



**Jurisdictional  
& Nested REDD+**

# JNR Non-Permanence Risk Tool

# ABOUT VERRA

---



Verra sets the world's leading standards for climate action and sustainable development. We build standards for activities as diverse as reducing deforestation, improving agricultural practices, addressing plastic waste, and achieving gender equality. We manage programs to certify that these activities achieve measurable high-integrity outcomes. We work with governments, businesses, and civil society to advance the use of these standards, including through the development of markets. Everything we do is in service of increasingly ambitious climate and sustainable development goals – and an accelerated transition to a sustainable future.

Verra's certification programs include the [Verified Carbon Standard \(VCS\) Program](#) and its [Jurisdictional and Nested REDD+ \(JNR\) framework](#), the [Climate, Community & Biodiversity Standards \(Climate, Community & Biodiversity \(CCBS\) Program\)](#), the [Sustainable Development Verified Impact Standard \(SD VISta\) Program](#), and the [Plastic Waste Reduction Program](#).

## Intellectual Property Rights, Copyright, and Disclaimer

The intellectual property rights of all materials in this document are owned by Verra or by entities that have consented to their inclusion in this document.

The use of these materials in the establishment or operation of a project in a Verra certification program is permissible ("Authorized Use"). All other commercial use of these materials is prohibited. Without limiting the generality of the foregoing, viewing, downloading, modifying, copying, distributing, transmitting, storing, reproducing, or otherwise using, publishing, licensing, transferring, selling, or creating derivative works (in whatever format) from this document or any information obtained from this document other than for the Authorized Use or for personal, academic, or other non-commercial purposes is prohibited.

All copyright and other proprietary notices contained in this document must be retained on any copies made under the Authorized Use. All other rights of the copyright owner not expressly addressed above are reserved.

No representation, warranty, or guarantee express or implied is made in this document. No representation, warranty, or guarantee, express or implied, is made that the information provided is accurate, current, or complete. While care is taken in the collection and provision of this information, Verra and its officers, employees, agents, advisers, and sponsors will not be liable for any errors, omissions, misstatements, or mistakes in any information or damages resulting from the use of this information, or any decision made or action taken in reliance on this information.

# CONTENTS

---

- 1 INTRODUCTION AND SCOPE..... 1**
  - 1.1 Scope .....1
  
- 2 RISK ANALYSIS AND BUFFER DETERMINATION ..... 2**
  - 2.1 Step 1: Risk Analysis.....2
  - 2.2 Risk Factors .....3
  - 2.3 Step 2: Overall Non-Permanence Risk Rating and Buffer Determination ..... 13
  
- APPENDIX 1: DOCUMENT HISTORY ..... 15**

# 1 INTRODUCTION AND SCOPE

This tool provides the procedures for conducting the non-permanence risk analysis and buffer determination required for jurisdictional and nested REDD+ (JNR) programs following Scenarios 2 and 3 described in the *JNR Requirements*. The tool sets out the requirements for jurisdictional proponents, implementing partners and validation/verification bodies to assess risk and determine the appropriate risk rating and buffer withholding.

This tool was developed by a working group composed of leading practitioners and experts on jurisdictional REDD+ and underwent peer review and public consultation, including review and testing by jurisdictional governments that are applying the VCS JNR framework. The tool is based on the VCS *AFOLU Non-Permanence Risk Tool* and is adapted to account for risks specific to jurisdictional programs. Note that nested projects shall apply the most recent version of the *AFOLU Non-Permanence Risk Tool*, while jurisdictional programs shall apply this *JNR Non-Permanence Risk Tool* to determine a non-permanence risk rating and buffer withholding.

This document will be updated from time to time, and readers shall ensure that they are using the most current version of the document.

## 1.1 Scope

- 1.1.1 This document sets out the procedures for conducting the non-permanence risk analysis to determine the non-permanence risk rating (“risk rating”), which shall be used to determine the number of buffer credits that a jurisdictional program shall deposit into the jurisdictional pooled buffer account. Risk ratings are based on an analysis of risk factors, which are added together to determine the total risk rating, as set out in Section 2.3. This document and the jurisdictional pooled buffer account are subject to periodic revision and reconciliation.
- 1.1.2 In addition to the requirements set out in this document, the jurisdictional program shall comply with all applicable VCS Program rules and requirements.
- 1.1.3 The jurisdictional proponent shall clearly document and substantiate the risk analysis covering each risk factor applicable to the jurisdictional program. During the assessment, the validation/verification body and expert panel shall evaluate the risk analysis undertaken by the jurisdictional proponent and assess all data, rationale, assumptions, justifications and documentation provided by the jurisdictional proponent to support the non-permanence risk rating.

## 2 RISK ANALYSIS AND BUFFER DETERMINATION

### 2.1 Step 1: Risk Analysis

- 2.1.1 The potential temporary and permanent losses in carbon stocks shall be assessed over a period of 100 years based on the conditions present and the information available at the time of the risk analysis, unless otherwise specified in Sections 2.2 to 2.3 below, to determine the appropriate risk rating. Jurisdictional programs with a start date in the past, or programs analyzing risk at a subsequent verification event shall assess the potential transient and permanent losses for the next 100 years.
- 2.1.2 The risk analysis shall be conducted as follows:
- 1) The tool assesses risks relevant to the jurisdictional program across the following six broad categories: political and governance risk, program design and strategy risk, carbon rights and use of carbon revenues, funding risk, program longevity, and natural risk. The jurisdictional program shall be evaluated against each of these six risk categories as set out in Section 2.2, assigned a risk score for each risk factor within the category, and shall follow the calculation formulae in each table to determine the risk rating for the category. The total rating for each risk category shall not be less than zero, regardless of whether the formula would result in a value less than zero.
  - 2) Where applicable, and the jurisdictional proponent (or implementing partner, where relevant) demonstrates that related risk mitigation activities will be (at validation) or are being (at verification) applied, the appropriate risk mitigation score shall be subtracted when establishing the risk rating for the category, as determined in Sections 2.2 and 2.3.
  - 3) An overall risk rating shall be determined based on the ratings from each risk category in accordance with Section 2.2 and 2.3. The overall risk rating is then converted to a withholding percentage applied to the net GHG benefit of a jurisdictional program in accordance with Section 2.3.4.
  - 4) Where the overall risk rating is unacceptably high, the jurisdictional program shall fail the risk analysis, determined in accordance with, and handled as set out, in Section 2.2.4.
  - 5) Where certain risks, whether factors or entire categories, are fully addressed using another (non-VCS) risk management mechanism, the risk may be rated as zero (i.e., no risk) for the purpose of this risk analysis. For example, where the jurisdictional proponent has obtained, or others have obtained on behalf of the jurisdictional proponent, insurance fully covering political and governance risk (as such risks are defined in this tool), that category (or relevant individual factor(s)) may be rated as no-risk (zero). The jurisdictional proponent

shall clearly document which types of risks and losses are covered by such mechanisms, which entities are the beneficiaries, what types of benefits are claimable and how such mechanisms ensure the permanence of credited (or compensated) GHG emission reductions.

Similarly, where a third party or the jurisdictional government establishes a mechanism to guarantee the replacement of GHG credits in the event of a reversal, the risk rating shall be applied to any remaining GHG emission reductions or removals not covered by the guarantee. For example, where the jurisdiction achieves total net GHG emission reduction of 100,000 tCO<sub>2e</sub> in the relevant monitoring period, and a government guarantee covers up to 30 percent of total GHG credits issued to the jurisdictional proponent, the risk rating generated by this tool is applied to 70 percent of the net GHG emission reductions and removals achieved. Assuming a 20 percent risk rating, then 14,000 credits (100,000\*0.7\*0.2) would be deposited into the jurisdictional pooled buffer account.

Such guarantee mechanisms shall clearly document specific management, operational and financial structures underpinning and ensuring the robustness and resilience of the guarantee, which types of risks and losses are covered, and the financial resources that would be used to replace GHG credits included in the guarantee. Such mechanisms require review by the JNR expert panel and Verra (i.e., shall be assessed at the initial validation of the jurisdictional program).

## 2.2 Risk Factors

2.2.1 Political and governance (PG) risk shall be assessed using Table 1, noting the following:

- 1) This risk factor addresses general political risk, rule of law and overall governance (i.e., it does not specifically relate to forest governance). This includes the risk that governance issues may result in a reversal, for example where government accountability, effectiveness or rule of law is weak, corruption is high, governance is unstable, or other highly disruptive events such as war or civil unrest are common.
- 2) An overall governance score shall be calculated based upon the World Bank Institute's Worldwide Governance Indicators (WGI)<sup>1</sup> and using the All Indicators for One Country<sup>2</sup> table as follows:
  - a) Select the relevant country, and the comparator based on year.
  - b) Select the most recent five years of available data.
  - c) Calculate the overall governance score as the mean of the governance scores across all six indicators, averaged over the most recent five years of available data.

---

<sup>1</sup> The World Bank Institute's Worldwide Governance Indicators are available at: <https://data.worldbank.org/indicator>

<sup>2</sup> The All Indicators for One Country table is available at: <https://datacatalog.worldbank.org/dataset/worldwide-governance-indicators>

- 3) Overall governance scores shall be translated into risk scores in accordance with Table 1 below. While the WGI indicators apply at the national level, they are also used in this tool as a proxy for risk at subnational levels. As set out in the mitigation factors in Table 1, a jurisdictional proponent may justify a lower risk rating by demonstrating significant differences in jurisdictional governance compared with the national governance rating provided by WGI.
- 4) Where the jurisdiction is subnational, risk factor (b) in Table 1 shall be assessed. However, where the subnational jurisdictional program is being coordinated directly by the national government (i.e., the jurisdictional proponent is the national government, or has been selected and will be directed by the national government), the score shall be set to zero for this risk factor. Similarly, the score shall be set to zero for a national jurisdictional program.

**Table 1. Political and Governance Risk**

Political and Governance Risk		
	Overall governance score is less than -0.9;	8
	Overall governance score is greater than or equal to -0.9 and less than -0.7;	6
a)	Overall governance score is greater than or equal to -0.7 and less than -0.4;	4
	Overall governance score is greater than or equal to -0.4 and less than 0; or,	2
	Overall governance score is greater than 0.	1
b)	Where the jurisdiction is subnational, the national government does not have documented policies or publicly stated support for the operation and direct GHG crediting of (or payments to) the subnational jurisdictional program.	2
c)	Mitigation: The jurisdictional program has been established and structured to ensure its continuity and long-term effective functioning regardless of changes in government (e.g., the jurisdictional program is managed and operates independent of the elected government and/or is protected by law).	-1
d)	Mitigation: The jurisdictional proponent is undertaking REDD+ readiness activities targeting governance issues and demonstrates the adoption of improved governance structures and processes that will enhance the long-term effectiveness of the jurisdictional program (e.g., changes related to transparency and accountability, grievance oversight and redress mechanisms, and/or rule of law). Where the jurisdiction is subnational, the jurisdictional proponent is undertaking such readiness activities, or can clearly demonstrate governance related to the jurisdictional program is better than indicated by the national governance rating.	-2
<b>Total Political and Governance (PG) [as applicable, (a + b + c + d)]</b>		
Total <u>shall not</u> be less than zero.		

2.2.2 Program design and strategy (PDS) risk shall be assessed using Table 2 below, noting the following:

- 1) This factor assesses the risk that the design or strategy of the jurisdictional program does not adequately reduce the impacts of core agents and underlying causes of deforestation (and degradation, where relevant)<sup>3</sup> and mitigate reversal risk over the long-term. Due to the difficulty of objectively assessing the relative risk of different GHG mitigation strategies, particularly given the different circumstances of various jurisdictions, the factor uses a default risk rating, which can be reduced where the jurisdictional proponent demonstrates strategies to ensure program design will lead to sustainable GHG emission reductions (e.g., by maintaining commodity production levels without increasing deforestation or degradation, or integrating REDD+ into broader low-emissions development or green-economy planning and implementation).
- 2) The jurisdictional proponent shall identify strategies to reduce deforestation (and degradation, where relevant) and shall develop an implementation plan covering (at a minimum) the length of the program crediting period that sets out the programs or activities that will be implemented to address the main drivers, agents and/or underlying causes of deforestation (and degradation) identified in the baseline. For the purpose of this risk analysis, drivers and/or underlying causes of deforestation (and degradation) are classified as commodity drivers or subsistence drivers, noting the following:
  - a) Commodity-related drivers of deforestation (and degradation, where relevant) include the production of agricultural products, forest products (including timber and non-timber forest products) and livestock products that are sold to global, regional or domestic markets.
  - b) Subsistence-related drivers include activities, and the associated agents, that drive deforestation (and degradation, where relevant) to meet a household's needs or local demand for a product, such as fuelwood gathering and agricultural production for household use.
  - c) Commodity and subsistence drivers may be related to legal or illegal activities (e.g., legally sanctioned timber harvesting or illegal logging).
- 3) To apply mitigation (b), the jurisdictional proponent shall provide evidence that the production of relevant commodities is being substantially maintained. For example, an equivalent area of production across relevant commodities and their substitutes is being maintained within the jurisdiction (e.g., through making up potentially displaced production by using intensification strategies or through use of marginal lands with low carbon stocks).

*Note - Strategies to maintain production of commodities shall not incentivize production of illegal commodities (e.g., coca). To address such drivers, the jurisdiction should develop*

---

<sup>3</sup> For the purposes of this tool, degradation is relevant in cases where the jurisdictional program accounts for reducing emissions from forest degradation. This applies to all "degradation, where relevant" references throughout the document.



*strategies, policies or measures to provide alternative livelihoods to actors who produce illegal commodities. Risk mitigation may be applied where evidence is provided to demonstrate such mitigation measures are in place.*

- 4) To apply mitigation (c), strategies, policies or measures to address subsistence drivers shall support and sustain alternative, non-deforesting and non-degrading livelihoods, and/or provide low-emission alternatives to agents of subsistence drivers within the jurisdiction (e.g., through providing agricultural extension services to promote climate-smart farming, enhancing land tenure or security, creating new non-forest-dependent employment, or developing alternative livelihoods based on sustainably harvested non-timber forest products).
- 5) To apply mitigation (d), a comprehensive government-led, low-emission, rural development or green economy plan<sup>4</sup> shall be developed with appropriate stakeholder consultation and in collaboration with all the relevant government agencies (e.g., agricultural, forestry, finance or other ministries/agencies), and shall be implemented across the jurisdiction.
- 6) To apply mitigation (e), the consultation process for identifying and developing the jurisdictional strategy to address deforestation (and degradation, where relevant) shall include agents that are representative of all significant drivers of deforestation (and degradation) within the jurisdiction. Evidence shall be provided demonstrating that all such agents were consulted, the rigor of the consultation process and how the consultation process has informed the jurisdictional strategy.

*Note - The mitigation criteria for program design and strategy risk are consistent with the mitigation criteria in the (optional) VCS tool VT0004 JNR Leakage Tool. Where the jurisdictional proponent applies the leakage tool, the mitigation factors shall be applied consistently across both VT0004 JNR Leakage Tool and the JNR Non-Permanence Risk Tool.*

**Table 2: Program Design and Strategy**

Program Design and Strategy		
a)	Default Program Design and Strategy risk rating	10
b)	<b>Mitigation:</b> The jurisdictional program incorporates and has implemented (or is implementing) strategies, policies or measures that maintain production of the significant commodities driving deforestation (and degradation, where relevant) within the jurisdiction; and/or the jurisdictional program does not affect commodity drivers of deforestation (and degradation).	-3
c)	<b>Mitigation:</b> Strategies, policies or measures are implemented, or are being implemented, to address subsistence drivers of deforestation (and degradation, where relevant) and are	-3

<sup>4</sup> Following commonly accepted definitions of rural development and green economy plans (e.g., from United Nations Environment Programme). See “Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication. United Nations Environment Programme (UNEP), Nairobi, Kenya (2011).”

	supporting most of the agents associated with such subsistence activities; and/or the jurisdictional program does not affect subsistence drivers of deforestation.	
d)	<b>Mitigation:</b> The jurisdictional program is integrated, or is being integrated, into a comprehensive government-led, low-emission, rural development or green economy plan.	-2
e)	<b>Mitigation:</b> The jurisdictional program has developed, or is developing, the strategy to reduce deforestation (and degradation, where relevant) in consultation with representative agents of deforestation (and degradation).	-1
f)	<b>Mitigation:</b> The national government has received or is receiving REDD+ readiness funding from bilateral or multilateral donors supporting the development of REDD+ programs and strategies that mitigate reversal risk.	-1
<b>Total Program Design and Strategy (PDS) [as applicable, (a + b + c + d + e + f)]</b>		

2.2.3 Carbon rights and use of carbon revenues (CR) shall be assessed using Table 3 below, noting the following:

- 1) This factor assesses the definition or allocation of rights to GHG credits or payments for GHG emission reduction and removals (i.e., carbon rights), and how this may create disincentives (or perverse incentives) for those that are reducing emissions, potentially leading to a reversal.

For example, where agents reduce emissions, but are not rewarded, they may discontinue the implementation of low-emission land management practices, or where government carbon revenues are not re-invested in the jurisdictional program, it may not be possible to continue funding relevant program activities. Likewise, where carbon rights or benefit sharing frameworks are not seen as equitable and transparent, there is a risk that stakeholders may not support the program, potentially leading to reversals.

- 2) Land and resource tenure refers to the systems of rights to lands, territories and resources, including obligations, rules, institutions and processes regulating ownership of, access to, and use of, land and associated resources. Tenure and resource rights may be synonymous with property rights and encompass full ownership as well as lesser usufructuary rights on the area and the resources within it, such as rights to fell timber or collect fallen branches.

Where carbon rights are tied (or expected to be tied) to land tenure and/or access/use rights, the jurisdictional proponent shall apply risk factor (b) listed in Table 3.

**Table 3: Carbon Rights and Use of Carbon Revenues**

Carbon Rights and Use of Carbon Revenues		
<b>Establishment of laws, policies or regulations addressing carbon rights</b>		
a)	Laws, policies or regulations establishing clear, undisputable carbon rights have not yet been enacted, or	4
	Laws, policies or regulations establishing clear, undisputable carbon rights have been enacted.	1
b)	Carbon rights are tied (or are expected to be tied) to land tenure and/or access/use rights, and less than 90% of the jurisdiction is free from overlapping, land tenure and/or access/use rights or disputes over such rights.	1
c)	<b>Mitigation:</b> Statutory rights to lands, territories and resources relevant to carbon rights have been established, or a process is in place and funding is secured to establish such rights (e.g., by inventorying and mapping rights to lands, territories and resources and clarifying associated rights).	-1
d)	<b>Mitigation:</b> Mechanisms are in place to resolve any disputes over carbon rights.	-1
<b>Use of carbon revenues</b>		
e)	More than 40% of government revenues from carbon sales and/or results-based carbon payments are being, or will be, used for purposes not related to REDD+,	4
	Between 20% and up to 40% of government revenues from carbon sales and/or results-based carbon payments are being, or will be, used for purposes not related to REDD+, or	2
	Less than 20% of government revenues from carbon sales and/or results-based carbon payments are being, or will be, used for purposes not related to REDD+.	1
f)	<b>Mitigation:</b> Policies with respect to the use of carbon revenues have been developed following best practice standards for stakeholder involvement, such as the REDD+ Social and Environmental Standards initiative, including establishment of processes and mechanisms for incorporating input from all relevant stakeholders into decisions about how such funds will be used, and for transparently accounting for expenditures.	-1
<b>Total Carbon Rights and Use of Carbon Revenues (CR)</b> [as applicable, (a + b + c + d + e + f)]		
Total <u>shall not</u> be less than 0		

2.2.4 Funding risk (FR) shall be assessed using Table 4 below, noting the following:

- 1) The jurisdictional program needs upfront funding (e.g., to successfully design and appropriately staff the program), as well as ongoing funding (e.g., to implement strategies, policies and measures that produce GHG emission reductions, undertake monitoring and verification, and administer the program). This factor assesses the risk that adequate funding which is not generated in a timely manner may undermine program success and lead to a reversal. Funding risk shall be assessed by assigning the default risk factor and applying qualifying mitigations as set out in Table 4.
- 2) The jurisdictional proponent shall provide a set of financial projections, that are forward-looking for at least the next five years, covering the following aspects of the program (and these shall serve as the basis for determining the appropriate risk rating):
  - a) Jurisdictional program development, including the development of baselines/reference levels, monitoring systems and (where relevant) registries,
  - b) On-going administrative management of the jurisdictional program, including safeguards and (where relevant) benefit-sharing mechanisms,
  - c) Development and implementation of activities, policies and/or measures that reduce emissions, and
  - d) On-going implementation of systems for carbon accounting, monitoring and verification.
- 3) In developing the financial projections, the jurisdictional proponent shall do the following:
  - a) Document the budget for the annual costs associated with implementing each of the activities listed in Section 2.2.5(2) above, and any other elements required to implement the jurisdictional program, and
  - b) Develop an annual forecast of all sources of funds (including grants, governmental budget allocations to the jurisdictional program, loans, investments and carbon sales) and identify which funds have been secured.
- 4) The cash flow breakeven point shall be calculated and is the year in which the cumulative cash flow is positive (i.e., cash flow in exceeds cash flow out) and stays positive. Breakeven shall be calculated on a cash flow basis based on generally accepted accounting principles and considering the following:
  - a) Cash flow in may include commercial revenue streams associated with the program, secured revenue and conservatively estimated revenues from the sale of GHG credits, other funding sources such as donor funds, government appropriations, upfront investments, or carbon prepayments, equity or loans.
  - b) Cash flow out shall include, at a minimum, the items included in the financial projections, and, where applicable, interest expenses, repayment of loans or forward purchase agreements, and any required equity distributions.

- 5) The percentage of needed funding secured shall be calculated by adding up all funding and revenue already secured and dividing this by the total cash flow out up to and including the year the program reaches breakeven.
- 6) The jurisdictional program may demonstrate that funding has been secured through, for example, financial statements, bank records, executed commodity purchase agreements, executed emission reduction purchase agreements, or other signed contractual agreements. Evidence shall be provided that agreement counterparties are in good financial standing, to demonstrate the ability to meet their financial obligations. Given execution uncertainties, options contracts shall not be counted as secured funding. When preparing the cash flow breakeven analysis, the assumptions on revenue from both carbon and other commercial sources (e.g., timber sales) shall be conservative and clearly document the source, pricing assumptions, frequency of verification and other relevant variables.
- 7) Where public-private REDD+ or sustainable landscape partnerships have been established and are being implemented to support low-emission models for the production of forest and agricultural goods within the jurisdiction and/or provision of non-carbon ecosystem services, the associated mitigation (e) in Table 4 may be applied. Regardless of whether revenue from such mechanisms has been included in the financial analysis, these kinds of partnerships, along with the establishment of domestic markets (d), help diversify funding streams for the REDD+ program, and provide some level of control and protection against potential revenue fluctuations.

**Table 4: Funding Risk**

Funding Risk		
a)	Default funding risk.	6
b)	<b>Mitigation:</b> The cash flow breakeven point is five years or less from the current risk analysis, or revenues from commercially viable activities that reduce emissions (e.g., sustainable timber production) or increase sequestration will provide at least 60% of required funding until breakeven.	-2
c)	<b>Mitigation:</b> The jurisdictional program has secured at least 40% of funding needed to cover the total cash flow out required before the program reaches breakeven.	-2
d)	<b>Mitigation:</b> The jurisdiction and/or country has, or is establishing (e.g., through participation in the Partnership for Market Readiness program), a domestic voluntary or compliance market for GHG credits that will recognize and create demand for credits from the jurisdictional program.	-1
e)	<b>Mitigation:</b> Public-private REDD+ or sustainable landscape partnerships have been established, as set out above.	-1

**Total Funding Risk (FR) [as applicable, (a + b + c + d + e)]**

Total shall not be less than zero

2.2.5 Program longevity (PL) shall be assessed using Table 5, noting the following:

- 1) The program longevity score shall be determined by the formulas set out in Table 5.
- 2) Program longevity is the period over which the jurisdictional proponent can maintain its legal right to control and operate the program activities. Such legal right can be granted by national laws or regulations or delegated via temporary disposition. Program longevity shall be demonstrated for a minimum of 40 years.
- 3) The entire program longevity shall be covered by public management, financial, and monitoring plans. The intention to continue management practices shall be stated and planned for in these documents. They may include external evidence such as national laws or regulations, governmental programs, institutional structures, ecological-economic zoning, etc.
- 4) Legal agreement or requirement to continue the management practice refers to any legally enforceable agreement or requirement, such as a conservation easement or protected area law requiring the continuation of the management practice that sequesters carbon or avoids emissions for the project's longevity.

**Table 5: Program Longevity**

Project Longevity		Score
Q1	Does the program have a legally binding agreement that covers at least a 100-year period from the project's start date? If Yes, the program is given a zero score for this risk category. If No, proceed to Q2.	
Q2	What is the program longevity in years? If program longevity is less than 40 years, the program fails the risk assessment.	Number of years
Q3	Does the program have a management, financial and monitoring plan for the entire program longevity? If No, the program fails the risk assessment. If Yes, proceed to Q4.	
Q4	Does the program have legal agreement, policy, or requirement to continue implementation? If No, proceed to a. If Yes, proceed to b.	
a)	Without legal agreement, policy, or requirement to continue implementation.	= 25 – (program longevity/5)
b)	With legal agreement, policy or requirement to continue implementation.	= 25 – (program longevity/4)

**Total Program Longevity (PL) = [as applicable, (a or b)]**

Total shall *not* be less than zero.

2.2.6 Natural risk (NR) shall be assessed using Table 6 below, noting the following:

- 1) This factor assesses the risk that natural disturbances may lead to a reversal.
- 2) To determine the natural disturbance risk profile of the jurisdiction, the historic frequency and extent of significant natural disturbances, combined, including geologic and weather-related events (such as fire, pest and disease outbreaks, extreme weather or other natural risks), shall be assessed.
- 3) The assessment area used to determine the likelihood and significance of combined natural risks shall be the entire country or the broadest eco-region(s) (within the same country) most relevant to assessing natural disturbance risk and encompassing the entire jurisdiction. Likelihood and significance shall be assessed using historic data from the assessment area. Significance shall be determined based on the percentage of forest carbon stock impacted, or where such data are not available, based on the percentage of forest area (in hectares) impacted within the assessment area.
- 4) Risk mitigation measures may include: education to reduce the risk of uncontrolled fires resulting from slash-and-burn agriculture, periodic fuel removal, establishment and maintenance of fire breaks and towers, deployment and maintenance of fire-fighting equipment (for fire risk); planting of diverse and resistant tree species (for risk of pests or disease); planting of frost, drought, flood, or wind-tolerant species (for extreme weather risk); and use of salinity-tolerant plant species (for salt-water intrusion risk).

**Table 6: Natural Risks**

Natural Risks					
Significance	Likelihood				
	Every 1 to less than 10 years	Every 10 to less than 25 years	Every 25 to less than 50 years	Every 50 to less than 100 years	Once every 100 years or more, or risk is not applicable to the jurisdictional program area
Catastrophic - impacting more than 30% of forest carbon stocks (or forest area)	Fail	30	20	10	0
Devastating - impacting between 20% and up to 30%	30	20	15	5	0

of forest carbon stocks (or forest area)					
Massive - impacting between 15% and up to 20% of forest carbon stocks (or forest area)	20	15	10	3	0
Major - impacting between 10% and up to 15% of forest carbon stocks (or forest area)	15	10	5	2	0
Minor - impacting between 5% and up to 10% of forest carbon stocks (or forest area)	10	5	2	1	0
Insignificant - impacting 5% or less of forest carbon stocks (or forest area)	0	0	0	0	0
Initial Natural Risk Score					
<b>Mitigation</b>					
a)	Measures to significantly mitigate the major natural risks (i.e., identified as affecting 10% or more of the jurisdictional forest carbon stocks or forest area) are in place and demonstrated to be effective.				-(Initial Natural Risk Score x 20%)
Total Natural Risk (NR) [Initial Natural Risk Score + a]					

## 2.3 Step 2: Overall Non-Permanence Risk Rating and Buffer Determination

2.3.1 The overall non-permanence risk rating shall be determined using Table 7, noting that the overall risk rating shall be rounded up to the nearest whole percentage.

**Table 7: Overall Risk Rating**

Overall Risk Rating	Rating
Total of all risk factors [PG + PDS + CR + FR + PL + NR]	



- 2.3.2 The minimum risk rating shall be 10, regardless of the risk rating calculated using Table 6.
- 2.3.3 Where the overall risk rating is greater than 60, jurisdictional risk is deemed unacceptably high and the jurisdictional program fails the entire risk analysis. Such jurisdictional program shall not be eligible for crediting until such time as risks are adequately addressed or sufficient mitigation measures are implemented such that the jurisdictional program is able to reduce its risk rating to below this eligibility threshold.
- 2.3.4 To determine the number of buffer credits that shall be deposited in the jurisdictional pooled buffer account, the overall risk rating shall be converted to a percentage (e.g., an overall risk rating of 35 converts to 35 percent). This percentage shall be multiplied by the net GHG benefit (stated in the verification report), as set out in the VCS Program document *JNR Registration and Issuance Process*.
- 2.3.5 Buffer credits shall be deposited in the jurisdictional pooled buffer account in accordance with the procedures set out in the VCS Program document *JNR Registration and Issuance Process*. The rules and requirements for the release and cancellation of buffer credits from the jurisdictional pooled buffer account are set out in the same document.

# APPENDIX 1: DOCUMENT HISTORY

Version	Date	Comment
v4.0	15 April 2021	Initial version released under VCS Version 4
V4.1	19 August 2024	Updates are effective for all project requests submitted on or after 15 August 2024: <ol style="list-style-type: none"><li>1) Section 2.1.1: Updated so that risk is assessed over a 100-year horizon</li><li>2) Section 2.2.5: Updated the program longevity to be at least 40 years</li><li>3) Section 2.2.5: Added program longevity to the set of risk factors assessed</li><li>4) Section 2.2.6: Adjusted the natural risk scores in Table 6</li></ol>



## Standards for a Sustainable Future



**Verified Carbon  
Standard**



**Jurisdictional  
& Nested REDD+**



**Climate, Community  
& Biodiversity Standards**



**Sustainable Development  
Verified Impact Standard**



**Plastic Waste  
Reduction Standard**