamy Buckwheat** Eriogonum heracleoides Creamy colour flowers turning to a russet colour late May persisting through June-



### **Snowy Buckwheat**

July.

Eriogonum niveum Creamy colour flowers turning to a russet colour late May persisting through June-July.



### Prickly pear cactus Opuntia fragili sxwina? Yellow flower in June-July.



Old Man's Whiskers Geum Triflorum A small perennial wildflower with alluring pink, fuzzy flowers and feathery seed heads. Pink flowers in May and June.

Nodding Onion Allium cernuum *xelíw* Soft, grasslike leaves and flowering stalk rise from a bulb. The stem bends so that the purple-pink flowers "nod" toward the ground. Pink/purple blooms July-August



### ntsástsestsn Blue-mauve flowers from June through October.

**Showy Aster** 

Aster conspicuous







Interior Mock Orange Philadelphus lewisii Can be seen growing on rocky outcrops and on hot, dry slopes. White fragrant flowers in June.

**Interior Oregon grape** 

Common throughout the

Okanagan. Bright yellow clusters of flowers appear in

Mahonia aquifolium

stsərsi4mix

April.

Interior Saskatoon Amelanchier alnifolia

sqiqp (bush); siya? (berry) White flowers in EARLY

spring before leaves, blue

berries in summer



Snowberry Symphoricarpos albus tmtm'ný?ip Pink/white flowers in spring; white berries



Smooth sumac Rhus glabra tmtm'ný?ip Yellow flowers in July; leaves turn scarlet in the fall.

**Big sagebrush** Artemisia tridentata Highly aromatic green-grey foliage; yellow blooms in

# cq'was'q'lstn June.



Waxy Current Ribes cereumstsərsi4mix White blooms in May.

# Chokecherry Prunus virginiana

A multi-stemmed large shrub or small tree growing 15-20 feet tall. Chokecherry is most noticeable when flowering, with many white elongated clusters of flowers that when pollinated become clusters of round red-black fruits.

# **Shrubs**

Here are some of the shrubs you can find at Km 0 and along the Okanagan Rail Trail. Many are used by birds, bees and other wildlife, and/ or have cultural significance for use as traditional foods, medicines or technology with the sqilx<sup>w</sup>/syilx.

Rabbitbrush Ericameria nauseosa stsərsi∮mix Yellow blooms in fall.



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Rocky Mountain Juniper Juniperus scopulorum



# <image>

Ponderosa pine Pinus ponderosa Needles 6 inches or longer, cones 3-4 inches. Distinctive thick, reddish, scaly bark.

# Trees

Here are some of the shrubs you can find at Km 0 and along the Okanagan Rail Trail. Trees and shrubs are important, for birds and wildlife, and for helping to maintain water quality.











# Photo Album

Temporary Irrigation

# Volunteer for Trail Stewardship - the 'Weed Warriors'

If you like working outside and 'learning while doing', consider joining the Friends of Okanagan Rail Trail Stewardship volunteers. Regular schedules are arranged for weed-pulling and other stewardship activities, and you can participate as available. Find out more: volunteer@okanaganrailtrail.ca.



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Okanagan Basin

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One valley. One water.

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