Instructions for Using the RGGI U.S. Forest Projects Monitoring Calculation Worksheet

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Contents

The Forest Project Monitoring Calculation Worksheet is provided as a tool for Project Sponsors to quantify the net GHG reductions and removal enhancements in accordance with the RGGI U.S. Forest Projects Offset Protocol (protocol). Individual worksheets are provided for each project type (Avoided Conversion, Improved Forest Management, Reforestation). The tool is used by Project Sponsors to calculate the total amount of net offset allowances they are claiming for the reporting period, and used by verification bodies to verify that calculations were performed in accordance with the protocol.

All required inputs require calculation separately or the use of other worksheets (e.g. Harvested Wood Products Worksheet). The calculation worksheets are color coded and have references to the protocol built in (Column AC). The color coding scheme is as follows:

Guidance
Project data entered by Project Sponsor
Assumptions and/or data populated automatically
Default values
Data calculated automatically for input into the Monitoring Calculation Worksheet

The Monitoring Calculation Worksheet will take the required inputs and provide an output of the CO_2 offset allowances to be issued to the project for the reporting period.

Column C of the Monitoring Calculation Worksheet represents the initial data as of project commencement, when project and baseline stocks are identical. Each subsequent reporting period calculates the net divergence between project and baseline activities, resulting in the annual CO_2 offset allowances issued to the Project Sponsor. The individual calculation steps described in the protocol are embedded in the calculation worksheets and include:

- Adjustments for inventory confidence
- Harvested wood products
- Secondary effects
- Buffer pool contributions
- Adjustments for reversals in a previous year

Improved Forest Management

Step 1: Input commencement date and initial reporting period end date (Cells C6 and D8). The initial reporting period must be a period of 6 to 24 months, with each subsequent reporting period spanning a period of 12 months. Select an initial reporting period that will meet this requirement and facilitate reporting in the future. The reporting period cycle automatically populates based on the initial reporting period end date.

Step 2: Input the initial carbon stocking value (Row 11). This is not to be confused with the Initial Carbon Stocks (ICS) used in Equation 6.6 of the protocol. The initial carbon stocking value represents the value of all reported carbon stocks in the project area at the offset project commencement date.

Step 3: Input sampled onsite carbon stocks (Row 12). This is the value of all reported onsite carbon stocks in the project area as of the end of the reporting period.

Step 4: Input confidence deduction (Row 13). The confidence deduction is calculated per the guidance in Appendix A, and is a standardized percentage deduction based on the inventory sampling error.

Step 5: Input soil carbon emissions (Row 15). Soil carbon emissions are only quantified in cases where site preparation activities involve deep ripping, furrowing, or plowing, causing significant soil carbon disturbance and subsequent emissions.

Step 6: Input baseline onsite carbon stocks (Row 17). The baseline carbon stocks are the result of modeling a financially feasible management regime for 100 years from the project's commencement date and then averaging stocks for that 100 year time frame. The 100 year average baseline carbon stocks must be greater than or equal to the Minimum Baseline Level (MBL) as determined by Equation 6.5 or 6.6.

Step 7: Complete the Harvested Wood Products Worksheet, and input data according to instructions from Harvested Wood Products Worksheet guidance (Rows 21, 23, 25-28). Baseline carbon in trees harvested for wood products and baseline carbon in harvested wood delivered to mill must be calculated according to the baseline modeling performed for Step 6 (Rows 22 and 24).

Step 8: Input the project-specific reversal risk rating as calculated per the guidance in Appendix D (Row 42).

Step 9: Calculate avoidable reversals for the reporting period and input relevant data (Rows 46, 48, and 49).

Avoided Conversion

Step 1: Input commencement date and initial reporting period end date (Cells C6 and D8). The initial reporting period must be a period of 6 to 24 months, with each subsequent reporting period spanning a period of 12 months. Select an initial reporting period that will meet this requirement and facilitate reporting in the future. The reporting period cycle automatically populates based on the initial reporting period end date.

Step 2: Input the initial carbon stocking value (Row 11). This is not to be confused with the Initial Carbon Stocks (ICS) used in Equation 6.6 of the protocol. The initial carbon stocking value represents the value of all reported carbon stocks in the project area at the offset project commencement date.

Step 3: Input sampled onsite carbon stocks (Row 12). This is the value of all reported onsite carbon stocks in the project area as of the end of the reporting period.

Step 4: Input confidence deduction (Row 13). The confidence deduction is calculated per the guidance in Appendix A, and is a standardized percentage deduction based on the inventory sampling error.

Step 5: Input soil carbon emissions (Row 15). Soil carbon emissions are only quantified in cases where site preparation activities involve deep ripping, furrowing, or plowing, causing significant soil carbon disturbance and subsequent emissions.

Step 6: Input baseline onsite carbon stocks (Row 17). The baseline onsite carbon stocks are the result of either referencing actual planning documentation specifying the timeframe for conversion and intended removal of forest cover or using the standard conversion rates provided per Section 6.3.1 of the protocol.

Step 7: Complete the Harvested Wood Products Worksheet, and input data according to instructions from Harvested Wood Products Worksheet guidance (Rows 21, 23, 25-28). Baseline carbon in trees harvested for wood products and baseline carbon in harvested wood delivered to mill must be calculated according to the baseline modeling performed for Step 6 (Rows 22 and 24).

Step 8: Input the appraised fair market value for alternative land use and current forested land use in thousands, which will automatically calculate the avoided conversion discount factor (Rows 34 and 35).

Step 9: Input the project-specific reversal risk rating as calculated per the guidance in Appendix D (Row 45).

Step 10: Calculate avoidable reversals for the reporting period and input relevant data (Rows 50, 52, and 53).

Reforestation

Step 1: Input commencement date and initial reporting period end date (Cells C6 and D8). The initial reporting period must be a period of 6 to 24 months, with each subsequent reporting period spanning a period of 12 months. Select an initial reporting period that will meet this requirement and facilitate reporting in the future. The reporting period cycle automatically populates based on the initial reporting period end date.

Step 2: Input the initial carbon stocking value (Row 11). This is not to be confused with the Initial Carbon Stocks (ICS) used in Equation 6.6 of the protocol. The initial carbon stocking value represents the value of all reported carbon stocks in the project area at the offset project commencement date.

Step 3: Input sampled onsite carbon stocks (Row 12). This is the value of all reported onsite carbon stocks in the project area as of the end of the reporting period.

Step 4: Input confidence deduction (Row 13). The confidence deduction is calculated per the guidance in Appendix A, and is a standardized percentage deduction based on the inventory sampling error.

Step 5: Input soil carbon emissions (Row 15). Soil carbon emissions are only quantified in cases where site preparation activities involve deep ripping, furrowing, or plowing, causing significant soil carbon disturbance and subsequent emissions.

Step 6: Input baseline carbon stocks (Row 17). The baseline carbon stocks are calculated based on modeling of a qualitative characterization of the anticipated likely vegetative conditions and activities that would have taken place absent the project. An inventory of on-site carbon pools is required to conduct the modeling.

Step 7: Complete the Harvested Wood Products Worksheet, and input data according to instructions from Harvested Wood Products Worksheet guidance (Rows 21, 23, 25-28). Baseline carbon in trees harvested for wood products and baseline carbon in harvested wood delivered to mill must be calculated according to the baseline modeling performed for Step 6 (Rows 22 and 24).

Step 8: Input the mobile combustion emission factor and the acreage of the project area to calculate the one-time combustion emissions associated with site preparation (Rows 34 and 35). Input the leakage risk percentage due to activity shifting leakage calculated according to Equation 6.3 and Figure 6.3 in the protocol (Cell D37).

Step 9: Input the project-specific reversal risk rating as calculated per the guidance in Appendix D (Row 46).

Step 10: Calculate avoidable reversals for the reporting period and input relevant data (Rows 51, 54, and 55).