PROPOSED JNR RISK MAPPING TOOL

Verra proposal for stakeholder input regarding a JNR Risk Mapping Tool to be used together with the JNR Allocation Tool

1 BACKGROUND

The VCS *Jurisdictional and Nested REDD+ (JNR) Requirements* provide the rules for jurisdictional REDD+ programs and nested lower-level programs and projects developed under the VCS Program. The JNR v4.0 framework requires the use of the *JNR Allocation Tool* (JNR AT) to estimate jurisdictionally-aligned nested project baselines and lower-level jurisdictional Forest Reference Emission Levels (FRELs) from the higher-level jurisdictional FREL. This tool enables jurisdictional proponents to allocate the jurisdictional FREL to projects and lower-level jurisdictional programs based on the deforestation and/or degradation risk found in the project or lower-level program areas.

The JNR AT is intended to achieve the following goals:

1) Jurisdictional FRELs are constructed in line with the JNR Requirements.
2) Jurisdictional FRELs are allocated using a consistent methodological approach (i.e., based on risk) within the jurisdictional program boundary and across jurisdictional programs adopting the JNR framework.
3) Emission reduction estimates from all jurisdictional elements (including nested projects and lower-level jurisdictional programs) are accurate, conservative and fungible across the JNR portfolio.

A key input to the JNR AT is the spatially explicit assessment of the risk of deforestation and/or forest degradation (i.e., a risk map). This risk map provides the information to allocate portions of the jurisdictional FREL to specific areas within the jurisdictional boundaries in a proportion that corresponds to the deforestation or degradation risk faced by such areas. Under the *JNR Requirements,* v4.0, jurisdictional proponents are required to develop a risk map depicting up to 30 risk classes for each REDD activity included in the jurisdictional FREL. The maps must also include an additional class depicting areas of insignificant risk.

Several risk-modelling approaches and tools exist, and have been used, to create risk maps and spatially explicit deforestation models in the context of setting the baseline of stand-alone REDD+ projects. Most of these approaches are based on the selection of "factor maps" representing landscape features such as roads, navigable water streams, recently deforested areas, settlements, etc., whose proximity to forested areas are hypothesized to be factors that drive deforestation and forest degradation. However, finding high-quality factor maps can be challenging in many REDD+ countries. National-scale maps are often outdated, too coarsely scaled, and difficult to obtain from official

sources in the digital formats needed to build spatial models. In regions where deforestation and forest degradation are advancing very quickly, there is often an almost simultaneous development of roads, settlements, and other types of infrastructure that is not visible in national scale maps. This implies that even recently updated national maps are likely to quickly become inaccurate and outdated, particularly in areas where land-use is changing rapidly.

Where factor maps are too coarse and out of date, particularly in hotspot areas of deforestation and forest degradation, risk models developed with these maps will be poorly calibrated, and the resulting risk maps will not be of good quality. To address this problem, complementing existing factor maps by digitizing the features that are not represented in them is an option, but carrying out this work meticulously in the entire jurisdictional area can be costly and time-consuming.

2   PROPOSAL

Verra is proposing a *JNR Risk Mapping Tool* that will include an approach that does not use factor maps and builds on the hypothesis that the "local" deforestation and forest degradation rates that occurred during the recent past (i.e., the "FREL historical reference period") are, in most cases, a good predictor of the risk of deforestation and forest degradation in the immediate future (i.e., the "FREL validity period"). The proposed process will:

1) Minimize opportunities for biasing map outcomes in favor or against certain areas to which a portion of the FREL is allocated.
2) Be effective in detecting areas where the risk of deforestation and forest degradation is insignificant and therefore negligible.
3) Require minimal data and enable it to be applied in the broadest possible country contexts.
4) Be based off of a technical approach that is as simple as possible to minimize the risk of errors in its application and validation while remaining effective in discriminating areas of different risk levels.

The approach included within the *JNR Risk Mapping Tool* would be optional to use. An alternative approach could be used to create good-quality deforestation and forest degradation risk maps However, where jurisdictional proponents decide to use their own process to create a risk map, they would be required to comply with the minimum requirements that are set out in the *JNR Requirements, v4.0,* including the need to demonstrate that the quality of the map created using the alternative approach is equal or better than the quality of the map produced with the *JNR Risk Mapping Tool*.

3   REQUEST FOR INPUT

Verra is therefore seeking input on the draft *JNR Risk Mapping Tool* on the following general considerations:

1) Is the tool clear? Do any sections require additional explanations or examples?
2) Is the proposed approach for validating and comparing risk maps (e.g., where an alternative approach is used and compared to the approach included within the *JNR Risk Mapping Tool*) fit-for-purpose or are there better methods for doing so?
3) Verra encourages stakeholders to apply the draft *JNR Risk Mapping Tool* during the public consultation period. If you applied the draft *JNR Risk Mapping Tool,* we would welcome your feedback on any problems or challenges you faced, and any suggestions you would make to change or improve the tool.

4   CONSULTATION PROCESS AND TIMELINE

We encourage stakeholders to review the draft *JNR Risk Mapping Tool* and provide input. Please provide comments in any form, including by email or by preparing formal documents, and send those to secretariat@verra.org by **14 June 2021**. After the consultation, we will use the input and feedback provided on these proposals to update the *JNR Requirements, v4.0*. As always, please let us know if you have any questions as you engage in this consultation. We look forward to your feedback.