

# Biodiversity and Reclamation



Pictured above: Employee at Teck protected land near to our Carmen de Andacollo Operations, Chile.

## Biodiversity and Reclamation

As the global population has increased, so too has the global per capita consumption of materials. Close to 60 billion tonnes of renewable and non-renewable resources are extracted each year around the world, up nearly 100% since 1980.<sup>29</sup> In the face of resource consumption driven by globalization and urbanization, biodiversity is at risk. With close to one million animal and plant species now threatened with extinction,<sup>28</sup> the loss of biodiversity and the impact on ecosystems are concerns and challenges for many, including companies, governments and civil society. Working together to find innovative solutions for biodiversity protection will help towards achieving the United Nation Sustainable Development Goal 15 to sustainably manage forests, combat desertification, and halt and reverse biodiversity loss.

### *Industry context*

Mining operations can directly or indirectly impact biodiversity and ecosystems. Regulatory requirements are becoming increasingly stringent in response to widening recognition of these impacts. This includes requirements to tailor reclamation, with a focus on wildlife and plants of greatest conservation concern, and to implement biodiversity offsets to mitigate impacts that cannot be fully addressed through avoidance, minimization and rehabilitation.

### *Teck context*

Our operations are adjacent to or within areas of high biodiversity value, including temperate and arctic areas, mountains, forests and deserts. This proximity, as well as the nature of our operations, means that we have a significant responsibility for land and biodiversity

management. Stakeholders and Indigenous Peoples expect us to contribute to the conservation of biodiversity and to work collaboratively with them to develop integrated approaches to land use.

Aligning to regulatory requirements and stakeholder expectations, we aim to avoid, minimize or restore negative impacts on biodiversity in our operations, and we further challenge ourselves to working towards securing a net positive impact on biodiversity. We also have a firm commitment, in accordance with the ICMM world-leading position statement on respecting biodiversity, to not explore or mine in World Heritage sites and to respect all legally designated protected areas, including International Union for Conservation of Nature (IUCN) category Ia, Ib, II, III or IV protected areas.

### **GRI Indicators and Topic Boundary**

304-103, 304-1, 304-2, 304-3, 304-4, G4-MM1, G4-MM2, G4 MM10

This topic is considered most material by government, Indigenous Peoples, local communities and society in the context of all Teck sites.

### **How Does Teck Manage This Topic?**

Information about how we manage biodiversity and reclamation, including relevant policies, management practices and systems, is available for download on our website.

**2019 Highlights**

**5,781**  
hectares

of total land reclaimed

**Updated closure plans**, which incorporate biodiversity management, at Carmen de Andacollo and Quebrada Blanca Phase 2 approved by government.

**Our Performance in Biodiversity and Reclamation in 2019**

**Our Targets and Commitments** The following table summarizes our performance against our 2020 sustainability goals in biodiversity and reclamation, and introduces our new strategic priority and goal.

2020 Sustainability Strategy Goals	Status	Summary of Progress in 2019
Implement biodiversity management plans for each of our operations.	On track	Continued advancing implementation of biodiversity management plans for operating sites and advanced projects.
Integrate the consideration of biodiversity into the exploration, construction and closure stages of the mining life cycle.	On track	Continued work to define how our net positive impact strategy should be applied to the exploration stage.
Enhance our contributions to biodiversity conservation knowledge through collaboration in research, education and conservation.	On track	Implemented a new ecological monitoring program that was developed together with the BC Parks Foundation in 2019.

**New Strategic Priority and Goal**

Strategic Priority	Goal
<ul style="list-style-type: none"> <li>Work towards securing a net positive impact on biodiversity</li> </ul>	<ol style="list-style-type: none"> <li>By 2025, all operating sites have and are implementing plans to secure net positive impact.</li> </ol> <p>Details about the context, definitions and key performance indicators related to this strategic priority and these goals is available on our website at <a href="http://www.teck.com/responsibility">www.teck.com/responsibility</a>.</p>

### Case Study: Harnessing the Regenerative Power of Fire through Traditional Knowledge

In both 2017 and 2018, British Columbia has experienced record-breaking fire seasons. As the frequency and severity of B.C.'s wildfire seasons grow, Indigenous traditional knowledge around fire management is increasingly recognized for how it can help to not only manage fires, but also to restore landscapes. At Teck's Highland Valley Copper (HVC) Operations, we are

working with Indigenous Peoples to incorporate traditional knowledge into our reclamation programs. In June 2019, prescribed burns were conducted at reclamation sites at HVC to test the effectiveness of these methods on accelerating ecosystem recovery. Read the full case study at [teck.com/news/stories/](http://teck.com/news/stories/).

**Table 34: Key Activities and Accomplishments in Biodiversity and Reclamation in 2019**

Operation	Performance Highlight
Highland Valley Copper Operations	Conducted prescribed burn trial at Highland Valley Copper Operations to test whether prescribed burns in reclaimed tailings and waste rock areas could accelerate recovery of native ecosystems. HVC also initiated reclamation trials on establishing targeted post-closure ecosystems and testing the effectiveness of various revegetation techniques. See above for the case study about this work.
Steelmaking coal operations in the Elk Valley	Fording River Operations began a reclamation trial aimed at re-establishing high-elevation grasslands in bighorn sheep winter ranges. This trial also incorporates the design of wetter areas and specific landform elements into waste rock dump re-sloping/revegetation projects.  Line Creek Operations constructed bird shelters, with the aim of diverting cliff swallows away from buildings and equipment.

### Area Reclaimed and Disturbed

At the end of 2019, Teck had a total footprint of 32,464 hectares (ha), of which 26,683 ha are yet to be reclaimed and 5,781 ha have been reclaimed. As this data relates to active operations,

the area of land yet to be reclaimed will generally increase over time until the mining areas are closed and become available for reclamation.

**Table 35: Area Reclaimed and Disturbed<sup>(1)</sup>**

	2019 <sup>(2)</sup>	2018 <sup>(2)</sup>	2017	2016
Area reclaimed during the current year (ha)	18	31	30	147
Area disturbed during the current year (ha)	1,846	1,018	388	421
Area of land yet to be reclaimed (ha)	26,683	24,914 <sup>(3)</sup>	23,922 <sup>(3)</sup>	23,449 <sup>(3)</sup>
Total area of land reclaimed (ha)	5,781	5,705 <sup>(3)</sup>	5,878 <sup>(3)</sup>	6,100 <sup>(3)</sup>
<b>Total footprint (ha)</b>	<b>32,464</b>	<b>30,619</b>	<b>29,800</b>	<b>29,549<sup>(3)</sup></b>

(1) The area of land disturbed in the current year may include land that was previously reclaimed and has been re-disturbed. The total area of land reclaimed may decrease in a year, due to unsuccessful reclamation attempts or the mining of a previously reclaimed area. Total footprint is the sum of total area of land yet to be reclaimed and total area of land reclaimed. Values are based on estimates stemming from the use of Geographic Information Systems.

(2) Quebrada Blanca phase 2 data has been included as it is an active project that has land disturbance.

(3) In an effort to constantly refine the values, annual surveys are conducted and estimates are refined, which may lead to restatements of historical values.

## Closure and Closure Planning

Our approach to mine closure begins before mining starts and carries on throughout the life cycle of the mine. We work with the Indigenous Peoples and local communities in the area to create closure plans focused on supporting the economic and social transition after mining ends, and establishing a thriving, self-sustaining ecosystem and opportunities for a range of potential post-mining land uses. For more information, see the Responsible Mine Closure & Reclamation page on our website.

Closure planning and closure progressed at several of our active and closed operations in 2019:

- **Duck Pond Operations** continued to implement closure measures at its tailings management area and advanced studies on other mitigation measures; a revised

Rehabilitation and Closure Plan was submitted to the provincial government in October 2019

- **Coal Mountain Operations** continued to implement reclamation activities and improve water management at the site
- **Cardinal River Operations** announced that closure of the operation will occur in 2020 and initiated work for transition into care and maintenance
- **Pend Oreille Operations** suspended its mining and concentrate production in July 2019; the mine has transitioned to the care and maintenance phase

## Post-Closure

A legacy property is a property previously explored, constructed and/or operated (usually by Teck, but not always) that is in an inactive state (no longer being explored, developed or operated), not expected to become active

again and permanently closed. In total, we actively monitor 35 legacy properties and carry out ongoing management actions on a subset of 28 of these sites.

## Outlook for Biodiversity and Reclamation

Moving forward, we will focus on our strategic priority of working towards securing a net positive impact on biodiversity. We have set a new goal in biodiversity and reclamation to establish and implement plans to secure a net positive impact at all operating sites by 2025. Our focus in 2020 will be on reviewing progress by sites in implementing and refining the biodiversity management plans that each had developed by 2015, and identifying the key actions that will be required to close gaps over the next five years.