



Sustainable Development Verified Impact Standard

BIGCOAST FOREST CLIMATE INITIATIVE



GreenRaise

Document Prepared by GreenRaise Consulting GmbH

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Project Title	BigCoast Forest Climate Initiative
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Project Proponent(s)	Mosaic Forest Management Corporation David Belezny, P.Eng, RPF; david.belezny@mosaicforests.com
Assessor Contact	SCS Global Services; cpollet-young@scsglobalservices.com
Project Lifetime	01 January 2018 – 01 January 2048; 30-year lifetime
History of SD VISTA Status	No historical status.
Other Certification Programs	Verified Carbon Standard (VCS) Project 3018
Expected Future Assessment Schedule	No currently known.

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1 SUMMARY OF SDG CONTRIBUTIONS

Table 1: Summary of Project SDG Contributions

Row number	Estimated Project Contribution by the End of Project Lifetime	SDG Target	SDG Indicator	Net Impact on SDG Indicator	Section Reference	Claim, Asset or Label
1)	Clean Water + Sanitation: +10 aquatic stewardship projects within the project area.	6.6	6.6.1 - Change in the extent of water-related ecosystems over time.	Increase	3.2; Impact #2, 12	Claim
2)	Responsible Consumption + Production: Annual production and publishing of corporate Sustainability Progress Report related to the project area.	12.6	12.6.1 - Number of companies publishing sustainability reports.	Increase	3.3; Impact #11	Claim
3)	Climate Action: 22 million tCO ₂ e stored and sequestered over the project lifetime from the project area.	13.0	Tonnes of greenhouse gas emissions avoided or removed.	Increase	VCS validation report	SD VISTA-labeled VCU
4)	Life Under Water: +10 fish (anadromous) stewardship projects within the project area.	14.0	Number of aquatic stewardship projects within the project area.	Increase	3.2; Impact(s) # 2, 12	Claim
5)	Life on Land: 100% of the private forest lands certified to a recognized third-party sustainable forest management standard(s).	15.2	15.2.1 – Progress towards sustainable forest management.	Increase	3.3; Impact(s) # 2, 9, 10, 11, 12	Claim

2 PROJECT DESIGN

2.1 Project Objectives, Context and Long-term Viability

2.1.1 Summary of Project Sustainable Development Objective(s)

Mosaic Forest Management Corporation (Mosaic) is the timberlands manager for TimberWest and Island Timberlands. Mosaic manages both private managed forest lands and public forest land licenses/ tenures.

The project is located in coastal British Columbia, Canada. The project area encompasses the West Coast and South Coast Natural Resource Regions (as defined by the Government of British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development) consisting of an area of approximately 200,000 km². Further information on the BigCoast Climate Initiative is located within the VCS Project Description Document, located within the VERRA Registry (Project 3018).

Prior to the project, Mosaic forestlands have been managed with a focus on timber production. The project will involve initiatives which curtail harvesting within the project activity instances of the project concurrent with the implementation and on-going maintenance of third-party sustainable forest certification within the entire project area, as well as implementing aquatic stewardship projects and annual publishing Sustainably Progress Reports.

These initiatives are being undertaken with the primary objectives of actively managing and protecting the forest lands under their control to achieve climate benefits, biodiversity benefits, water benefits, and other ecosystem services benefits.

Mosaic will achieve these sustainable development objectives through the following initiatives:

- Group Activity 1 - Forest Ecosystem Maintenance Initiative:
- Group Activity 2 - Climate Improvement Initiative:
- Group Activity 3 – Aquatic Ecosystem Enhancement Initiative:

It is expected that Mosaic will positively contribute to sustainable development as defined by and tracked against the United Nations Sustainable Development Goals (SDGs). The applicable SDGs include:

- 6 – Clean Water and Sanitation
- 12 – Responsible Consumption and Production
- 13 – Climate Action
- 14 – Life Under Water; and
- 15 – Life on Land

2.1.2 Description of the Project Activity

Initiatives will be undertaken by Mosaic to achieve the noted sustainable development objectives via the following activities:

Group Activity 1 – Forest Ecosystem Maintenance Initiative

This relates to on-going implementation, maintenance and certification to a recognized third-party forest certification standard on forestlands managed by Mosaic. The certification requires mitigation measures to be implemented to protect water quality, biodiversity, wildlife habitat, species at risk and forests with exceptional conservation value. This sustainable forest management certification requires on-going monitoring, reporting and annual external audits (registration and surveillance) by accredited third parties.

Annual Sustainability Progress Reports will be produced and published.

Group Activity 2 - Climate Improvement Initiative

As outlined the VCS Project Description Document, Mosaic intends to implement a carbon offset project to create greenhouse gas (GHG) emission reductions and removals by converting privately owned operational forest lands to protected forest lands. The project will be implemented following the Verified Carbon Standard (VCS) VM0012 – Improved Forest Management in Temperate and Boreal Forests (LtPF), v1.2 methodology.

Current project activity instances are within approximately 45,000 ha of TimberWest and Island Timberlands private forest lands located within Managed Forests 7, 8, 19, 21, 65, 68, 74, and 76 (as established under the Private Managed Forest Land Act of British Columbia). This forest carbon project area is non-contiguous, with parcels located throughout Vancouver Island, Cortes Island, and Haida Gwaii. Old forests (aged >120 years), ecologically significant areas, and forests with exceptional conservation values were targeted for the forest carbon project.

Through the curtailment of timber harvesting within the project activity instances, an estimated 22,000,000 tonnes of carbon dioxide equivalent (tCO₂e) will be reduced from the atmosphere during the life of the project. This project requires on-going monitoring, as well as validation/verification audits by accredited third parties.

Group Activity 3 – Aquatic Ecosystem Enhancement Initiative

This initiative relates to water and drainage quality, and management plans both on natural sites and at industrial facilities. Continued quality standards and certification occurs through recognized third-party qualified inspections with measures implemented to protect water quality and drainage improvements at working facilities, and ecosystem biodiversity through watershed protection measures and ongoing support for aquatic stewardship and research projects for the enhancement of salmon stocks.

2.1.3 Implementation Schedule

Date	Milestone(s) in the Project's Development and Implementation
January 1, 2018	Project start date. Forest Ecosystem Maintenance Initiative and Aquatic Ecosystem Enhancement Initiative – implementation and on-going maintenance of the entity specific Environmental Management Systems (EMS) consistent the Sustainable Forestry Initiative®(SFI) Forest Management Standard (2015-2019). Climate Improvement Project commencement - commence curtailment of harvesting activities within project activity instances. Aquatic Ecosystem Enhancement Initiative - commencement of initiative.
September 2019	Implementation and verification Canadian Council for Aboriginal Business (CCAB) Progressive Aboriginal Relations (PAR) certification criteria - Bronze
February, 2019	SFI Forest Management Standard (2015-2019) surveillance audit.
June 2020	Verification to the Canadian Council for Aboriginal Business (CCAB) Progressive Aboriginal Relations (PAR) certification criteria – Silver
April 27, 2020	SFI Forest Management Standard (2015-2019) surveillance audit.
July 14, 2020	Production and publishing of Sustainability Progress Report 2019
April 26, 2021	SFI Forest Management Standard (2015-2019) surveillance audit.
May 26, 2021	Production and publishing of Sustainability Progress Report 2020
December 8, 2021	Identify Initiative Extension Participants; execute Agreements.
April 4, 2022	SFI 2022 Forest Management Standard registration audit.
April 7, 2022	Production and publishing of Sustainability Progress Report 2021
June 27, 2022	Verified Carbon Standard (VCS) validation/verification for periods 2018, 2019, 2020 and 2021.
2022	Sustainable Development Verified Impact Standard (SD VISta) validation.
Annually/On-going	Project area monitoring and management.
Annually/On-going	Project verification audits (VCS, SD VISta), surveillance audits (SFI, CCAB PAR).

2.1.4 Project Proponent

Organization Name	Mosaic Forest Management Corporation
Role in the Project	Project Proponent
Contact Person	David Belezny, P.Eng, RPF
Title	Manager – Hydrology & Terrain
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2.1.5 Other Entities Involved in the Project

Organization name	GreenRaise Consulting GmbH
Role in the project	Authorized Representative, Implementation Partner, Project Developer
Contact person	Jason Zimmermann, RPF
Title	Director
Address	1010 Vienna, Rudolfsplatz 9/8, Austria
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Organization Name	Zimmfor Management Services Ltd.
Role in the project	Project Developer
Contact person	Jason Zimmermann, RPF
Title	President
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2.1.6 Project Type

Sectoral Scope 14

Improved Forest Management (IFM)

Logged to Protected Forest (LtPF)

The BigCoast Forest Climate Initiative is a Grouped Project, allowing for the addition of project activity instances following project validation.

2.1.7 Project Location

Project activity instances are located within TimberWest and Island Timberlands privately owned forest lands. The geographic project area includes: Vancouver Island & Coastal Mainland, and Haida Gwaii. Areas bordering the project area include a mixture of operational forest lands, crown lands, private lands, and municipal boundaries. The current extent of the project activity instances is described by the geodetic coordinates within table 2 below and map(s) below.

Table 2 Project geographic boundary

Coordinate System	Extent Coordinates			
	North	South	East	West
GCS_WGS_84	53.8237	48.3803	-123.6	-132.3993

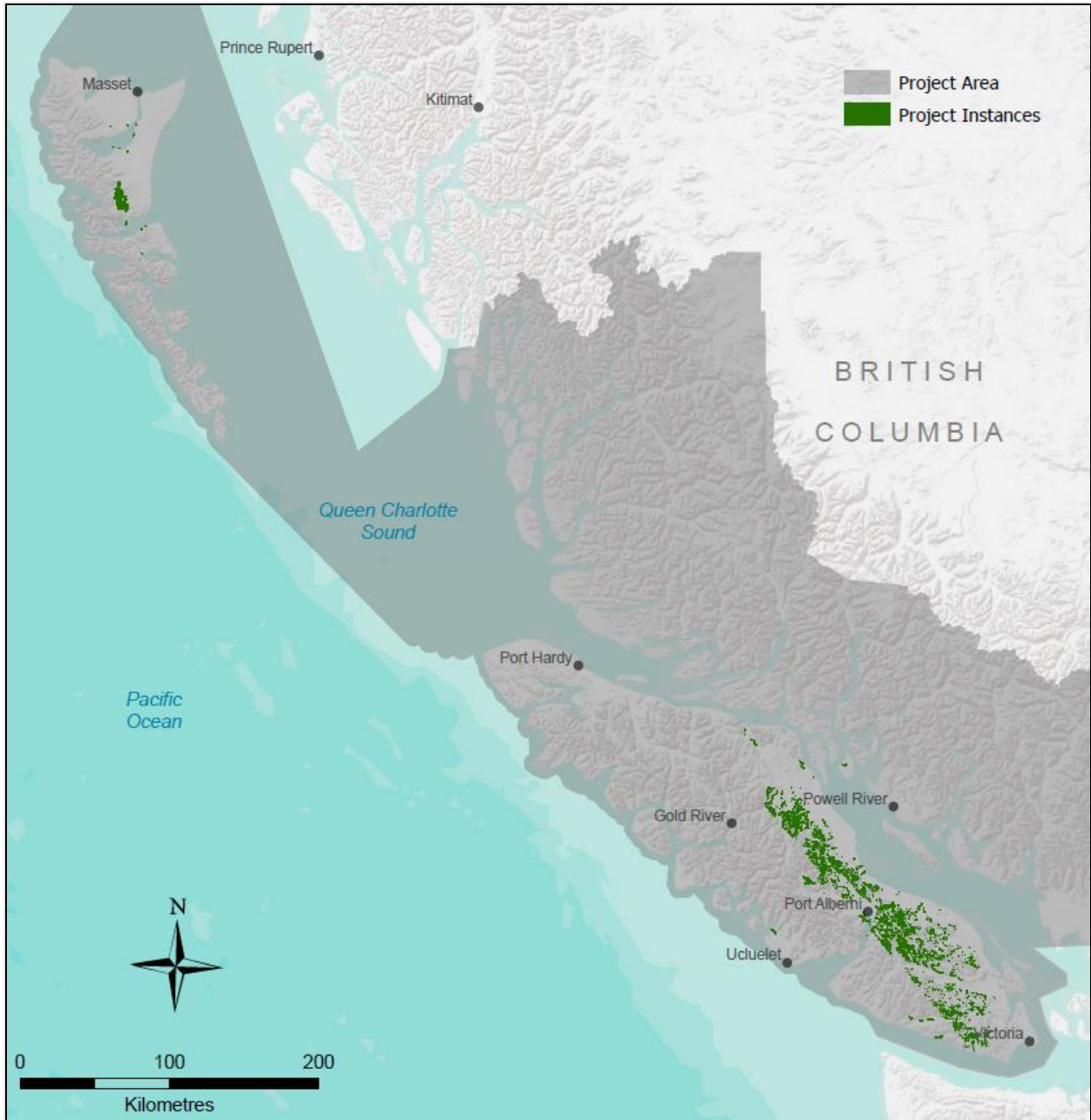


Figure 1 BigCoast Forest Climate Initiative Project Area

2.1.8 Baseline Scenario

Social and Economic Capital

Indigenous People

Mosaic has a unique history with local First Nations as a result of the Esquimalt & Nanaimo (E&N) land transactions of the 1880s wherein the Crown asserted title over parts of Vancouver Island.

In 2015, the Truth & Reconciliation Commission (TRC) released its report with 94 recommendations. The report included a “Call to Action” to specific audiences. Recommendation #92 asks the corporate sector and their leadership to adopt the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). The commission calls for meaningful consultation, long term sustainable opportunities from economic development projects as well as education and training for managers on the history of Indigenous people, intercultural competency, human rights and anti-racism. Improvements in Indigenous inclusion workplace performance and engagement with Indigenous communities, people and businesses are another promoted response to the call to action.

Prior to starting the project, there was an inconsistent approach to consultation and the financial support of cultural and natural heritage.

The implementation (and ongoing verification) of company policies/strategies to the PAR certification program will have positive and intended impact in supporting cultural and natural heritage through the consistent identification of sites of special interest, information sharing and consultation processes.

Communities

Key to the success of the business is the ongoing cooperation and mutual respect shared with local communities and partners. Public access to private forest lands managed by the project proponent is a central and growing aspect of public support for the forest operations on Vancouver Island. The proponent responds to this desire for public access in three ways: entering into permits or licences with responsible recreational user groups and certain related businesses, opening identified gates to the public on weekends and statutory long weekends, and providing camping opportunities through sanctioned campgrounds on managed lands.

Natural Capital and Ecosystem Services

The project, which includes low elevation forests near rivers and estuaries, mid elevation foothills, and sub alpine forests within coastal British Columbia hosts a wide diversity of ecosystems, which vary with elevation. The project includes a gradient of low elevation coastal forests, to high alpine and subalpine mountain ecosystems. Vancouver Island is the most mountainous region of the project area, where forests reach a maximum elevation of 1650m (Green and Klinka 1997).

Mosaic manages its assets for long-term sustainability to assure a steady and continuing flow of high-quality timber. In addition, the company has a system of procedures in place to manage for key public environmental values and other specific objectives through a suite of Environmental Management System procedures (environmental policy, standards and guidelines). The EMS, and Corporate Strategies, provide guidance to operational staff on risk management in a results-based framework.

The project proponent has identified key ecological objectives and developed protocols appropriate for its industrial forestlands. These objectives/protocols consider the project proponent's economic objectives, legislative requirements, the commitment to third-party sustainable forest management (consistent to the Sustainable Forestry Initiative®), interactions with adjacent land ownerships and current knowledge of the biological responses to various silviculture practices.

2.1.9 Causal Chain(s)

Refer to Appendix 1 for causal chains.

2.1.10 Threats to the Project

Threats to the sustainable development benefits during the project lifetime are outlined within the latest verified VCS Non-Permanence Risk Assessment completed for the BigCoast Climate Improvement Initiative (available via the Verra Registry). As net impacts to the planet, people and their prosperity are directly linked to the health of the ecosystem, the risks associated with the assessment conducted as part of the BigCoast Initiative (an AFOLU project) directly correlate to the threats to the project activities as listed previously. Additionally, although the risk assessment was initially conducted specific to activity #2 (Climate Improvement Initiative), activities #1 and #3 are also AFOLU projects, are within the same project area, and are managed by the same project proponent, therefore the threats can be considered the same for all three activities.

The risk assessment outlines all threats related to internal risk, external risk, and natural risk. Internal risks of the project are related to project management, financial viability, opportunity cost and project longevity. External risks are related to land tenure and resources access impacts, community engagement and political risk. The natural risks assessed were fire, pest and disease outbreaks, extreme weather and geological risk. These risks were then ranked based on significance and likelihood.

Human induced threats within the project area are considered low to not applicable. Illegal harvesting of wood from the project area is not an identified systemic issue. The most prevalent human induced threat is related to wildfire risk, as almost half (42%¹) of wildfires within coastal BC are human caused (i.e., recreational activities and arson).

The non-permanence risk assessment identified the likely threats to the BigCoast initiative as being:

- 1) Project longevity
- 2) Natural Risks

¹ <https://www2.gov.bc.ca/gov/content/safety/wildfire-status/about-bcws/wildfire-statistics/wildfire-averages>

Project Longevity

As described in the Non-Permanence Risk Assessment, the threats to project longevity are related to legally binding agreements. None of the activities listed above are under a legally binding agreement to continue management activities, however, all activities are carried out within the scope of Mosaic's corporate commitment to sustainable management practices. There are measures already implemented at Mosaic include commitments and actions to achieve sustainable forest management.

As stated in Mosaic's Corporate Environmental Policy, "...employees, consultants, and contractors will meet all applicable compliance obligations and conform to relevant certification standards, including ISO 14001, Sustainable Forestry Initiative, PEFC chain of custody, and CCAB Progressive Aboriginal Relations.". Corporate policies are the highest level of guidance within the Mosaic management system and act as guidance for corresponding company strategies (i.e., Climate Solution Strategy, Private Forest Land Management Strategy, Private Access Strategy, Indigenous Relations Strategy) and company objectives. As part of their management system, Mosaic has a robust Environmental Management System that integrates all legal, regulatory as well as voluntary standard requirements (i.e., SFI and PEFC).

Any deviation from these commitments would require a drastic deviation at the corporate level, which would also require full support from the executive management team. Due to the unlikely occurrence that this would occur, the threat associated with project longevity can be considered low.

Natural Risks

The natural risks that could potentially threaten the sustainable development benefits during the project lifetime correspond to the threats to forest ecosystems within Coastal BC as a whole: extreme weather events and wildfire. Studies have shown that, "portions of Canada are expected to experience greater impacts of climate change than many areas of the world" (Field et al. 2005). Of particular concern are impacts such as:

- increased frequency and intensity of fires (Flannigan et al. 2005),
- increased outbreaks of forest pests, both insects and disease (Johnston et al. 2006), and
- changes to growth and amount of harvestable wood volume (Johnston and Williamson 2005, Girardin et al. 2008)."

These impacts, particularly windthrow events, landslides and wildfire, are characterized as natural disturbance types that are integral to the natural successional pathways of coastal ecosystem types² and historically occur on disturbance intervals of 100 – 350 years. Other extreme weather events can include extreme heat and drought, changes in seasonal precipitation patterns and increase in fluctuations in wind patterns and speed.

² Successional Responses to Natural Disturbance, Forest Management, and Climate Change in British Columbia's Forests: <https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/land-based-investment/forests-for-tomorrow/171-1398-4-pb.pdf>

Historically, wildfire has not played a significant role in the natural disturbance types of Vancouver Island and surrounding mainland coast areas. However, due to the potential for more frequent wildfires in the future due to hotter and drier seasons with abrupt transitions, the proponent has measures in place such as Fire Protection Standards and Emergency Response Procedures that act to mitigate and inhibit any operationally caused fire hazards, with ignition prevention being the most important. These measures include curtailment of operations during times of extreme fire danger (i.e., fire weather curtailments). During times of extreme fire hazard, to mitigate the risk of human caused fires, the project proponent restricts public access to their forest lands. As per the BC Wildfire Act, it is also the responsibility of the land holder to report, respond to and coordinate firefighting resources with the BC Wildfire Service in the event of a wildfire, and therefore the project proponent has several systems and procedures in place to actively fight and extinguish and wildfires that could occur.

The current threat of pest and disease outbreak on the project lands is low, however due to the potential for future challenges due to climate change, the project proponent has implemented measures to mitigate the effects of forest pests and disease. These measures include but are not limited to periodic survey and monitoring, alternate species planting with pest/ disease resistant stock, collaboration with research pathologists and eradication strategies.

A vulnerability assessment within the proponent's Climate Solutions Strategy regarding extreme weather events resulted in a ranking of high likelihood of future vulnerability due to changes in average temperatures that could lead to extreme heat, drought and changes in seasonal precipitation patterns. Currently, mitigation measures in place to reduce the effects of these events include but are not limited to conducting periodic watershed assessments, engaging with Water Purveyors, creating and monitoring hydrological recovery targets, and participating in and supporting research.

Hurricane-force winds are generally limited to the exposed portions of Vancouver Island (i.e., the west coast). Within the project area, winter winds are predominantly from the SE quadrant and can be damaging to fresh timber edges with long fetch and topography that may funnel the wind. This type of damage effects areas of uniform second growth that are subsequently harvested. Old growth portions of the project area are considered naturally windfirm given their topographic position and historic exposure to high winds. Mitigation measures in place to mitigate effects from windthrow events include wind-firming practices in areas of recent harvest as well as windthrow surveys and monitoring to better understand how wind patterns and events can cause disturbance events. The threats to the sustainable benefits of the project related to natural risk can be identified as threats that all forest ecosystems will face within the lifetime of the project. The project proponent acknowledges and understands that planning for the effects of climate change is integral to sustainable forest management and is actively working to develop strategies and implement measures to guide current and future forest management activities and ensure the long-term sustainable benefits from their operations and compliance with certification..

2.1.11 Benefit Permanence

As referenced above, although project longevity is determined to be a threat to the sustainable benefits of the project activities, the proponent has measures in place to ensure that the sustainable benefits are maintained and enhanced after the project activities have ceased. Refer to Section 2.1.10 above.

2.2 Stakeholder Engagement

2.2.1 Stakeholder Identification

A stakeholder (excluding an interested stakeholder) as defined in the Sustainable Development Verified Impact Standard v1.0 is any person who can potentially be affected by the project.

Potential stakeholders were identified by the project proponent. The proponent provided a categorized description of peoples potentially impacted by the project. Stakeholder contacts were chosen to:

- Cover national, provincial, and smaller scale levels,
- Provide a range of stakeholder organization sizes, from larger institutions through to small organizations and individuals,
- Provide a range in geographic coverage, with a focus on areas where forest management is likely a priority.

Information was collected with the goal to:

- Identify digital contact information (i.e., email addresses), as the primary point of contact (to maximize the duration of consultation, to speed up the response process, and to facilitate responses and information sharing, and
- Provide a sufficient number of contacts, commensurate within available information and the size of the project area.

Once potential stakeholders were identified, they were categorized as follows to ensure adequate representation had been achieved across the following groups:

1. Economic
 - Other Forest Owners (adjacent to the project area)
 - Forest Contractors
 - Representatives of Forestry Workers/Industry
2. Social
 - Non-government organizations
 - Labour/ Trade Unions
 - Community Representatives
 - Recreation Representatives
 - Indigenous Representatives
3. Environmental
 - Non-government organizations
 - Local Communities
4. Forest Agencies
 - National/Federal
 - State/Provincial
5. Research Institutes and Universities

Further analysis was completed to identify stakeholders that could be impacted by the project via the Causal Chain Analysis (refer to Section 7.1.9). All stakeholders identified through the risk ranking process were classified as “impacted” and were designated as a stakeholder by the project proponent. All identified stakeholders were included in all public outreach activities.

As required under SD VISta, stakeholders were further categorized into stakeholder groups based on similar income, livelihood, well-being and/or cultural values and whose values are different from those of other groups. Stakeholder groups comprised of all stakeholders, excluding “interested stakeholders”. Interested stakeholders are designated as any person, group or persons, or entity that has shown an interest, or is known to have an interest, in the activities of the project, but that will not be materially affected by those activities (e.g., local or international NGOs).

2.2.2 Stakeholder Description

Table 3 defines the stakeholder groups and their relevance to the project. There were no stakeholders that were identified as having rights to resources of the land associated with the project activities.

Table 3 Stakeholder groups and relevance to the project

Stakeholder Group	Relevance to project
Male	Proponent does, or could potentially employ male workers (directly and indirectly)
Female	Proponent does, or could potentially employ female workers (directly and indirectly)
Gender (un/non-defined)	Proponent does, or could potentially employ workers of un/non-defined gender (directly and indirectly)
Indigenous Peoples*	Proponent employs or could potentially employ Indigenous Peoples
Forestry Contractor (Direct)	Direct forestry contractors are contractors who are currently employed by the project proponent
Forestry Contractor (Indirect)	Indirect forestry contractors are contractors who are not currently employed by the project proponent, however, could potentially be employed in the future or has been employed in the past by the proponent

*The project proponent actively engages with Indigenous Peoples as part of their regular business practices. Indigenous Peoples as defined in the stakeholder groups are Indigenous Peoples that are employed by the project proponent. Indigenous Peoples who have been engaged regarding the project activities but who are not employed by the project proponent are not defined as stakeholders.

2.2.3 Stakeholder Consultation

Local stakeholder consultation was conducted for a 30-day period from April 21, 2022 and May 31, 2022, prior to project validation. Different consultation processes were not required for each stakeholder group as all stakeholders were able to be consulted in the same manner. Consultation was conducted both via electronic documents delivered by email, as well as an in-person open house meetings held on April 25, 2022, within the community of Qualicum, on April 26, 2022, within the community of Duncan, on May 4, 2022, within the community of Port Alberni and on May 10, 2022, within the community of Haida Gwaii. Meetings were organized by the project proponent. Attendance was taken at the town hall meetings and is kept on file. Project information relating to the design and implementation, any risks, costs or benefits to local stakeholders, all relevant law and regulations covering workers' rights in Canada was provided via the GreenRaise website (<https://green-raise.com/projects/>). Links to the Project Registry are also provided on the GreenRaise website.

No marginalized and/or vulnerable groups were identified and therefore no special attention was required to be paid to optimizing benefits to these groups.

Online forms were made available on the GreenRaise and BigCoast websites and were used to collect stakeholder comments and feedback. Comments received through other means (i.e., town halls or direct emails) were collected within the proponent's Salesforce database.

Response, and any required updates to the project design relating to comments received from Stakeholders were also tracked. All consultation information will be made available to the VVB during project Validation and Verification. Refer to the GreenRaise SOP –Stakeholder Consultation + Engagement for additional details relating to Stakeholder consultation processes.

To date, 11 comments were received through the local stakeholder consultation process regarding potential interest in being included as a project activity instance of the VCS project in the future.

2.2.4 Continued Consultation and Adaptive Management

The online feedback forms will remain accessible to the public throughout the lifetime of the project, allowing for continual stakeholder engagement. If required throughout the life of the project, any additional information that is required to be communicated to stakeholders will follow the same process of electronic correspondence via email and information provided via the GreenRaise website as described in section 2.2.3 above.

2.2.5 Anti-Discrimination

Measures were taken throughout the stakeholder consultation process to ensure that the project proponent and all other entities involved in project design and implementation are not involved or complicit in any form of discrimination³ or sexual harassment with respect to the project. The measures implemented are the proponent's company wide zero-tolerance policy for discrimination or harassment, "Workplace bullying, discrimination and harassment policy". The purpose of the policy is as follows: at Affiliation Group, one of the ways we value people by showing respect for each other regardless of the work we do. We are committed to provide an environment that protects and promotes the dignity of individuals and ensures that all employees are treated in a fair and respectful manner, and can work without fear of bullying, discrimination or harassment. The scope of the policy is as follows: the policy applies to all officers, directors, employees (permanent, temporary, casual or student) and contractors (collectively, for the purposes of this policy "Employees") of Mosaic Forest Management Corporation, TimberWest Forest Corp., Island Timberlands LP, and their affiliates (collectively, "Affiliate Group"). It applies at any location where Affiliation Group business is conducted, including at all Affiliate Group events, regardless of whether they occur at or outside of the workplace, or during or after normal working hours. This policy applies to interpersonal and electronics communications, such as email.

Additionally, correspondence was sent out electronically, presented virtually to interested stakeholders, and was made available on a public website; Town Halls were hosted in neutral locations (i.e., not owned by the project proponent) to allow for unimpeded access to project information and the opportunity to provide feedback.

2.2.6 Worker Training

As part of the project proponent's existing health and safety program, workers are oriented and trained prior to conducting any work tasks. Any stakeholders involved in carrying out project activities will be employed by the project proponent and fall under their corporate policies and procedures. As part of worker training and orientation, workers will be informed of the aforementioned project activities. Where required, training content will be tailored to marginalized and/or vulnerable people in the form of visual aids, translation services and/or traditional translations.

2.2.7 Equal Work Opportunities

It is not anticipated that an abundance of work opportunities will be generated from the project activities themselves. Work opportunities provided by the project proponent are posted publicly with the position description as well as the job requirements. Submission of applications for postings are not restricted in any manner besides by a pre-determined time-frame. Once applications are received, and the pre-determined time frame has concluded, applicants are reviewed and assessed based on their qualifications as it relates to the corresponding job posting. From the applicant pool, applicant may then be chosen for in person interviews to further determine the applicants' qualifications for the posted position.

³ Discrimination may include but is not limited to that based on gender, race, religion, sexual orientation or other habits.

The proponent's workforce is diverse in both gender, ethnicity and beliefs. Currently, the proponent's leadership is comprised of a diverse group of individuals which includes both male and female employees. The proponent also has corporate level policy's addressing equal work opportunities such as the "Diversity & Inclusion Vision" as well as the corporate values that include the commitment to have "a diverse and inclusive culture where people are inspired, empowered and engaged".

Additionally, the proponent has achieved Silver Progressive Aboriginal Relations (PAR) Certification through the Canadian Council for Aboriginal Business. As part of the qualifications for the PAR certification, the proponent has demonstrated that they prioritize offering employment to aboriginal peoples.

2.2.8 Workers' Rights

Via the Occupational Health and Safety requirements under the Worker's Compensation Act as well as via the third-party requirements of PEFC and SFI certifications, Mosaic ensures that workers' rights are meet all legal requirements including the Core Labor Conventions of the International Labor Organization (ILO) (refer to Section 2.3.9 below). These rights are communicated to workers via the Mosaic Forest Management Corporation Code of Business Conduct & Ethics, the Mosaic Safety & Vision Principles, as well as the Occupational Health and Safety Program.

2.2.9 Occupational Safety Assessment

Risks related to work carried out as a result of project activities is directly comparable to risks associated with forestry work within coastal British Columbia. These risks are associated with the proponent's "business as usual" and therefore project specific safety measures are not required. Risks associated with forestry work can include but are not limited to exposure to extreme weather (heat, cold, rain/snow), working in remote locations, working alone, wildlife encounters, slips trips and falls, scrapes and bruises.

The project proponent has a robust safety system in place including an established Emergency Preparedness and Response Plan (EPRP) with corresponding workplace Standard Operating Procedures. Anyone working on lands owned and managed by the project proponent are required to adhere to the safety system in place. As part of the established EPRP, pre-work hazard assessments are required to be completed for all new sites, and when returning to work. All workers are briefed on pre-work hazard assessments prior to entering any work site.

2.2.10 Feedback and Grievance Redress Procedure

Please refer to Appendix 3 – Grievance Redress Procedure of the GreenRaise Standard Operating Procedures – Stakeholder Consultation + Engagement for procedures relating the Grievance Redress Procedure. This document will be made available to the VVB during the validation and all subsequent verification audits.

2.2.11 Feedback and Grievance Redress Procedure Accessibility

The GreenRaise Grievance Redress Procedure is made publicly available via the GreenRaise website: www.green-raise.com.

2.2.12 Stakeholder Access to Project Documentation

Project documentation has been made available to stakeholders via the GreenRaise website, as well as via the Verra Project Registry. Throughout the lifetime of the project, documentation will continue to be provided to the public in this manner, unless a change in procedure is warranted.

2.2.13 Information to Stakeholders on Assessment Process

Information regarding the process of SD VISta project assessment has been provided to all stakeholders via the GreenRaise website. This information will remain publicly available on the GreenRaise website for the lifetime of the project.

Stakeholders will be made aware of assessor's site visits, as well as how direct and independent communication with the assessor can be achieved, prior to the occurrence via a email notification. It is determined a stakeholder cannot be reached via electronic means, notification will be sent out via post mail.

2.3 Project Management

2.3.1 Avoidance of Corruption

The project proponent is a prominent company governed by a Board of Directors. The proponent complies with all laws and regulations of Canada and British Columbia, including those pertaining to corruption. The proponent maintains an effective human resources program governing all employees and management. Refer to the proponent's corporate policies, strategies and other supporting documentation.

Additionally, the proponent undergoes third-party auditing through its several certification standards such as SFI, PEFC, and ISO 14001.

2.3.2 Statutory and Customary Rights

Use of lands directly affected by project activities is formally for timber and real estate management only, however informally other uses include recreation and traditional/ heritage practices.

Managed forest tenure is an assessment classification established by the provincial government in 1986 to encourage private landowners to manage the long-term forest production. Approximately 822,000 hectares of private land in British Columbia are classified as managed forest. These lands are owned by individuals, families and companies of various sizes. The taxation values for this land are established under the authority of the *Assessment Act*.

The *Private Managed Forest Land Act* was passed in 2004 and encompassed within its jurisdiction all Managed Forest lands as defined under Section 24 of the *Assessment Act*. This Act restricts landowners that own managed forest property to the management of their property for forestry and forestry related uses.

The *Private Managed Forest Land Act* established the Managed Forest Council and forest land objectives for soil conservation, water quality, fish habitat, critical wildlife habitat, and reforestation.

The forest land objectives are managed under the *Private Managed Forest Land Council Regulation*. Council's legislated mandate is "...to encourage forest management practices on private managed forest land, taking into account the social, environmental & economic benefits of those practices."

The project proponent manages a combination of Private Land and Crown Lease land. The project proponents operating area is defined in the Mosaic Private Forest Land Strategy (Corporate Strategy).

Access to the project lands varies. The majority of the lands covered by the project activities can be accessed via forestry (gravel) road networks, however, few remote locations require access via boat or helicopter.

2.3.3 Recognition of Property Rights

Legal rights to the lands affected by the project activities are designated to both TimberWest and Island Timberlands as described above.

Aboriginal and treaty rights are recognized and affirmed in the Canadian Constitution. In British Columbia, however, there are very few treaties. On the proponent's operations, the Douglas Treaties include certain areas of the operations on Southern Vancouver Island. The Douglas treaties are generally focused on hunting and fishing rights.

Treaty Negotiations with Canada and British Columbia are currently ongoing with several Aboriginal groups. Crown tenures managed by the proponent may be impacted by treaties, while private lands are not considered for land settlement in treaty negotiations. Opportunity to sell private lands on a willing buyer - willing seller basis could occur through the treaty process. Completion of treaties will serve to identify aboriginal and treaty rights, and they will have to be considered in the context of sustainable forest management.

Government, at various levels, has legal obligations with respect to Aboriginal and treaty rights that are met through policy and legislative initiatives. Generally, these relate to hunting, fishing, gathering, culture and heritage. Government has a duty to consult with Aboriginal groups regarding development impacts on aboriginal and treaty rights.

2.3.4 Free, Prior and Informed Consent

As no people live on the project area there are no affected individuals whose property rights will be, or are, affected by the project, however, continuous consultation this Aboriginal groups and Indigenous People has occurred and is planned to continue throughout the lifetime of the project.

2.3.5 Restitution and/or Compensation for Affected Resources

There are no anticipated net negative effects of the project activities, and therefore this section is not applicable.

2.3.6 Property Rights Removal/Relocation of Property Rights Holders

No people live on the land affected by the project activities, therefore there will be no risk of relocation of habitation or livelihood.

2.3.7 Identification of Illegal Activities

There is a very low risk of illegal activities occurring that could materially affect the project activities' impacts.

British Columbia has robust regulations with strong private property protections. Additionally, the legal timber system in British Columbia is well established and actively monitored. The system includes timber marking/ stamping as well as a scale reporting system that makes timber left extremely difficult and rare.

Other illegal activities (including poaching) that could occur but are considered rare within British Columbia. Illegal activities are monitored by provincial police, forestry and wildlife enforcement resources. The risk of wildfire due to arson has been discussed above within "Project Longevity" and is also considered rare.

Access to the proponents' lands are gated and are monitored regularly.

To date, there are no identified issues with illegal activities within project area.

2.3.8 Ongoing Conflicts or Disputes

Currently and over the last 20 years, there have been no ongoing, unresolved conflicts or disputes, or disputes that were resolved, over rights to lands or resources within the project area.

2.3.9 National and Local Laws and Regulations

There are a range of regulatory requirements on private managed forest lands in British Columbia. Landowners must ensure that all relevant federal and provincial legislation is understood and observed. Key Acts and Regulations relevant to private land include, but are not limited to:

Table 4. Private Land Legislation

Legislation	Application	Lead Agency
BC Assessment Act	Values, Assessment and Taxation of Private Land	BC Assessment Agency
Environmental Management Act	Detrimental environmental impacts and emergencies	Ministry of Environment & Climate Change Strategy
Forest Act	Timber Scaling, marking and Transportation	Ministry of Forests, Lands & Natural Resource Operations & Rural Development
Private Managed Forest Land Act	Uses and restrictions of Managed Forest land	Managed Forest Council
Forest and Range Practices Act	Regulations for Forest Fire Prevention and Suppression; Control of destructive agents; Private Land	Ministry of Forests, Lands & Natural Resource

Legislation	Application	Lead Agency
		Operations & Rural Development
Hazardous Products Act	Sale or importation of prohibited and restricted products	Minister of Public Safety & Solicitor General
Heritage Conservation Act	Archaeological assets	Ministry of Indigenous Relations & Reconciliation
Highways Act	Load restrictions, access	Ministry of Transportation & Infrastructure
Navigable Waters Act	Construction or placement of "works" on, over, under, through or across any navigable water	Transport Canada
Occupiers Liability Act	Care towards persons entering premises	Attorney General
Pesticide Control Act	Pesticide Use	Ministry of Environment & Climate Change Strategy
Regional District Zoning Standards	Land Use	Regional Districts
Transport of Dangerous Goods Act	Handling and transportation of dangerous goods	Ministry of Transportation & Infrastructure
Trespass Act	Posted and Enclosed Land	Attorney General
Waste Management Act	Spill prevention and reporting	Ministry of Environment & Climate Change Strategy
Workers Compensation Act	Industrial Health & Safety Regulations	Ministry of Jobs, Economic Development & Competitiveness
Fisheries Act (Federal)	Protection of fisheries and fish habitat	Fisheries and Oceans Canada
Water Sustainability Act	Works in and about stream	Ministry of Environment & Climate Change Strategy
Migratory Birds Convention Act (Federal)	Migratory birds and bird habitat	Environment and Climate Change Canada
Drinking Water Protection Act	Human drinking water	Ministry of Health
Species at Risk Act (Federal)	Species at risk and critical habitat	Environment and Climate Change Canada

Legislation	Application	Lead Agency
Wildlife Act	Species at risk and critical habitat	Ministry of Environment & Climate Change Strategy

2.3.10 Project Ownership

Lands within the project area are owned by TimberWest and Island Timberlands. Mosaic is the timberlands manager for TimberWest and Island Timberlands, managing their forest resources, forest operations, and forest management planning. Mosaic has been given management directive and therefore consent from the property owners to implement the project activities.

TimberWest and Island Timberlands have made Management Commitments (as required under the Private Managed Forest Land Act) for Managed Forests: 7, 8, 19, 21, 65, 68, 74, and 76. The Managed Forests are composed of parcels of land, with each parcel having a unique Parcel Identifier (PID). PIDs are registered with the Government of British Columbia's Register to Land Titles (according to the Land Title Act) administered by the Land Title and Survey Authority of British Columbia. Each parcel is associated with either TimberWest or Island Timberlands. Samples of specific properties are provided below. Specific legal title will be provided to the validation body for each land parcel upon request.

Table 5: Supporting Property Ownership Information [sample]

Landowner	Managed Forest No.	Land District	Block Number	Parcel Identifier (PID)
TimberWest Forest Corporation	19	15	1339	008-957-436
Island Timberlands Limited Partnership	74	01	84	008-243-727

2.3.11 Grouped Projects

The BigCoast SD VISTA initiative is not considered a grouped project.

3 BENEFITS FOR PEOPLE AND PROSPERITY

3.1 Condition of Stakeholders at Project Start

The BigCoast property is non-contiguous, private, fee-simple lands with gated road access. There are no communities, Indigenous people or other ongoing public use for income or livelihood by any people living or who are dependent on resources within the project activity instances that would be affected by the project activities.

The project lands are located throughout Vancouver Island, Haida Gwaii, and the coastal mainland of British Columbia. The current population of Vancouver Island is ~881,000 people, with the majority (63%) being considered “of working age”, 15-64⁴. Of this population, as reported in the 2016 census, 4% of the population reported a language other than English as their first language, and 15.8% of the population identifying as immigrants and 7.8% of the population identifying as Aboriginal.

Within British Columbia there is a very well established and modern economy. As of April 2022, the regional unemployment rate on Vancouver Island was 5.0%⁵. According to the 2020 *State of the Island Economic Report* completed by Vancouver Island Economic Alliance, Forestry, fishing, mining, oil and gas provided ~10.7%⁶ of jobs within the “Goods Producing Sector” and 2.9% of all jobs on Vancouver Island. The overwhelming majority of employment opportunities on Vancouver Island exist within the Service Producing Sector, specifically, Health Care and Social Assistance (15.7%). Although on an upward trend, a living wage on Vancouver Island ranges from \$15.81 - \$19.63. When comparing the living wage to the median wage of workers, the majority of workers on Vancouver Island make a living wage.

As previously stated, the forestry sector provides a smaller percentage of all jobs in the region of Vancouver Island. The relevant stakeholder group (Forestry Contractors (direct)) would be considered an even smaller sector of this cohort as the coastal British Columbia region is home to several large licensees that encompass the larger stakeholder group of Forestry Contractors (Indirect). These forestry sector as a whole encompasses all the stakeholder groups defined in Table 6 as the industry is diverse in both gender and ethnicity.

⁴ 2020 Labour Force Survey

⁵ WorkBC - <https://www.workbc.ca/labour-market-information/regional-profiles/vancouver-island-coast#regional-overview> – accessed June 3, 2022.

⁶ 7,100 jobs of 66,000 within the Goods Producing Sector, which includes Construction, Manufacturing, Forestry, Fishing, Mining, Oil and Gas, Agriculture, and Utilities.

Table 6. Stakeholder Groups

Stakeholder Group	Description	Condition at Project Start	Relevance to project
Male	Individuals who identify as male.	On Vancouver Island, approximately half (48%) of the population is male. The project proponent employs male individuals (60% of workforce) ⁷	<i>Proponent does, or could potentially employ male workers (directly and indirectly)</i>
Female	Individuals who identify as female.	On Vancouver Island, approximately half (52%) of the population is female. The project proponent employs female individuals (40% of workforce) ⁷	<i>Proponent does, or could potentially employ female workers (directly and indirectly)</i>
Gender (un/non-defined)	Individuals who choose not to disclose their gender identity, or who identify as a non-binary gender.	Current census data does not capture un/non-defined gender individuals at this time, however non-binary identities are recognized by the government of BC. At this time the project proponent does not employ any non-binary identified, un/non-defined gendered individuals.	<i>Proponent could potentially employ workers of un/non-defined gender (directly and indirectly)</i>
Indigenous Peoples	Individuals who identify as Indigenous.	The project proponent currently employs Indigenous individuals ⁷	<i>Proponent employs or could potentially employ Indigenous Peoples</i>
Forestry Contractor (Direct)	Individuals employed directly within the forestry sector.	The project proponent currently employs approximately 2000 direct “forestry contractors”	<i>Direct forestry contractors are contractors who are currently employed by the project proponent</i>

⁷ Mosaic 2021 Sustainability Progress Report

Stakeholder Group	Description	Condition at Project Start	Relevance to project
Forestry Contractor (Indirect)	Individuals employed indirectly within the forestry sector.	The project proponent currently employs approximately 1000] indirect “forestry contractors”	<i>Indirect forestry contractors are contractors who are not currently employed by the project proponent, however, could potentially be employed in the future or has been employed in the past by the proponent</i>

3.2 Expected Impacts on Stakeholders

Table 7. Expected impacts on stakeholders

Impact #2	Protection of Community Watersheds and Drinking Water
Type of Impact	Positive, actual, direct and intended.
Affected Stakeholder Group(s)	All stakeholder groups (regionally)
Resulting Change in Well-being	<p>Significantly positive benefits for all stakeholders within protected water resources areas in the form of enhanced watershed protection.</p> <p>Project proponent actively participates in watershed advisory groups enabling them to provide, measures and/or mitigation where required based on water users needs and concerns.</p> <p>Efforts by the project proponent will also be made to determine best management practices of water resources with the on-going challenges of climate change difficulties.</p>
Impact #7	Economic Opportunity (Potential job loss)
Type of Impact	Negative, actual, direct and unintended.
Affected Stakeholder Group(s)	Forestry contractors (direct/indirect)

Resulting Change in Well-being	<p>Due to the size of the deferral project (7% of owned lands) and the distribution across the landbase, there is potential for minimal negative impact to direct and indirect forestry contractors due to potential job loss from harvest deferral. Potential job loss most likely related to activities such as:</p> <ul style="list-style-type: none"> - Harvesting (falling, yarding and processing crews) - Road building (machine operators, driller/blasters, truck drivers) - Log transportation (truck drivers) - Harvest Planning (forest engineers) - Silviculture (forestry workers, tree planters) - Wood waste and residue utilization (shake/shingle, biofuel, and firewood harvesting) - Crew Transportation (water taxi drivers, helicopter pilots) <p>The impact is anticipated to be very low to not applicable due to the likelihood that workers will still be required for operations outside of the harvest deferral area.</p> <p>Mitigation Efforts: Where practicable, contractors displaced by harvest deferral practices will be given opportunities to continue working on areas of continued timber harvesting by the project proponent.</p>
Impact #9	Support for Local Communities
Type of Impact	Positive, actual, direct and intended.
Affected Stakeholder Group(s)	All stakeholder groups (regionally)
Resulting Change in Well-being	Positive benefits for all stakeholders within project area. The project proponent has a proven record of providing support to local community organizations in the form of goods or funds. Donations in the past have been made to the following community organizations (non-exhaustive list): non-profit community societies, Food Banks, school food programs, sustainability programs, disaster relief funds, community cleanup efforts, internships and scholarships, job training, recreation groups and others.
Impact #10	Supporting recreation opportunities.
Type of Impact	Positive, actual, direct and intended.

Affected Stakeholder Group(s)	All stakeholder groups (regionally)
Resulting Change in Well-being	Significant positive benefits to all stakeholder groups in the form of ongoing support of recreational campsites, formal access agreements with recreational groups (hiking, mountain biking, research, beekeeping, fishing, ATV use, etc.) and recreational event support (e.g., Search and Rescue training, recreational sports events).
Impact #11	Supporting cultural and natural heritage
Type of Impact	Positive, actual, direct and intended.
Affected Stakeholder Group(s)	Indigenous Peoples
Resulting Change in Well-being	<p>Significantly positive benefits for Indigenous Peoples within the project area due to donations and programs lead by the project proponent. These include but are not limited to:</p> <ul style="list-style-type: none"> - Indigenous Intern Leadership Program - Log and firewood donations - Local Indigenous language education efforts - Investments in First Nations scholarships and training programs - First Nations fibre sourcing program - Donations to First Nation's community projects - Locate and coordinate access to large cultural cedar - Donations of cultural logs to First Nations - Increase Indigenous participation in forest economy by increasing investment in First Nations contractors and employment
Impact #12	Economic Opportunity
Type of Impact	Positive, actual, direct and intended.
Affected Stakeholder Group(s)	All stakeholder groups (regionally)

Resulting Change in Well-being

Significantly positive benefits for all stakeholders within project area due to:

- Increasing investment in First Nations contractors and employment to increase Indigenous participation in the forest economy
- Corporate commitments to advance gender parity, and promote and develop women to higher levels in the organization
- Employment of a learning management system for employee training and professional development opportunities
- Continual commitment to worker safety

3.3 Stakeholder Monitoring Plan

The project proponent will conduct stakeholder group monitoring by monitoring the impacts to stakeholders, previously identified. Monitoring will be conducted via systems already in place by the organization. The systems are mature with allocated roles and responsibilities already identified throughout the organization. Table 8 below outlines all identified impacts to People and their Prosperity, and how they will be monitored. Refer to tables above for the full description of impacts and the affected stakeholder group(s).

Reporting on monitoring will be completed in the following manner at the designated frequencies:

- SFI Objectives – annually within the SFI Audit reports
- Environmental Objectives – annually within Mosaic Environmental Objectives Report
- VCS – periodically within verification reports (at least every 5 years)
- SD VISta – periodically within verification reports (at least every 5 years, and concurrently with VCS verification events)

Table 8. Stakeholder monitoring mechanisms

Impact #	Monitoring Mechanism(s)
2	<p>SFI Certification - Objective #3: Protection and maintenance of water resources</p> <ul style="list-style-type: none"> - Performance Measure: Certified organizations shall meet or exceed all applicable federal, provincial and local water quality laws and meet or exceed best management practices. - Performance Measure: Certified organizations shall implement water, wetland, and riparian protection programs based on climate, soil type, terrain, vegetation, ecological function, harvesting system, state best management practices, provincial guidelines and other applicable factors. <p>SFI Certification - Objective #9: Climate smart forestry</p> <ul style="list-style-type: none"> - Performance Measure: Certified Organizations shall individually and/or through cooperative efforts involving SFI Implementation Committees or other partners identify and address the climate change risks to forests and forest operations and develop

Impact #	Monitoring Mechanism(s)
	<p>appropriate adaptation objectives and strategies. Strategies are based on best scientific information.</p> <ul style="list-style-type: none"> - Performance Measure: Certified Organizations shall individually and/or through cooperative efforts involving SFI Implementation Committees or other partners identify and address opportunities to mitigate the effects associated with its forest operations on climate change. <p>Environmental Objectives - #3: Protection of soil, water, fish habitat and wildlife habitat</p> <ul style="list-style-type: none"> - Target: refer to Mosaic Environmental Objectives Performance Report (target # 2) <p>Environmental Objectives - #15: Maintain water quality and community relationships</p> <ul style="list-style-type: none"> - Target: refer to Mosaic Environmental Objectives Performance Report (target # 15).
7	<p>SD VISta – Impact #7: Economic Impact (potential job loss)</p> <ul style="list-style-type: none"> - Mitigation Effort: Where possible, re-allocate contractors from harvest deferral areas across project proponent landbase (non-harvest deferral areas and deferral areas (within project proponent lands) to provide alternate work opportunities
9	<p>SFI Certification - Objective #14: Community Involvement and Landowner Outreach</p> <ul style="list-style-type: none"> - Performance Measure: Support, individually and/ or through cooperative efforts involving SFI Implementation Committees, education and outreach to forest landowners describing the importance of and providing implementation guidance on: - Performance Measure: Individually and/ or through cooperative efforts involving SFI Implementation Committees support and promote, at the provincial or other appropriate levels, mechanisms for public outreach, education and involvement related to sustainable forest management. - Performance Measure: Individually and/ or through cooperative efforts including SFI Implementation Committees, establish, at the provincial, or other appropriate levels, procedures to address concerns raised by loggers, consulting foresters, employees, unions, stakeholders, the public, or other Certified Organizations regarding management that appears inconsistent with the SFI Forest Management standards principles and objectives. <p>Environmental Objectives - #12 – Support local communities</p> <ul style="list-style-type: none"> - Target: refer to Mosaic Environmental Objectives Performance Report (target # 12) <p>Environmental Objectives - #18 – Enhance relationship with local community and groups</p> <ul style="list-style-type: none"> - Target: refer to Mosaic Environmental Objectives Performance Report (target # 18)
10	<p>SFI Certification - Objective #5: Management of Visual Quality and Recreational Benefits</p> <ul style="list-style-type: none"> - Performance Measure: Certified organizations shall manage the impact of harvest on visual quality - Performance Measure: Certified organizations shall manage the size, shape, and placement of clearcut harvests

Impact #	Monitoring Mechanism(s)
	<ul style="list-style-type: none"> - Performance Measure: Certified organizations shall adopt a green-up requirement or alternative methods that provide for visual quality - Performance Measure: Certified organizations shall support and promote recreational opportunities for the public <p>Environmental Objectives - #13 & #14 – Promote recreation opportunities</p> <ul style="list-style-type: none"> - Target: refer to Mosaic Environmental Objectives Performance Report (target # 13) - Target: refer to Mosaic Environmental Objectives Performance Report (target # 14)
11	<p>SFI Certification - Objective #8: Recognize and respect Indigenous Peoples’ rights</p> <ul style="list-style-type: none"> - Performance Measure: Certified organizations shall recognize and respect Indigenous Peoples’ rights - Performance Measure: Certified organizations with forest management responsibilities on public lands shall confer with Indigenous Peoples whose rights may be affected by the certified organization’s forest management practices - Performance Measure: Certified organizations are encouraged to communicate with and shall respond to Indigenous Peoples whose rights may be affected by forest management practice on certification organization’s private lands <p>Environmental Objectives - #17: Enhance relationships with First Nations</p> <ul style="list-style-type: none"> - Target: Maintain participation in the Canadian Council for Aboriginal Business (CCAB) Progressive Aboriginal Relations (PAR) program (contains established objectives and targets as part of the program)
12	<p>SFI Certification - Objective #12: Forestry research, science and technology</p> <ul style="list-style-type: none"> - Performance Measure: Certified organizations shall individually, and/ or through cooperative efforts involving SFI Implementation Committee, associations or other partners provide in-kind support or funding, for forest research to improve the sustainable management of forest resources, and the environmental benefits and performance of forest products. <p>SFI Certification - Objective #13: Training and Education</p> <ul style="list-style-type: none"> - Performance Measure: Certified Organizations shall work individually and/ or through cooperative efforts involving SFI Implementation Committees, logging or forestry associations, or appropriate agencies or others in the forestry community, to foster improvement in the professionalism of wood producers specific to qualified logging professionals. <p>VCS – Inclusion of additional project activity instances (and Project Proponents)</p> <ul style="list-style-type: none"> - Performance Measure: Work with interested landowners to include additional land parcels as project activity instances (and Project Proponents) in the BigCoast Initiative. <p>Environmental Objectives - #2 – Support wildlife, research, stewardship and conservation initiatives</p>

Impact #	Monitoring Mechanism(s)
	- Target: refer to Environmental Objectives Performance Report (target # 2)

3.4 Net Positive Stakeholder Well-being Impacts

Due to only identifying one negative impact (Impact #7 – Economic Opportunity (potential job loss)) and 5 positive impacts, it has been determined that there will be a net positive impact to stakeholders' well-being. Additionally, although the resulting net negative impacts affect the stakeholder groups Forestry Contractors (direct/ indirect), mitigation measures (providing other employment opportunities on other portions of managed lands) are anticipated to neutralize the negative impacts.

Building trust amongst Indigenous Peoples' requires an understanding of the diversity of visions and interests among each of the communities as much as ensuring that a consistent set of business practices is implemented by Mosaic personnel (Mosaic Indigenous Relations Strategy [Corporate Strategy])⁸. In order to support this consistency, Mosaic has developed and implemented policies/strategies consistent with Canadian Council for Aboriginal Business (CCAB) Progressive Aboriginal Relations (PAR) certification program, consistent with Sustainable Forestry Initiatives (SFI) and entered into Extension Agreements with the Indigenous Protected and Conserved Areas (IPCA) Innovation Program.

By entering into Extension Agreements with the IPCA Innovation Program, the Project Proponent will provide financial support to establish Indigenous protected and conserved areas to build capacity, mobilize knowledge and facilitate Indigenous-led conversation and stewardship initiatives creating a net positive impact for Indigenous Peoples.

⁸ [Indigenous Relations Policy — Mosaic Forest Management \(mosaicforests.com\)](https://www.mosaicforests.com/indigenous-relations-policy)

4 BENEFITS FOR THE PLANET

4.1 Condition of Natural Capital and Ecosystem Services at Project Start

The project area is located in Coastal British Columbia, Canada, and encompasses non-contiguous privately owned forest lands within the Temperate Coniferous Forest Global Ecological Zone (as defined by Food and Agriculture Organization of the United Nations (FAO) (FAO, 2001). Historically this area has been home to many Indigenous peoples for centuries and was later settled by Europeans in the mid-1800s, who were drawn to the area due to the diverse ecosystems, natural resources, and the mild Oceanic climate. Land resource use surrounding the project area is primarily related to timber resource harvest operations, but it is recognized that the entire area supports hydrological, biological, and aquatic resources. Coastal British Columbia has a milder climate than any other region of Canada. Moist winds from the Pacific Ocean bring a large amount of seasonal precipitation to Vancouver Island creating an abundance of green vegetation. The region's climate and soils provide excellent growing conditions for Douglas-fir, western hemlock, and other coastal tree species.

The project proponent operates on the coast of BC, on approximately 575,000ha of privately managed forests, on public lands in Tree Farm Licence (TFL) #47 and on several other smaller volume-based Forest Licences. The proponent's forest plans adhere to strict government regulations for both private and public lands. Management of private lands is subject to regulations established by the Private Managed Forest Land Act (PMFLA) of 2003. The PMFLA does not require private forest land managers to meet the same restrictive management objectives imposed on those who cut Crown timber, managers must ensure that harvest is sustainable over the long run, but there are no upper or lower restrictions on annual allowable harvest. Private managed forest land is also subject to the Heritage Conservation Act, Drinking Water Protection Act, Wildfire Act, the federal Species at Risk Act, the federal Fisheries Act, and other regulations.

Prior to project start (2018), lands within the project area were managed individually (as Island Timberlands and TimberWest assets).

The project which includes low elevation forests near rivers and estuaries, mid elevation foothills, and sub alpine forests within coastal British Columbia hosts a wide diversity of ecosystems, which vary with elevation. The project includes a gradient of low elevation coastal forests, to high alpine and subalpine mountain ecosystems. Vancouver Island is the most mountainous region of the project area, where forests reach a maximum elevation of 1650m (Green and Klinka 1997).

British Columbia classifies ecosystems into Biogeoclimatic (BEC) Zones. Each zone is further defined using subzones and variants. The BEC classification system is an important tool used by foresters and ecologists to describe site conditions, which influence stand structure, tree and vegetation species present, flora and fauna, and wildlife species. A full list of BEC zones and their descriptions can be found in Section 1.13 of the VCS Project Description Document. The soils of coastal British Columbia are composed of a broad spectrum, and are from the Podzolic, Brunisolic, Regosolic, Gleysolic, and Organic orders (Keser and Pierre 1973).

The condition of natural capital and ecosystem services specific to the project activities, prior to project start, are described below:

Table 9. Natural capital and ecosystem services prior to project start

Natural Capital/ Ecosystem Service	Condition prior to project start ⁹	Potential Threats
Aquatic Habitat	Corporate objectives to fund ≥ 5 projects to improve water quality by reducing erosion/siltation related to infrastructure, and ≥ 3 project related to the improvement of fish habitat.	On-going erosion/ sediment from existing infrastructure Climate change related threats (more frequent drought/ extreme heat events, more frequent extreme weather events leading to increased habitat degradation)
Critical Wildlife Habitat	Critical wildlife habitat is managed according to legal requirements. All critically imperiled (G1) and imperiled species (G2), as well as species that are legally protected provincially or federally are managed for within 100m of active harvesting or road construction. Employees are trained to look for evidence of critical habitat and report all findings, track them spatially (via GIS - TEM) and implement management prescriptions.	Lack of training leading to the mis-identification/ no identification of critical wildlife habitat Non-adherence to management prescriptions
Forests with exceptional conservation value	Forests with exceptional conservation value are managed as Special Sites. Consideration for designation of Special Sites includes criteria as determined by provincial agencies, Conservation Data Center (CDC), the public and field personnel. Consideration for forests with exceptional conservation value can include significant areas containing threatened or endangered plants, unique habitat for wildlife species that are candidates for listing or listed as rare, threatened or endangered, sensitive to forest management according to wildlife biologists. Employees are trained to look for evidence of Special Sites and report all findings, track them spatially (via GIS - TEM) and implement management prescriptions. <ul style="list-style-type: none"> - Forests with exceptional conservation value are consistently identified via terrain ecosystem mapping (TEM), and management prescriptions are followed. 	Lack of training leading to the mis-identification/ no identification of forests with exceptional conservation value Non-adherence to management prescriptions

⁹ Additional description of condition of project prior to project noted in the Island Timberlands Environmental Objectives Report (2018; ITL)

Natural Capital/ Ecosystem Service	Condition prior to project start ⁹	Potential Threats
CO2 emissions	Limited corporate strategies are currently (as of 2018) in place to reduce CO2 emission outputs. Preliminary and limited tracking of CO2 emissions.	n/a
	1,100 ha of land previously certified to the Forest Carbon Offset Protocol (v1.0) removed from operational areas.	Pest, disease, or natural event causing mortality of stands
Forest Health	Corporate objective to reforest sites within 1-year of harvest completion on average, as well as promote/ encourage healthy forests through replanting white pine and Sitka spruce with disease resistant stock, working with research trials and treating affected areas.	Increase in pest and disease outbreak Novel pest and disease outbreak (i.e., no known prescriptive treatment)

4.2 Expected Impacts on Natural Capital and Ecosystem Services

Table 10. Expected impacts on natural capital and ecosystem services

Impact #1	Conservation of aquatic habitat
Type of Impact	Positive, actual, direct and intended.
Affected Natural Capital and/or Ecosystem Service(s)	Aquatic Habitat
Resulting Change in Condition	<p>Significantly positive benefits within the project area due to donations and programs lead by the project proponent. These include but are not limited to:</p> <ul style="list-style-type: none"> - Minimized use of chemicals for pest management - Increased donations to fish habitat projects - Active participation on all community watershed roundtables applicable to Mosaic managed lands - Improved erosion and sediment control practices - Increased riparian retention zones
Impact #3	Conservation of critical wildlife habitat
Type of Impact	Positive, actual, direct and intended.

Affected Natural Capital and/or Ecosystem Service(s)	Critical wildlife habitat
Resulting Change in Condition	Significantly positive benefits within project area due to: <ul style="list-style-type: none"> - Mitigation of undesirable effects of wildfire through forest management - Protection of natural communities, ecological important site and old-growth forests - Protection of threatened and endangered species, critically imperiled & imperiled species - Reduction of forest conversion - Increased donations to Indigenous lead conservation stewardship initiatives
Impact #4	Conservation of forests with exceptional conservation value
Type of Impact	Positive, actual, direct and intended.
Affected Natural Capital and/or Ecosystem Service(s)	Forests with exceptional conservation value
Resulting Change in Condition	Significantly positive benefits within project area due to: <ul style="list-style-type: none"> - Improvement of sediment and erosion control practices - Mitigation of undesirable effects of wildfire through forest management
Impact #5	Commitment to the regeneration of forests
Type of Impact	Positive, actual, direct and intended.
Affected Natural Capital and/or Ecosystem Service(s)	Forests health

Resulting Change in Condition	Significantly positive benefits within project area due to: <ul style="list-style-type: none"> - Commitment to >90% stand regeneration - Management of size, shape and placement of clearcut harvests - Protection of natural communities, ecological important side and old-growth forests
Impact #6	Decreased CO2 emissions
Type of Impact	Positive, actual, direct and intended.
Affected Natural Capital and/or Ecosystem Service(s)	CO2 emissions
Resulting Change in Condition	Significantly positive benefits within project area due to: <ul style="list-style-type: none"> - The reduction in CO2 emissions from harvested biomass
Impact #8	Increased CO2 sequestration
Type of Impact	Positive, actual, direct and intended.
Affected Natural Capital and/or Ecosystem Service(s)	CO2 emissions
Resulting Change in Condition	Significantly positive benefits within project area due to: <ul style="list-style-type: none"> - Identification, mitigation of (and address) climate change risks - Increased carbon sequestration via the deferral of harvesting

4.3 Natural Capital and Ecosystem Services Monitoring Plan

Table 11. Natural capital and ecosystem services monitoring plan

Impact #	Monitoring Mechanism(s)
1	<p>SFI Certification - Objective #3: Protection and maintenance of water resources</p> <ul style="list-style-type: none"> - Performance Measure: Certified Organization shall meet or exceed all applicable federal, provincial, state, and local water quality laws, and meet or exceed best management practices. - Performance Measure: Certified Organizations shall implement water, wetland, and riparian protection programs based on climate, soil type, terrain, vegetation, ecological function, harvesting system, state best management practices (BMPs), provincial guidelines and other applicable factors. <p>SFI Certification - Objective #2: Forest health and productivity</p> <ul style="list-style-type: none"> - Performance Measure: Certified Organizations shall have a program to minimize chemical use required to achieve management objectives while protecting employees, neighbors, the public and the environment, including wildlife and aquatic habitats. <p>Environmental Objectives - #3 – Protection of soil, water, fish habitat and wildlife habitat</p> <ul style="list-style-type: none"> - Target: refer to Mosaic Environmental Objectives Performance Report (target # 3)
3	<p>SFI Certification - Objective #4: Conservation of biological diversity</p> <ul style="list-style-type: none"> - Performance Measure: Certified Organizations shall conserve biological diversity - Performance Measure: Certified Organizations shall protect threatened and endangered species, critically imperiled and imperiled species, and natural communities ('Forests with Exceptional Conservation Values') and old-growth forests - Performance Measure: Certified Organizations shall manage to protect ecologically important sites in a manner that takes into account their unique qualities - Performance Measure: Certified Organizations shall apply knowledge gained through research, science, technology, and field experience to manage wildlife habitat and contribute to the conservation of biological diversity. <p>Environmental Objectives - #1 – Support wildlife, research, stewardship and conservation initiatives</p> <ul style="list-style-type: none"> - Target: refer to Mosaic Environmental Objectives Performance Report (target # 12)
4	<p>SFI Certification - Objective #4: Conservation of biological diversity</p> <ul style="list-style-type: none"> - Performance Measure: Certified Organizations shall conserve biological diversity - Performance Measure: Certified Organizations shall protect threatened and endangered species, critically imperiled and imperiled species, and natural communities ('Forests with Exceptional Conservation Values') and old-growth forests - Performance Measure: Certified Organizations shall manage to protect ecologically important sites in a manner that takes into account their unique qualities

Impact #	Monitoring Mechanism(s)
	<ul style="list-style-type: none"> - Performance Measure: Certified Organizations shall apply knowledge gained through research, science, technology, and field experience to manage wildlife habitat and contribute to the conservation of biological diversity. <p>SFI Certification - Objective #6: Protection of Special Sites</p> <ul style="list-style-type: none"> - Performance Measure: Certified Organizations shall have a program to identify special sites and manage them in a manner appropriate for their unique features.
5	<p>SFI Certification - Objective #1: Forest management planning</p> <ul style="list-style-type: none"> - Performance Measures: Certified Organizations shall ensure that forest management plans include long-term harvest levels that are sustainable and consistent with appropriate growth-and-yield models. - Performance Measures: Certified Organizations shall not convert one forest cover type to another forest cover type, unless an assessment has been conducted to determine ecological impacts and provide appropriate justification. - Performance Measure: Certified Organizations shall not have within the scope of their certification to this SFI standard, forest lands that have been converted to non-forest land use. - Performance Measure: Certified Organization shall not afforest in locations which negatively impact ecologically important natural communities, threatened and endangered species or native anural communities which could be at risk of becoming rare. <p>SFI Certification - Objective #2: Forest Health and Productivity</p> <ul style="list-style-type: none"> - Performance Measure: Certified Organizations shall promptly reforest after final harvest. - Performance Measure: Certified Organizations shall manage to protect forests from damaging agents, such as environmentally or economically undesirable levels of wildfire, pests, disease, and invasive species, to maintain and improve long-term forest health, productivity and economic viability. - Performance Measure: Certified Organizations that deploy improved planting stock, including varietal seedlings, shall use best scientific methods. <p>Environmental Objectives - #5 – Sustainable harvest rate</p> <ul style="list-style-type: none"> - Target: refer to Mosaic Environmental Objectives Performance Report (target # 5) <p>Environmental Objectives - #6 – Ensure survival of plantations and achievement or regeneration delay requirements</p> <ul style="list-style-type: none"> - Target: refer to Mosaic Environmental Objectives Performance Report (target # 6) <p>Environmental Objectives - #11 – Promote reforestation by other landowners</p> <ul style="list-style-type: none"> - Target: refer to Mosaic Environmental Objectives Performance Report (target # 11)

Impact #	Monitoring Mechanism(s)
6	<p>SFI Certification - Objective #9: Climate Smart Forestry</p> <ul style="list-style-type: none"> - Performance Measure: Certified Organization shall individually and/or through cooperative efforts involving SFI Implementation Committees or other partners identify and address the climate change risks to forests and forest operation and develop appropriate adaptation objectives and strategies. Strategies are based on best scientific information. - Performance Measure: Certified Organizations shall individually and/ or through cooperative efforts involving SFI Implementation Committees or other partners identify and address opportunities to mitigate the effects associated with its forest operation on climate change. <p>Environmental Objectives - #6 – Ensure survival of plantations and achievement or regeneration delay requirements</p> <p>VCS – Implementation and management of Improved Forest Management (IFM) project</p> <ul style="list-style-type: none"> - Performance Measure: Periodic generation of verified carbon credits via verification audits
8	<p>VCS – Implementation and management of Improved Forest Management (IFM) project</p> <ul style="list-style-type: none"> - Performance Measure: Periodic generation of verified carbon credits via verification audits

4.4 Net Positive Natural Capital and Ecosystem Services Impacts

Due to the fact that there are no negative impacts to the planet identified through the causal chain analysis, it is anticipated that the net impact of the project will be positive for all natural capital and ecosystem services.

APPENDIX 1 – CAUSAL CHAINS

People and their prosperity

Planet

Direct

Indirect

Intended

Unintended

