

SDG Accord Case Study – BCIT Ecological Restoration of Parking Lot



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Integration of SDGs in

- Institutional governance/strategic level
- SDGs in research
- SDGs in campus operations
- SDGs in curriculum development
- SDGs in student engagement activities
- SDGs into community activities
- SDGs at a whole-institution level

Focus on

- Goal 1 - No poverty
- Goal 2 - Zero hunger
- Goal 3 - Good health and wellbeing
- Goal 4 - Quality education
- Goal 5 - Gender equality
- Goal 6 - Clean water and sanitation
- Goal 7 - Affordable and clean energy
- Goal 8 - Decent work and economic growth
- Goal 9 - Industry, innovation and infrastructure
- Goal 10 - Reduced inequalities
- Goal 11 - Sustainable cities and communities
- Goal 12 - Responsible consumption and production
- Goal 13 - Climate action
- Goal 14 - Life below water
- Goal 15 - Life on land
- Goal 16 - Peace, justice and strong institutions
- Goal 17 - Partnerships for the goals

Summary:

In the 1970s and 1980s, Guichon Creek, which runs through the BCIT Burnaby campus, was a well-kept area of lawns with minimal natural riparian habitat. Over the last 20 years, BCIT has worked to restore the creek to a more natural state that is suitable for native plants, fish, birds, and other animals.

BCIT Ecological Restoration students, as part of their capstone projects, identified Lot O as a candidate for restoration. It was an underused, unsightly gravel parking lot and a source of sediment and pollution runoff into Guichon Creek.

The goal of the restoration was to transform the parking lot into a landscaped natural area designed to enhance the Guichon Creek watershed and to reduce pollution entering the creek.

The restoration began in 2019 with the addition of fill (excavated soil and boulders) from the construction of the new [Health Sciences Centre](#) (HSC) which also reduced the costs and greenhouse gas (GHG) emissions from trucking and disposing of the fill offsite.

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The fill was contoured with natural features and a variety of habitat types were planted in 2021. This includes forested areas, a bioretention pond, and a pollinator garden on the south side. A gravel path meanders through the area for exploration. As the new planting is established it will also help control some of the invasive species that are currently in the forest beside the creek.

Restoration of Lot O is part of BCIT's wider plan to restore [Guichon Creek](#) into a rich ecological environment. Joe Cosh, BCIT's Director of Facilities Improvements says, "This was an important project because restoring Guichon Creek is a major goal of the Campus Plan. It was done in a way that enhances nature but also includes trails, so our campus community can enjoy the area."

Outline the 3 key benefits of integrating this theme:

1. Reduced sediment and pollution entering the Creek and further restoration of the Guichon Creek watershed.
2. Reduced waste through diversion of excavated material from off campus disposal which also reduced GHG emissions from transportation.
3. Cost savings by using excavated material from the HSC project as fill did not need to be purchased nor trucked away for disposal.

Outline the barriers or challenges encountered in integrating this theme and how you overcame these:

Substantial works near protected waterways require coordination with multiple authorities. Other restoration work was done in the area, in partnership with the City of Burnaby, that impacted the southwest corner of the site. This area was later fixed through the addition of new soil, replanted and further aesthetic improvements completed.

"Through the project delivery process revisions were made to protect the needs of other research parameters needed for the area."

Please outline your conclusions and recommendations to others (Max 200 words):

- Stakeholder engagement greatly increases the sense of ownership across the organization and community:
 - BCIT recognizes Guichon Creek as a place of wellness where faculty, staff, students, and members of the community can connect to nature, peace, and tranquillity during their busy workday.
 - BCIT celebrates Guichon Creek Day in September as part of World Rivers Day. A variety of activities have been offered including interpretive creek tours, opportunities for the community to actively participate in restoration planting along, and wellness walking breaks.
 - Launched on Guichon Creek Day, the [trail map](#) was created to engage and guide the community through the trails and habitat beside the creek. Points of interest and rest areas along the trails are highlighted.
- Look to waste streams, especially those that have an ongoing cost, to find sustainability opportunities.
- Look beyond simple payback to gain buy-in for a project (e.g. curriculum, operational improvements, industry connections, climate and sustainability).