



IBioS Interdisciplinary Biodiversity Solutions Collaboratory

**Strategic Plan
2023 – 2028**



LAND ACKNOWLEDGEMENT

The Interdisciplinary Biodiversity Solutions (IBioS) research cluster is located at the UBC Point Grey campus situated within the traditional, ancestral, and unceded territory of the xʷməθkʷəy̓əm (Musqueam) people.

We are guests and settlers on the traditional, ancestral, and unceded territories of four Nations:

xʷməθkʷəy̓əm (Musqueam)

Sk̓wx̓wú7mesh (Squamish)

Sel̓ilwítulh (Tsleil-Waututh)

Syilx (Okanagan)

We share an important responsibility in learning with and about our host Nations and strengthening these relationships through mutual respect and reciprocity.



THE BIODIVERSITY CRISIS

Biodiversity is life on Earth – from the tiniest microbes to the largest mammals, unicellular algae to giant redwoods, solitary individuals to social organisms like bumblebees, elephants, and humans. It includes all of the interactions among organisms that create communities and form ecosystems. This immense diversity has been in crisis for decades due to environmental degradation that causes declines of populations, losses of species, and collapse of ecosystem structure and function.

Biodiversity loss today is occurring at unprecedented rates. **About a quarter of the species on Earth are facing extreme threats to their survival, largely due to human alteration of land, water, atmosphere, and climate.** The loss of a species is forever, and ultimately, the loss of species puts human lives at risk too.

Humanity depends on biodiversity for survival. Examples include natural forests and oceans that soak up carbon, provide oxygen and regulate our climate; beneficial microbes and pollinators that enable crop yields; and wild-caught fish that supply critical dietary components for peoples around the world. In addition to such tangible life-supporting functions, biodiversity and nature are fundamental to human learning, biocultural values, inspiration, and psychological well-being.

Although it is time-critical to protect biodiversity, this issue too often plays backseat to other critical global challenges with which it is inter-linked, such as climate change and pandemics. **In fact, the importance of biodiversity to human health and well-being rarely drives decision-making.**

Long-term interventions that address the root economic, social, and political causes of nature's decline are required, not only to stave off future losses but also to restore functioning, productive ecosystems.

Throughout history, Indigenous communities and other local peoples have cared for and co-produced the nature that supports their cultures and well-being. And yet, a brief look across history, from centuries past to recent times, shows that Western conservation actions, such as establishment of protected areas, often displaced or excluded Indigenous communities and local peoples from lands and waters that they depended on and cared for over millennia. Meanwhile, the relentless expansion of unsustainable resource extraction along with pollution and climate change continue to upend natural ecosystems and Indigenous ways of life.

Successful interventions will require major changes in how we manage working forests, farmlands, rangelands, and oceans, which in turn requires transformative shifts in human actions, from individuals to institutions and economies. These interventions must involve the full range of stakeholders and help to heal past inequities including the removal of Indigenous peoples from their lands and ways of life, which are intimately intertwined with biodiversity.

AS A COLLECTIVE

WE AIM:



TO PROTECT

and restore the adaptive capacity of biodiversity and its connection to ecosystem functioning and human well-being.

TO ENGAGE

a diverse range of communities and institutions in socially just, effective and inclusive biodiversity conservation.

TO EXPLORE

biodiversity's connections to sustainable land and ocean management.

TO DEVELOP

and support the implementation of equitable and effective policies, business models, and governance systems to improve restoration and conservation of biodiversity.



Our Vision

Collaborative science to advance just, equitable, and inclusive interdisciplinary solutions for biodiversity and people to thrive.

Our Mission

The IBioS program develops science-to-solutions approaches to improve biodiversity outcomes and promote a sustainable future for our planet. Informed by multiple ways of knowing, we aim to identify and support mechanisms for transformative social and ecological change that supports biodiversity and diverse peoples.

Our work is based on interdisciplinary collaborative research, enhancing capacities of current and future generations of scientists and practitioners, and building trust and relationships with communities through practice, policy, and outreach.

Our Guiding Values

Adaptability
Collaboration
Justice and Inclusion
Scientific integrity and humility

Our Operating Principles

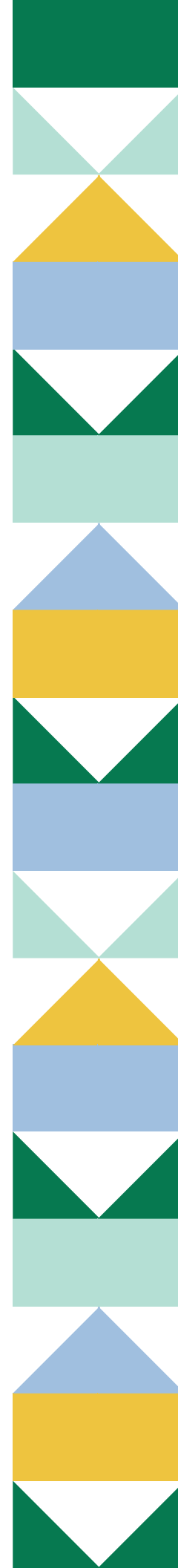
Working towards positive solutions
Systems-thinking approach
Cross-generational responsibility
Consideration urgency and scale of transformation



ABOUT IBioS

The IBioS Collaboratory at the University of British Columbia was established in 2020 to research and contribute to ongoing global actions and measures to help protect and restore Earth's biodiversity, under the belief that it is time to mainstream biodiversity protection and restoration as a major goal for policies, businesses, communities, and civil societies. When done well, protecting and restoring biodiversity can help mitigate several other global challenges, such as the climate crisis, and to rebuild respectful and reciprocal relationships with nature akin to those that characterized nature-people interactions prior to colonial expansion and industrialization.

At IBioS, we acknowledge the 'dark' side of conservation history and recognize that some existing discourses on conservation are still rooted in colonial history. Recognizing these injustices and respecting the immense biocultural knowledge and stewardship principles and practices of many Indigenous and other local peoples,



the IBioS Collaboratory strives to build activities, approaches, and outlooks that differ fundamentally from conservation's colonial legacy. The program commits to finding new mechanisms for restoring and protecting biodiversity that explicitly support justice, equity, and inclusivity for diverse human societies. The Collaboratory takes a solutions-oriented approach, meaning that the research is designed to help identify equitable management systems, behavioral or institutional changes, or policies to promote biodiversity and the sustainable coexistence of people and nature.

IBioS builds on UBC's position as a global leader in ecological and environmental research to create a dedicated space for interdisciplinary science-to-solutions approaches to promote biodiversity as the basis for ecosystem, human and planetary health. Our strengths emanate from our multidisciplinary research community of scholars in ecology, evolutionary biology, conservation, public policy, environmental social sciences, food systems, fisheries, economics and business. Our research team includes US National Academy of Science members, MacArthur Fellows, Royal Society of Canada Fellows, Canada Research Chairs, Steacie Fellows, Volvo Environmental Prize Laureates, and the UN Special Rapporteur on Human Rights and the Environment.

OUR STRATEGIC CORE AREAS



INTERDISCIPLINARY RESEARCH



TRAINING AND LEARNING



LOCAL AND GLOBAL ENGAGEMENT & PARTNERSHIPS



ORGANIZATION AND PEOPLE





INTERDISCIPLINARY RESEARCH

Our Vision for the Future:

Interdisciplinary research that:

- Identifies effective pathways to promote biodiversity and the sustainable coexistence of people and nature
- Considers ecologies, behaviours, cultures, institutions, economies, and land and sea management systems
- Crosses typical academic silos and integrates social-ecological systems understanding into their work; Encourages innovative new research programs across Faculties at UBC
- Is solutions-oriented, i.e. management systems, behavioral or institutional changes, or policies to promote biodiversity and the sustainable coexistence of people and nature
- Develops evidence-based frameworks for policy and management-level decision-making

Strategic Goals:

1. Create foundation in IBioS for conducting “science-to-solutions” interdisciplinary research to promote inclusive biodiversity conservation
 2. Design, conduct, and support interdisciplinary research to fill defined research and policy gaps needed for inclusive biodiversity conservation and sustainable land and sea management
 3. Champion and advance best practices for open, transparent, reproducible science while respecting and navigating data sovereignty needs
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TRAINING AND LEARNING

Our Vision for the Future:

Designing and delivering:

- Exceptional interdisciplinary training, research, and experiential opportunities for undergraduates and graduates
- Equipping our students with skills to generate positive impact in policy, practice, and solutions-focused work
- Providing training opportunities and capacity building for our own faculty, and for practicing professionals and learners beyond UBC

Strategic Goals:

1. Offer pathways and programs for undergraduate and graduate training at UBC in inclusive conservation science that are both interdisciplinary and experiential
 2. Provide an exceptional opportunity for cross-departmental student mentorship and cohort building for UBC graduate students
 3. Provide skills-based interdisciplinary training / capacity building to, from, and with people outside of UBC
 4. Provide training opportunities to IBioS faculty and other professionals
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LOCAL AND GLOBAL ENGAGEMENT & PARTNERSHIPS

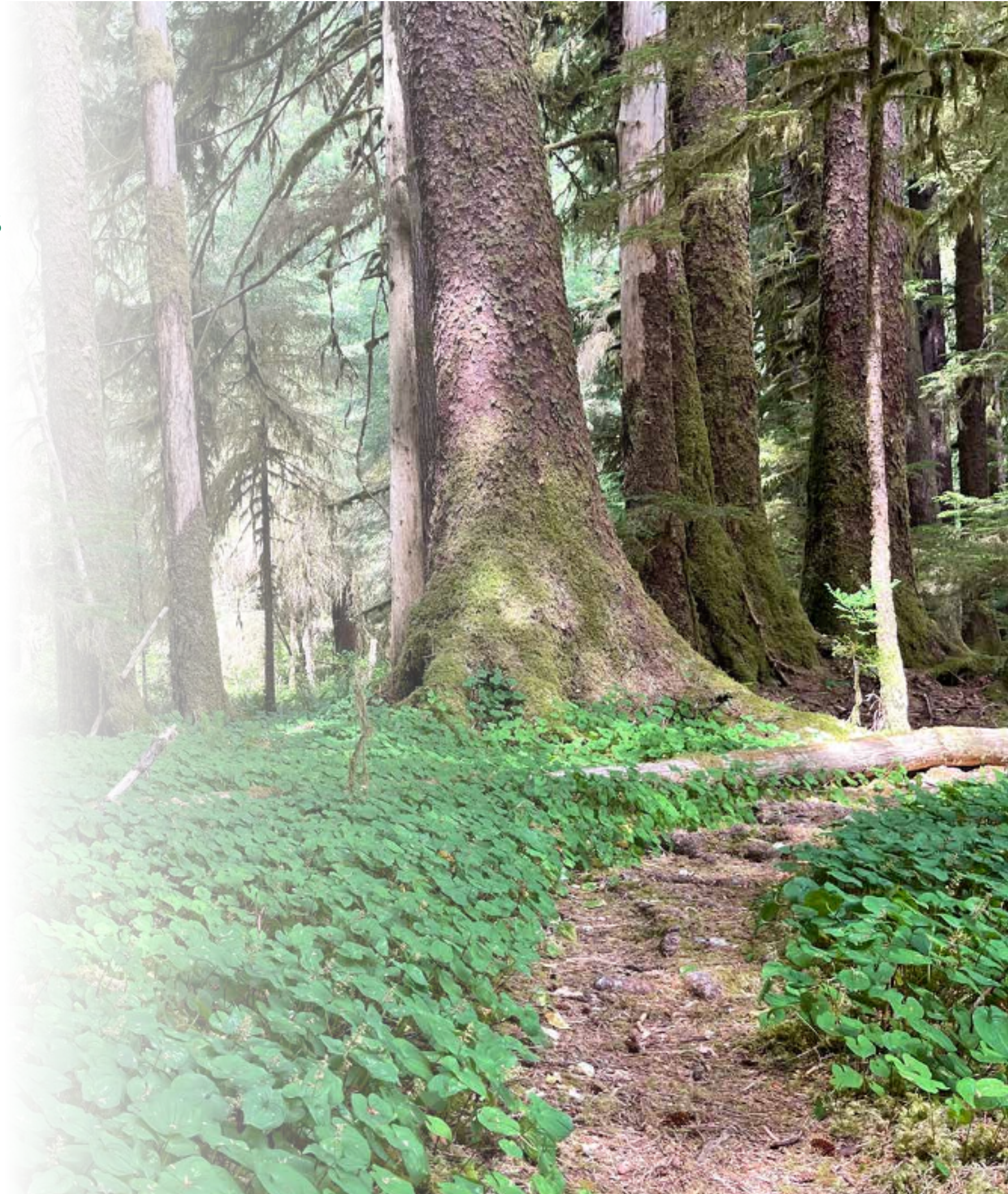
Our Vision for the Future:

Fostering an open and inclusive community for people on and off campus interested in science-to-solutions research and engagement on biodiversity conservation:

- Developing capacity to co-produce and translate knowledge
- Becoming leaders in knowledge translation for the public
- Engaging with communities in inclusive conservation and restoration
- Building trusted, reciprocal relationships
- Strengthening existing and fostering new relationships with local, regional, national and international groups working on biodiversity conservation
- Serving as a cross-campus hub in inclusive biodiversity conservation science
- Connecting our work to policy and practice to mainstream biodiversity issues, and chart a sustainable and equitable future for the planet

Strategic Goals

1. Develop IBioS as a leader in inclusive biodiversity conservation at UBC and beyond
 2. Contribute to campus land use planning for biodiversity and nature net positive initiatives on the UBC campus
 3. Enhance existing and build new local to global partnerships and collaborations in alignment with our mandate
 4. Support the advancement of Indigenous voices, rights, and ways of knowing within all facets of our work
 5. Mainstream biodiversity in policy and practice
 6. Build a successful model for the engaged academic at UBC
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ORGANIZATION AND PEOPLE

Our Vision for the Future:

Promoting a diverse, inclusive, and thriving community which enriches our shared and individual research and training activities:

- Enable individual and collective work centered on a shared purpose
- Foster culture of wellbeing across teams, researchers, and ways of knowing
- Define a collegial atmosphere that celebrates individual contributions, and gives every person at the table an equal voice
- Create a robust but agile organizational infrastructure to advance our research and training mandate
- Invest in our Collaboratory for success

Strategic Goals

1. Increase organizational resources and faculty capacity
 2. Raise the profile and recognition of IBioS, on-campus and beyond UBC
 3. Provide resources towards the development and success of junior faculty and highly-qualified personnel
 4. Provide resources that contributes to the financial sustainability of our research, training, and engagement activities
 5. Foster a diverse and inclusive IBioS community
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OUR PLANING PROCESS

JAN 2022-FEB 2023

LED BY UBC'S STRATEGY AND DECISION SUPPORT TEAM

- Informed by principles of collaboration, consultation, and transparency
- Situation assessment including scan of work mobilized to date
- Comprehensive survey distributed to IBioS faculty, research associates, graduate students, and postdoctoral fellows, along with select members both within and beyond the UBC community
- Collation of findings regarding respective areas of excellence and strength, areas for improvement, and areas of strategic opportunity
- Kick-off meeting with IBioS members preceding the formal commencement of the strategic planning process
- On-line and in person workshops with the IBioS Steering Committee and IBioS new hires to deliberate on the Mission, Vision, Values, Operating Principles, Strategic Priorities, Core Activities and Indicators
- Periodic feedback from an Advisory Board of academic leaders, professors, senior executives, and directors of policy and sustainability
- Refinement and validation of the plan through several workshops with the Advisory Board and IBioS members during the Annual retreat
- Periodic on-line workshops with a group of external advisors that reviewed our work and provided critical feedback



Thank you to the group of external advisors that gave generously of their time and provided critical input at several points during our strategic planning process:

Don Carruthers Den Hoed

IRES Research Associate; Canadian Parks, Protected, and Conserved Areas Leadership Collective (CPPCL)

Emily Rubidge

Lead scientist of the Seascape Ecology and Conservation Program; Assistant Professor, Department of Forest and Conservation Sciences

Linda Nowlan

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Liska Richer

Manager of the SEEDS Sustainability Program; Instructor, Faculty of Land and Food Systems

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Meigan Aronson

Faculty of Science Dean; Professor, Department of Physics and Astronomy

Nathan Cardinal

Resource Conservation Manager, Parks Canada

Serbulent Turan

Manager, Public Scholarship Initiatives; Instructor, Political Science

Tara Moreau

Associate Director of Sustainability and Community Programs at UBC Botanical Garden

Trisha Fockler Beaty

MD, Nature Trust of BC; The Sitka Foundation

