

U.S. FOREST OFFSET PROJECT DATA REPORT INITIAL REPORTING PERIOD - IMPROVED FOREST MANAGEMENT				
OPR Staff Use Only	Date Report Received:	OPR Tracking Number:	Date Report Reviewed:	OPR Staff Use Only
<i>Entities submitting the project's first Offset Project Data Report must submit the information requested in both Initial Reporting Period and the Annual Reporting forms to the appropriate Offset Project Registry. For every reporting year thereafter, submit only the information requested in the Annual Reporting form.</i>				
PART I. ENTITY SUBMITTING REPORT				
Is this form being submitted by the Offset Project Operator (OPO) or by the Authorized Project Designee (APD)? <i>Note: The person completing this form should be an OPO/APD employee.</i>				☒ OPO ☐ APD
Name of Person Completing Form: Edward Mann		Organization, if applicable: Yurok Tribe		
Date Form Completed: 1/14/2019	Phone Number: 707-954-1409	Email Address: emann@yuroktribe.nsn.us		
PART II. OFFSET PROJECT INFORMATION				
Offset Project Name: Phase 1 Sustainable Forest Project		OPR Project ID#: CAR1070	ARB Project ID# (if known): CAFR5090	
Offset Project Commencement Date: 04/14/2011	First Reporting Period Start Date: 01/01/2015	First Reporting Period End Date: 12/31/2016		
Provide an explanation and justification for the commencement date. Specify the action(s) that identify the offset project commencement date. Offset project commencement date is date of early action project commencement. This is the date that lands were acquired by the Yurok Tribe for management under a federally-approved "Yurok Habitat Conservation Plan." The transition date is January 1, 2015, which is the day following the end date of the final early action reporting period.				
Optional: Provide the nearest town/city to the Project Area: Klamath, California				
PART III. OPO/APD INFORMATION				
A. OPO				
OPO Name: Yurok Tribe			OPO's CITSS ID#: CA 1 2 6 6	
Mailing Address: PO Box 1027, 190 Klamath Boulevard		City: Klamath	State: CA	Zip: 95548
Contact Person: Edward Mann	Phone Number: 707-954-1409	Email Address: emann@yuroktribe.nsn.us		
B. APD (if applicable)				☒ No APD/Not Applicable
APD Name:			APD's CITSS ID#: CA	
Mailing Address:		City:	State:	Zip:
Contact Person:	Phone Number:	Email Address:		
PART IV. LAND OWNERSHIP				
A. Is the Offset Project Operator (OPO) the owner in fee for the Project Area? <i>Further documentation is required for all projects. Submit as attachment labeled "Attachment A." See Part X of this</i>				☒ Yes

<i>OPDR document for more information.</i>		☐ No
If "no," explain how the entity identified as the OPO has the right to undertake and list the project.		
B. Optional: List all Forest Owners. This includes owners in fee as well as third parties with existing property interests within the Project Area that affect the trees and standing timber located in the Project Area (e.g. mineral rights, timber rights, easements, rights of way, leases, etc.). Yurok Tribe		
C. Does the offset project occur on public or private lands? <i>If the project occurs on public lands, proceed to questions C1 and C2. Otherwise, skip to question D. Further documentation is required if project occurs on public lands. Submit copies of documentation demonstrating explicit approval of the project's management activities and baseline, as well as the public vetting process used; attachment should be labeled "Attachment B." See Part X of this document for more information.</i>		☒ Private ☐ Public
1. Describe the public process that was used to evaluate the forest management activities and policy decisions concerning the offset project.		
2. Describe the explicit approval process used by the public entity to initiate and maintain this offset project, including the offset project's management activities and baseline.		
D. Does the project employ a Qualified Conservation Easement (QCE)? <i>If employing a QCE, proceed to questions D1, D2, and D3. Otherwise, skip to question E. Supporting documentation for a QCE is required. Submit as attachment labeled "Attachment C." See Part X of this document for more information.</i>		☐ QCE ☐ Public Ownership
1. Date that the QCE was recorded.		
2. Optional: Is the project located in a state that requires third-party beneficiaries to sign the easement (i.e., to "accept and record that acceptance"), such as Arizona, Pennsylvania, or West Virginia?		☐ Yes ☐ No
3. Provide the terms within the easement that affect forest management.		
E. Does the offset project occur on any of the following categories of land? (check all that apply) ☒ Land that is owned by, or subject to, an ownership of possessory interest of a Tribe ☐ Land that is "Indian lands" of a Tribe as defined by 25 U.S.C. §81(a)(1) ☒ Land that is owned by any person, entity, or Tribe, within the external borders of such Indian lands ☐ None of the above <i>If "none of the above," skip to Part V. Otherwise, proceed to Optional questions E1 and E2. Further documentation is required for projects occurring on land listed in the first three categories. Submit supporting documents as attachments labeled "Attachment D." See Part X of this document for more information.</i>		
1. Optional: Does a limited waiver of sovereign immunity between ARB and the governing body of the Tribe exist?		☒ Yes ☐ No
2. Optional: Provide a description of land ownership within the Project Area. Fee land with title held by the Yurok Tribe		
PART V. OFFSET PROJECT AREA		
Maps depicting specific elements of the Project Area are required for all projects. <i>Submit supporting documentation as attachments labeled "Attachment E." See Part X of this document for more information.</i>		
Latitude of Offset Project Location: 41.325954	Longitude of Offset Project Location: -123.792201	Project Area Total Acreage: 20,783
A. Identify the assessment area (or assessment areas, if project crosses more than one) that contain Project Area lands and list the acreage of project lands within each assessment area. Northern California Coast (Coast Redwood/Douglas-fir Mixed Conifer) – 2,057.5 acres Southern Cascades (Mixed Conifer) – 18,725.5 acres		
B. Identify and describe the governing jurisdiction(s) applicable to the Project Area. Yurok Indian Reservation, Humboldt County, California, and various federal agencies.		
C. Describe how the Project Area was determined. In an effort to repatriate historical lands and to protect fisheries and natural resources within tribal lands and the state of California, the Yurok Tribe partnered with Western Rivers Conservancy to acquire several tracts of land. These lands (known as the Phase I Acquisition) are subdivided into three separate management tracts, 1) Pecwan, 2) Cappell, and 3) Weitchpec. The Project Area		

covers all of the lands within the Cappel and Weitchpec management areas, and the large majority of the Pecwan tract.

The Project Area is 20,783 acres and was determined using the same GIS shapefile as the accounting.

D. Describe the existing land cover, and land use of the Project Area.

The project area consists of coast redwood, douglas fir, and other mixed conifer stands. The land use is resource management and commercial forestry.

E. Describe the forest vegetation types within the Project Area boundary.

The project consists of coast redwood, douglas fir, and other mixed conifer stands of various age and density classes.

F. Describe the site classes within the Project Area boundary.

The project consists of a roughly even mix of high and low site classes. Approximately 52% of the project is considered high site class (Timber Sites I – II), and 48% of the project is low site class (Timber Sites III-V).

G. Describe the land pressures and climate zone/classification applicable to the Project Area.

Land conversion pressures are minimal since the property is adjacent to public land (US Forest Service) and the east side and is zoned for forest management in adjacent properties. Because of this zoning and general lack of access, development of property within the project site for residential, commercial, or other uses is severely restricted.

The project site is found within the Dry Summer Sub-Tropical or Mediterranean Climate Zone (Cs) as defined by the Köppen-Geiger Climate Classification System.

Describe the historical land uses, current zoning, and projected land use within the Project Area and surrounding areas.

Two types of land management predominate. First, some prominent publicly owned recreational sites in the region include the Redwood National Park, Prairie Creek Redwoods State Park, Six Rivers National Forest, and Del Norte Coast Redwoods State Park. Second, private forested lands throughout the region are zoned and managed for timber harvest. Because of this zoning, land use is not projected to change in the surrounding areas.

The property has been managed for timber harvest since the late 1940s. Simpson Timber Company purchased these parcels between 1956 and 1981. Simpson continued to manage the property for timber production until 2002 when it transferred its timberlands to Simpson Resource Company. In 2004, Simpson Resource Company was renamed Green Diamond Resource Company. Green Diamond Resource Company owned and managed the properties until it sold to Western Rivers Conservancy in September, 2009 and December, 2010, then to the Yurok Tribe as sole fee owner in April 14, 2011. The project site will now be subject to the Yurok Tribe's management plan.

H. Describe the forest conditions within the Project Area, including species composition, age class distribution, and management history.

In 2008, prior to acquisition of the property, Western Timber Services completed a timber cruise of the Weitchpec and Cappel Parcels and the Pecwan Tract. This timber cruise was not used to calculate carbon, however, its results accurately depict the forest conditions within the project area. As commercial harvesting has not occurred since the 2008 timber cruise, its depictions of the forest conditions in the project area can be held as valid.

Species (tree) composition: Based on a 2008 timber cruise completed by Western Timber Services, the IA lands (Weitchpec and Cappel Parcels) contain both about 65.7 million board feet of merchantable conifer species and 41.5 million board feet of merchantable hardwood species.

Conifers are comprised primarily of young growth Douglas-fir (8.3 million board feet on Cappell, and 42.8 million board feet on Weitchpec, or approximately 78% of the total). Of the remainder, 7% is old growth Douglas-fir; there are some redwood stands on Cappell (1.5% of the landscape); and western hemlock (3.5%), Port-Orford-cedar (5.73%), incense-cedar (.5%) Western redcedar (.01%), Ponderosa pine (3.9%) and knobcone pine (.2%) can be found on both parcels. In addition, there are about 6.7 million board feet of red alder, with the remaining hardwood species primarily including tanoak, Pacific madrone, golden chinquapin, big leaf maple, cottonwood and California laurel. Based on the same 2008 timber cruise, the Pecwan Tract contains an estimated 163.6 million board feet of merchantable conifer species and 128.8 million board feet of merchantable hardwood species. Conifers are comprised primarily of young growth Douglas-fir (115.8 million board feet). Other substantial species and volume include old growth Douglas-fir (15.9 million board feet), redwood (2 million board feet), western hemlock (10.4 million board feet), Port-Orford cedar (9.3 million board feet), incense cedar (1.3 million board feet), and ponderosa pine (8.5 million board feet). In addition, there is an estimated 35.9 million board feet of red alder, as well as other hardwood species primarily including tanoak, Pacific madrone, golden chinquapin, big leaf maple, cottonwood and California laurel.

According to the results of the Western Timber Services inventory of 2008, only a small percentage of the total acreage is 20 years of age or younger. Specifically, the 2008 inventory reveals the following acreages by age class: 0-20 years -- 1,861 acres, or 8.96% of the total; 20 + years -- 18,922 acres, or 91.04% of the total. The property has been managed for timber harvest since the late 1940s.

PART VI. OFFSET PROJECT ELIGIBILITY

A. Does the Project Area have a canopy cover that is greater than 10 percent? <i>Supporting documentation is required. Submit as attachment labeled "Attachment F." See Part X of this document for more information.</i>	☒ Yes ☐ No
B. Optional: Are the associated project lands currently in compliance with all local, state, and federal regulatory requirements?	☒ Yes ☐ No
Optional: If no, provide an explanation of the non-compliance.	
C. Does the entity submitting this report declare that the offset project <u>has not</u> and <u>does not</u> employ broadcast fertilization?	☒ Yes ☐ No
D. Indicate how the offset project meets the definition of Natural Forest Management per Table 3.2 in the U.S. Forest protocol:	
1. Native species: a) Does the project consist of at least 95% native species based on the estimated sum of carbon in the standing live carbon pool? Improved Forest Management Projects are assessed using estimates of basal area per acre. <i>If "no," proceed to question 1b. Otherwise, skip to question D2.</i>	☒ Yes ☐ No
b) Describe how the project will meet this requirement.	
2. Composition of native species: a) Does the Project Area naturally consist of a mixed species distribution where no single species' prevalence, measured as the percent of basal area of all live trees in the Project Area, exceeds the percentage value of standing live carbon shown under the heading 'Species Diversity Index' in the Assessment Area Data File? <i>If "no," proceed to questions 2b and 2c. Otherwise skip to question D3.</i>	☒ Yes ☐ No
b) Explain how the project will demonstrate a trend toward achieving the Species Diversity Index of native species and meet this requirement within 25 years.	
c) If the Project Area does not naturally consist of a mixed species distribution: Will or have you provided a written statement from the government agency in charge of forestry regulation in the state where the project is located stipulating that the Project site is not capable of meeting the requirement of mixed species distribution?	☐ Yes ☐ No

3. Distribution of age classes/sustainable management:

- a) Indicate how the project will meet the requirement for sustainable management if regeneration or commercial harvesting is either planned or initiated within the Project Area demonstrating sustainable long-term harvesting practices. This applies to all forest landholdings of the Forest Owner(s) (check one of the boxes).
- ☐ Not applicable; no commercial harvesting is occurring within the Project Area.
- ☐ Third party certification under the Forest Stewardship Council, Sustainable Forestry Initiative, or Tree Farm System, whose certification standards require adherence to and verification of harvest levels which can be permanently sustained over time.
- ☒ Adherence to a renewable long-term management plan that demonstrates harvest levels which can be permanently sustained over time and that is sanctioned and monitored by a state or federal agency.
- ☐ Employ uneven-aged silvicultural practices and maintain canopy retention averaging at least 40% across the forest, as measured on any 20 acres within the entire forestland owned by the Forest Owner, including land within and outside of the Project Area (areas impacted by Significant Disturbance may be excluded from this test).
- b) On a watershed scale up to 10,000 acres (or the Project Area, whichever is smaller), projects must maintain, or make progress toward maintaining, a maximum of 40% of the project's forest lands in ages that are less than 20 years old. (Areas impacted by Significant Disturbance are exempt from this test until 20 years after reforestation of such areas.) Does the acreage within this project meet this requirement?
- ☒ Yes
☐ No
- If "no," proceed to question 3c. Otherwise, skip to question D4.
- c) If the project does not meet the age class requirement at this time, explain how the project intends to demonstrate progress to meet this requirement over time; such that forest lands in ages less than 20 years old are reduced and make up no more than 40% of the Project Area.

4. Structural elements (standing and lying dead wood):

How does the project ensure that structural elements are retained in sufficient quantities throughout the project life?

Forest management includes the retention of snags and coarse woody debris.

E. Describe the management activities that will result in increased carbon stocks in the Project Area, compared to the baseline.

The management activities that will increase carbon stocks on the project site are the prohibition of clear cutting on the Project Area, which will transition to selective harvest management, extended riparian buffers, and the potential creation of cultural reserves.

F. Is this project being implemented and conducted as the result of any law, statute, regulation, court order, or other legally binding mandate?

If "yes," explain:

☐ Yes
☒ No

G. Does the offset project take place on land that was part of a previously listed and registered Forest Offset Project?

This question is applicable to both voluntary and compliance markets. If "yes" proceed to questions G1 and G2. Otherwise, skip to Part VII.

☒ Yes
☐ No

1. Optional: Was the previous Forest Offset Project terminated due to an Unintentional Reversal?

☐ Yes
☒ No

2. Optional: Has this project transitioned to the Compliance Offset Protocol U.S. Forest Projects after previously being listed as an early action offset project?

☐ Yes
☐ No

PART VII. CARBON STOCK INVENTORY

A. Provide a description of the inventory methodology used to quantify carbon stocks for each required carbon pool in the forest project's offset boundary. The inventory methodology must describe the information required in Appendix A.3 of either the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 or the Compliance Offset Protocol U.S. Forest Projects, November 14, 2014.

IFM-1 Standing Live:

A carbon inventory was conducted in 2011, installing 107 plots in the project area. In 2014, 12 new plots were added to supplement this inventory. All 118 plots were allocated on a grid across the project area. The origin of the grid was randomly selected. The carbon inventory was updated in 2016 to meet the protocol requirements for the transition to ARB.

Stratification is based on forest stand-typing completed in 2008 by Western Timber Services. Stands were typed based on species composition, size/age class, and stocking level. The stand

typing was completed using aerial imagery, existing GIS data from Green Diamond Resource Company, slope and aspect analysis, and incorporation of cruiser data from timber inventory plots installed in the same year. The project area was then stratified based on dominant species. Further information on the stratification can be found in section 12.3 of the Yurok Carbon Inventory Report v3.2.

Non-forested areas were derived from a land cover classification created by Western Timber and were verified using NAIP imagery. Active roads as interpreted in aerial imagery were buffered to 25 ft. The remaining area not designated as Pre-Cruise or non-forest was classified as the Cruise area. The Pre-Cruise area and the Cruise are the sampling frame because these are the forested stratum.

Plots consist of a variable-radius, prism point sample using a 20 BAF prism and a single 17-foot fixed-radius plot with a shared center. The fixed-radius plot is only used to tally tree heights by diameter class for trees whose diameters are less than 5 inches. Measurements on the fixed-radius plots are only used for growth modeling and the projection of future carbon stocks. Within the variable radius plot, detailed measurements were collected for all "in" trees whose diameters are greater than or equal to five inches. Measurements include species, height, and diameter.

In the case where a plot boundary extended beyond the property boundary, the mirage method developed by Schmid-Haas (1969) and described by Beers (1977) was utilized. In the case that the plot center fell on a stand boundary, plot center was not relocated but was measured as-is. As the plots were allocated by stratum boundaries (separate from forest type boundaries) and the plots were point samples, no adjustment were made. In the case that the plot fell within the project area but in a non-forested or zero carbon area, the plot was monumented and sampled as normal.

Diameter at breast height was measured using a DBH tape, to the nearest tenth of an inch. Height measurements were made to the nearest foot using an optical or ultrasonic hypsometer or rangefinder. Plot measurements were made using a 20 BAF prism, for variable-radius plots, and a 100 foot tape or hypsometer/rangefinder, for fixed-radius plots.

Measurements were collected by the Yurok Tribe's forestry team and data was recorded on paper datasheets. Datasheets were scanned and data was digitized by the forestry team. The forestry team has retained original paper copies, and scanned versions have been saved to Dropbox and backed up to a remote server. Digitized data was then provided to the technical consultant for QAQC and biomass quantification.

As a part of the QAQC process, spot checks were made on the plot data in order to verify that the data is input correctly from the plot sheets into the Excel tree list document. Data within the tree list was sorted and pivoted by species for inputs such as DBH, height, and missing biomass in order to identify outliers. Any values that appeared to be outliers were checked against the original plot data sheets, and corrected if they are determined to be an error in the data entry. If inconsistencies were still present or items were questionable, the foresters were asked to return to the plot and take re-measurements.

Check cruises were conducted by the technical consultant in 2016 to assess the quality of the data collection. Where inconsistencies in measurements were identified, plots were re-measured by the forestry team to correct these items.

The Yurok Tribe will maintain a current running inventory of carbon stocks as part of their management of the project site. Plots will be re-measured at least every twelve years. Individual trees on measure plots may be grown using FVS or any other growth model approved by ARB between re-measurements, provided that it has been calibrated to accurately reflect data in earlier modeling exercises. Additional plots may be added to the inventory to improve the precision of estimates.

On variable-radius plots, all borderline trees were recorded to predict ingrowth to future modeling predictions.

Upon event of natural disturbance (such as fire, wind, pests) that may alter the carbon stocks in the project area, the affected area will be delineated into appropriate strata and all plots within the affected area re-measured prior to subsequent verification. All affected areas that are greater than ten acres must be delineated.

Plots can also be added to areas post-harvest or post-disturbance in order to increase the precision of carbon estimates from removal or loss. In these cases, harvest or disturbed areas will be stratified and delineated into separate strata. In the event that plots are not installed post-harvest or post-disturbance, the acreage of the harvest or disturbed area shall be determined through a combination of a digitized harvest or disturbance area in a GIS and a review of harvest records if available. The total loss in carbon stocks shall be estimated based on the determined harvest or disturbance area size and the average carbon stock density for this area prior to harvest or disturbance. The harvest area shall be assumed to be a clear-cut and the total harvest acres must be multiplied by a carbon stock density weighted by the proportion of area in each pre-harvest stratum intersecting with the harvest area. The same procedure shall be used for disturbed areas. This carbon stock estimate must then be removed from the project's total carbon stocks for the reporting period as an emission according to the requirements of the applicable Offset Protocol.

There are three known potential pests and diseases that may affect the health of the project's inventory: bear damage, sudden oak death, and severe drought.

Bear Damage: The primary agent affecting redwoods within the Project Area is black bear damage. Damage is caused by the bears peeling the bark and then eating the cambial layer on pole-sized to 25 inch DBH redwood trees. Damaged trees may become partially or completely girdled resulting in increased susceptibility to infection, or mortality for fully girdled trees. Damage usually occurs from May through early June.

Sudden oak death: Sudden Oak Death is also a concern within the Project Area. SOD is an introduced disease that kills native oak and tanoak trees in California. SOD is caused by *Phytophthora ramorum*, a microscopic organism that is spread during the late spring in northern California. According to a map produced by the Berkeley Forest Pathology and Mycology Lab, average SOD infections per square kilometer are towards the lower end of the spectrum in northern Humboldt and southern Del Norte Counties.

Drought: While the Project Area has not experienced significant drought in recent years, climate change presents the possibility that drought may impact forest health in the future. Douglas fir trees are commonly affected by increased drought, and may become prone to Douglas fir beetle attacks. Similarly, drought stressed pines may be more susceptible to mountain pine beetle and western pine beetle outbreaks.

IFM-3 Standing Dead:

Standing dead was also measured in the new carbon inventory. Plots consist of a variable-radius, prism point sample. Within the plot, measurements were collected for all "in" standing dead trees whose diameters are greater than or equal to five inches and whose total heights are at least fifteen feet. Measurements include species, height, diameter, and decay class.

IFM-6 Soil (if applicable):

Not applicable.

IFM-7 Carbon in in-use forest products:

Mill receipts for harvested wood products are recorded and retained by the OPO.

IFM-8 Forest product carbon in landfills (if applicable):

Mill receipts for harvested wood products are recorded and retained by the OPO.

IFM- 9 Biological emissions from site preparation:

Not applicable.

IFM-14 Biological emissions/removals from change in harvesting on forestland outside project area:

Default 20% secondary effects factor applied to difference between actual and baseline harvest volumes.

IFM-17 Biological emissions from decomposition of forest products:

Mill receipts for harvested wood products are recorded and retained by the OPO.

B. Describe the calculation methodologies used to determine metric tons per acre for each of the carbon pools included in the Offset Project Data Report.**IFM-1 Standing Live:**

If necessary, plot measurements are grown forward to the current reporting year. On individual plots, carbon in standing live trees is calculated using ARB-approved volume and biomass equations for California (t). At the plot-level, mean carbon is calculated from biomass (t/ac) by multiplying by 0.5 (t/biomass to t/C) and 3.664 (tC/tCO₂e). Mean carbon in the standing live pool (tCO₂e/ac) for the entire sampling frame is estimated across forest stratum using stratum area weights.

Carbon in the below ground portion of standing live trees is calculated at the plot level using the Cairns et al (1997) equation.

IFM-3 Standing Dead:

For decaying standing dead trees, volume and biomass are calculated using ARB-approved equations for California and density reduction factors from Harmon et al. (2011) were applied by decay class.

IFM-6 Soil (if applicable):

Not applicable

IFM-7 Carbon in in-use forest products:

Measured through harvest receipts, and calculated using ARB regional mill efficiency rates, decay rate, and landfill values.

IFM-8 Forest product carbon in landfills (if applicable):

Measured through harvest receipts, and calculated using ARB regional mill efficiency rates, decay

rate, and landfill values.

IFM- 9 Biological emissions from site preparation:

Not applicable

IFM-14 Biological emissions/removals from change in harvesting on forestland outside project area:

Default 20% secondary effects factor applied to difference between actual and baseline harvest volumes.

IFM-17 Biological emissions from decomposition of forest products:

Calculated based on harvest wood volumes and mill efficiencies.

C. Provide a summary of the inventory of carbon stocks for each carbon pool (or approach used, if inventory is not applicable).

IFM-1 Standing Live:

254.72 tCO₂e/ac

IFM-3 Standing Dead:

9.56 tCO₂e/ac

IFM-6 Soil (if applicable):

Not applicable

IFM-7 Carbon in in-use forest products:

0 tCO₂e. No commercial harvesting has occurred in the Project Area.

IFM-8 Forest product carbon in landfills (if applicable):

0 tCO₂e. No commercial harvesting has occurred in the Project Area.

IFM- 9 Biological emissions from site preparation:

Not applicable

IFM-14 Biological emissions/removals from change in harvesting on forestland outside project area:

-44,711.91 tCO₂e

IFM-17 Biological emissions from decomposition of forest products:

0 tCO₂e. No harvesting has occurred in the Project Area.

D. Provide a summary of inventory confidence statistics.

The estimated sampling error is 8.14% of the inventory estimate. The sampling error is estimated by first computing the standard error of the estimated mean carbon, multiplying the standard error by the z-value of 1.645 and 100, and then dividing by estimated mean carbon.

E. Provide the calculation of the offset project's reversal risk rating and contribution to the Forest Buffer Account.

$100\% - [(1 - 0.01) * (1 - 0.00) * (1 - 0.02) * (1 - 0.02) * (1 - 0.02) * (1 - 0.04) * (1 - 0.03) * (1 - 0.03)] = 15.84\%$

PART VIII. OFFSET PROJECT BASELINE

A. Required for ALL Improved Forest Management Projects

1. Describe the project's modeling plan, following the requirements and methods in Appendix B, Section B.3 of the U.S. Forest protocol.

Silvicultural Methods

The baseline scenario consists of managing the entire project area, minus legally constrained areas, for Douglas fir timber production using even-aged management.

The following silvicultural regimes are used in the modeling:

GROW - No management. Assumes natural regeneration as predicted by the approved-FVS growth model.

SLRP - Selective cuts thinning the canopy cover by 50%. Harvest intervals are conditional every cycle and completed once a stand hits a basal area greater than 180 ft²/acre. Assumes natural regeneration. No species preferences were specified in the model and thus FVS selected trees randomly for harvest.

UNCONSTRAINED - Mature stands will be clear-cut and replanted with 300 TPA of Douglas fir. Management prevents sprouting of non-planted trees. After a stand has been clearcut and replanted, it enters a conditional thinning regime that triggers when the basal area exceeds 150 ft²/acre. These stands are thinned to 125 ft²/acre. Final rotation occurs once a stand reaches a volume target of 10,000 board feet/acre. Douglas firs are replanted at 300 TPA and the regime is repeated until the end of the modeled period.

Site Index

A site tree was designated, cored, and measured at each plot in the inventory. The site trees were filtered by a number of factors to ensure quality site trees were selected. The following filters were used to select eligible site trees:

- Trees must be between the ages of 35 years and 120 years.
- Trees must possess site curves from Dunning and Reineke.
- Trees must be 50 feet in height or greater.
- Trees must not have any defect in the top third.
- Trees must be dominant or codominant (taller than the average height of all trees measured on the plot).

The equations found in Hanson (2002) derived from Dunning and Reineke (1933) were used to calculate site class for each eligible site tree. For plots without a site tree or with an ineligible site tree, the stratum average Douglas fir was assigned.

Stratum	Site index
1	98
2	99
3	90
4	70

Model and Model Calibration

Forest Vegetation Simulator (FVS) was used to model project stocks. The Klamath Mountains (NC) variant was selected, due to the project's location. The NC variant recognizes 11 species of trees. The document FVS_SpeciesCrosswalk was used to assign species codes to species not listed in the NC variant overview document. Plant

association code was assigned to stands by leading species, as described in the following table:

Leading Species	FVS Sequence Number	Plant Association Species Type
Alder	90	Douglas-fir-red alder/vine maple/Siberian springbeauty
Conifer	426	Western hemlock-Port-Orford-cedar
Douglas fir	95	Douglas-fir-giant chinquapin-tanoak
Hardwood	182	Tanoak-giant chinquapin/California huckleberry-salal
Pine	262	Sugar pine-western white pine/huckleberry oak-pinemat manzanita
Redwood	354	Redwood
Young	97	Douglas-fir-giant chinquapin/Pacific rhododendron-salal

Default pulpwood and sawtimber specifications for Region 5 from the NC variant were used. In reality, merchantability specifications would be changed over time as milling systems and markets evolved. The model did not assume how merchantability specifications would have changed over the modeling period and thus these specifications were fixed throughout the modeling period.

Aspect, slope, and elevation are computed in a GIS using a digital elevation model acquired from the USGS National Map Viewer. For growing plots forward, these are calculated at each plot. For baseline modeling, these are calculated at the modeling unit level.

The FVS model was implemented by constructing logical modeling units, resampling tree data and assigning site index to each modeling unit, and running the model for the baseline and project scenarios.

The basis of the modeling units were the stand-level vegetation cover type polygons. Constraint layers were created for each of the constraints mentioned above. These constraint layers were unioned with the stand-level vegetation cover type polygons, creating a shapefile containing the stands and constraints. These were then merged adjacent units of the same stratum or divided until it had reached a size between 5 and 20 acres.

The modeling units sum to 20,051 acres versus a GIS Project Area of 20,783 acres. The 732 acre difference reflects the removing of roads within the project area from the model.

In order to produce the final keyword files needed for the FVS modeling process, the de-grown 2011 inventory data and modeling units were run through a resampling procedure. The resampling process for the tree data was intended to produce modeling units and corresponding tree lists that were representative of the project for the modeling process.

Some modeling units contained inventory plots and thus had a known tree list. Other

uncruised modeling units did not contain inventory plots. Where modeling units did not contain inventory plots, representative tree lists were compiled.

To compile representative tree lists for uncruised modeling units, a non-parametric resampling method was used. Similar methods had been used by Gehringer (2006) and for other ARB-approved projects. Plots were randomly selected from the inventory plot list with probabilities proportional to their original selection probability under the inventory sampling design. Non-parametric resampling – also known as the bootstrap – theoretically guaranteed that the resampled subset was a representative population. Five plots were selected for each uncruised modeling unit from inventory plots in the same stratum. Individual tree records from these plots were used to compile representative tree lists for uncruised modeling units. Representative tree lists therefore represented five plots.

Both a baseline and a project scenario were modeled in FVS over 100 years. Model outputs of growth and yield estimates were organized by modeling unit and then compiled into databases for processing. Due to the large data size of the model outputs, the databases were used to run calculations and queries on the model outputs. The results of the calculations were condensed and transferred from the databases into an Excel workbook in order to best display and summarize the modeling results.

Standing dead was assumed to stay static over the 100 year model. Carbon in standing dead was estimated at 9.56 tCO₂e/ac from inventory calculations. As the baseline scenario includes clearcutting and the removal of all standing dead trees at every harvest, carbon in standing dead in the baseline scenario would decrease from current inventory estimates over the 100 year model. Therefore it is conservative to assume standing dead is static throughout the 100-year model.

Quality control checks were implemented throughout the modeling process. Inventory data was reviewed and spot-checked for data entry errors. In addition, modeling inputs including keyword files, parameterization data, stand and treelist files, and the optimization dashboard were checked for errors and proper functioning. Model results of residual growth and yield, as well as cut and post-harvest retention lists from FVS were reviewed by exporting records to Excel workbooks. Average growth, cut, and post-harvest retention records by year were examined by basal area, trees per acre and maximum, minimum, and mean tree diameter. Data checks were completed in order to ensure that the residual basal area post-harvest was accurate, that the post-harvest stand conditions reflected the prescribed silvicultural treatment, and that the modeled growth rates were realistic.

2. Describe and estimate the project's baseline onsite carbon stocks. Explain any annual changes in baseline carbon stocks over time.

A graph of the baseline onsite carbon stocks, labeled "Attachment G," must be portrayed depicting time on the x-axis and metric tons CO₂-e on the y-axis. Include a written characterization describing any annual change in baseline carbon stocks over time. See Part X of this document for more information. A diagram of the baseline incorporating all required carbon stocks, labeled "Attachment H," is also required.

Modeled above ground carbon stocks in the baseline scenario averaged over 100 year is 115.6 tCO₂e/acre. This is not below the Common Practice value for the Project Area (108 tCO₂e/acre). Annual changes in baseline carbon stocks are the result of considering all legal and financial constraints in the model.

The baseline model (see Attachment G) shows an initial dip in carbon stocks followed by

regrowth. This reflects an increase in harvest levels to recover the costs of acquiring the property.

3. Optional: Identify the approved growth model that will be used for the project.
Forest Vegetation Simulator (FVS)

4. Harvest Planning

a. Is harvesting planned in the Project Area?

If "yes," proceed to question 4b. Otherwise, skip to question A5.

☒ **Yes**
☐ **No**

b. Optional: Does the project use a harvest schedule model?

If "yes," proceed to question 4c. Otherwise, skip to question A5.

☒ **Yes**
☐ **No**

c. Optional: Explain how you are addressing age class and stratification as part of your harvest scheduling?

Vegetation was stratified by species, size, and stocking by Western Timber Services in 2008 as part of the timber valuation for land sale. These strata were clipped to the Project Area and used for modeling purposes. Areas by vegetation stratum were subdivided into modeling units. Each modeling unit is modeled individually.

5. Provide an estimate of carbon that will be stored long-term in harvested wood products in the baseline.
27,557 tCO₂e per year

6. Provide a projection of baseline and actual harvesting volumes from the Project Area over 100 years.

A projection may be provided in an attachment, labeled "Attachment I". Include a narrative with a clear explanation of how the OPO/APD arrived at the baseline and actual harvest volumes is determined

B. Required for Improved Forest Management Projects on Private Lands ONLY

1. Provide the initial above ground standing live carbon stock (per acre) for the project.

206.61 tCO₂e/ac

2. Provide the Common Practice statistic (per acre) associated with the Project Area.

107.63 tCO₂e/ac

3. Summarize how the Project's initial above-ground standing live carbon stock compares to Common Practice.

Initial above ground standing live carbon stocks are significantly higher than Common Practice.

Are the initial above-ground standing live carbon stocks above or below Common Practice?

Above

If below Common Practice, what is the High Stocking Reference for the Project Area? Describe the Project Area's live tree carbon stocks over the previous 10 years.

Further documentation is required if project is below Common Practice. Submit supporting documents as attachments labeled "Attachment J." See Part X of this document for more information. An affidavit must be submitted testifying that the inventory depicted over the past 10 years is reasonably accurate.

☒ **Above**
☐ **Below**

4. Optional: Does the Forest Owner(s) and its affiliate(s) own land in fee or hold timber rights on land outside the Project Area?

If "no," skip to question B.5.

☒ **Yes**
☐ **No**

Optional: If "yes" does the Protocol require the use of a weighted average carbon stock on lands in the same Logical Management Unit (LMU, as defined in Section 6.2.1.1)?

If "no," skip to question B.5.

☐ **Yes**
☒ **No**

Optional: If "yes," is inventory data available for the LMU or will the OPO use a stratified vegetation analysis?

If "no," skip to question B.5.

☐ **Data available for LMU**
☐ **Stratified Vegetation Analysis**

Optional: Identify the Minimum Baseline Level for above-ground standing live carbon stocks for the Project Area:

107.63 tCO₂e/ac

5. Provide a description of any and all legal constraints affecting forest management activities in the Project Area. Include documentation of legal constraints and a description of each constraint (referring to Section 6.2.1.2); for each constraint provide a narrative that constraint has on forest management.

Submit supporting documents as attachment labeled "Attachment K". See Part X of this reporting document for more information.

Management on the site will conform with all applicable state and federal regulations governing timber harvesting and endangered species. On-reservation portions of the Project Area are managed in accordance with the National Indian Forest Resources Management Act under a BIA-approved forest management plan. The Yurok Tribe will comply with applicable provisions of

California state law for activities undertaken on off-Reservation portions of the Project Area, including compliance with the California Forest Practices Act.

In addition to applicable state, federal, and tribal regulations, all management will abide by restrictions listed on the property itself. There are currently several categories of encumbrances on the title which could impact land management activities. These can be grouped into the following major categories: oil, gas, hydrocarbon, and mineral rights; rights of way grants and access easements, and utility easements. Since these title restrictions do not define clear operational actions that will be undertaken on restricted areas, they are not modeled as part of the baseline carbon calculation. Timber harvest may occur on any of these encumbered areas.

There are no current Timber Harvest Plans (THPs) currently on file for the project site.

There is an Aquatic Habitat Conservation Plan (aHCP) on the property, in effect since July 7, 2007. The aHCP protects aquatic habitats in the Project Area, restricting management activities in proximity to Class I and II streams. All restrictions outlined in the aHCP will be treated as legal constraints.

- 6. Provide a description of the modeling techniques used to simulate the effect of any constraints on carbon stocks.** The following legal and management plan constraints were considered when parameterizing the model. Silvicultural regime is in parentheses:

Stream Class 1 (GROW) - 150 ft buffer

Stream Class 2 (GROW) - 100 ft buffer

Stream Class 3 (UNCONSTRAINED) - 50 ft buffer

Stream Class 4 (UNCONSTRAINED) - 100 ft buffer

NDDDB Species (SLRP) - Natural Diversity Database species subject to surveying and habitat avoidance requirements

Federal List (SLRP) - Subset of NDDDB species that are threatened and endangered under federal law.

Wild and Scenic River (UNCONSTRAINED) - 1/4 mile zone around Klamath River; clear-cutting not explicitly prohibited from Wild and Scenic Zone.

Road - 25 ft buffer

Northern Spotted Owl detections (GROW) - No changes to nesting habitat within 500 ft; no changes to roosting habitat within 1,000 ft

Northern Spotted Owl territories (GROW) - 500 acres of owl habitat must be maintained within 0.7 miles of NSO detections, and 1,336 acres within 1.3 miles

Coho Salmon (GROW) – Coho observations from landowner

Salamander detections (SLRP) - Salamander observations from landowner

Pacific Fisher detections (SLRP) - Pacific fisher observations from landowner

Clear cut adjacency - Forest Practice Rules for even-aged silviculture requiring at least 300 feet between harvested units

Stocking standards - Minimum planting and residual basal area standards of Resource Conservation from the Forest Practice Rules

Restricted zones - Spatial harvesting limits imposed by the above riparian and wildlife constraints

Optional: Provide a description of the modeling techniques used to simulate forest management activities that may affect carbon stocks.

The model was parameterized with silvicultural prescriptions and local calibration. It was parameterized to consider the required legal constraints of the California Forest Practice Rules (FPRs) and Special Assessment Areas in the baseline scenario and in the project scenario the same, plus management plan objectives.

Default pulpwood and sawtimber specifications for Region 5 from the NC variant were used. In reality, merchantability specifications would be changed over time as milling systems and markets evolved. The model did not assume how merchantability specifications would have changed over the modeling period and thus these specifications were fixed throughout the modeling period.

Management techniques are outlined above under "Silvicultural Methods" in Section VIII.A.1.

7. How does the OPO demonstrate financial feasibility of the growth and harvesting regime assumed for the baseline? (check one of the boxes)

- ☐ Conducting a financial analysis of the anticipated growth and harvesting regime that captures all relevant costs and returns, taking into consideration all legal, physical, and biological constraints, using regional norms or documented costs and returns for the project area or other properties in the Forest Project's Assessment Area
- ☒ Providing evidence that activities similar to the proposed baseline growth and harvesting regime have taken place on other properties within the Forest Project's Assessment Area within the past 15 years

Supporting documentation is required. Submit as attachment labeled "Attachment L." See Part X of this listing document for more information.

C. Required for Improved Forest Management Projects on Public Lands ONLY

1. Provide a projection of future changes to Project Area forest carbon stocks extrapolating from historical trends.

2. Explain how current public policy affects onsite carbon stocks and how the baseline modeling incorporates constraints imposed by all applicable statutes, regulations, policies, plans, and activity-based funding.

3. Have carbon stocks in the Project Area been increasing or declining over the preceding ten-year period?

- ☐ Increasing
☐ Declining

PART IX. OTHER OFFSET PROGRAMS

A. Have any GHG reductions or GHG removal enhancements associated with the Project Lands ever been listed or registered with, or otherwise claimed by, another registry or program, or sold to a third party prior to listing?

If "yes," identify the registry or program and provide details on the issued credits below.

- ☒ Yes
☐ No

B. Have any lands within the Project Area ever been listed or registered with an offset project registry or program in the past?

If "yes," identify the registry or program and provide details on the issued credits below.

- ☒ Yes
☐ No

C. Have greenhouse gas emission reductions or removal enhancements associated with lands within the Project Area been credited or claimed for the purpose of greenhouse gas mitigation or reduction goals, whether in a voluntary or regulatory context? <i>If "yes," identify the goal(s) and provide details on the reductions and removal enhancements (under "Number of Credits Issued") below.</i>			☒ Yes ☐ No
Registry/Program/Goal(s): Climate Action Reserve FPP v3.1	Reporting Period(s): 4/14/11-12/31/11, 1/1/12-12/31/12, 1/1/13-12/31/13, 1/1/14-12/31/14,	Vintage(s): 2011, 2012, 2013, 2014	Number of Credits Issued: 1,048,997, 26,341, 25,033, 24,767

PART X. ATTACHMENTS

- A. If the answer to Part IV.A is "yes," provide documentation (e.g., deed of trust, title report, etc.) showing the OPO's ownership interest in the property and its interest in the trees and standing timber on the property. If the answer to Part IV.A is "no," provide documentation supporting the explanation of the OPO's right to undertake and list the project.**
- B. If the answer to Part IV.C is "public," provide documentation demonstrating explicit approval of the offset project's management activities and baseline including any public vetting processes necessary to evaluate management and policy decisions concerning the offset project. If the project is a private lands project, mark "N/A" in the box below. The OPO may provide an "Attachment B" page with a "This Page Left Intentionally Blank - Private Lands Project" notation on the page.** ☒ N/A
- C. If a Qualified Conservation Easement (QCE) has been recorded, provide a copy. The information contained in this form and the documents attached to it will be submitted to ARB so submitting a copy of the QCE as an attachment to this document fulfills the requirement in 9.1.1.1(18)(a) of the U.S. Forest protocol to provide ARB with a copy.** ☒ N/A
- D. If the project is located on one of the categories of Tribal land listed in Part IV.E, provide documentation demonstrating that the land within the Project Area is owned by a tribe or private entity. Also provide documentation that demonstrates the existence of a limited waiver of sovereign immunity between ARB and the governing body of the Tribe entered into pursuant to section 95975(I) of the Cap-and-Trade Regulation.** ☐ N/A
- E. Attach map(s) of the Project Area including:**
1. Public and private roads
 2. Towns
 3. Major watercourses (4th order or greater), water bodies, and watersheds
 4. Topography
 5. Townships, ranges, and sections or latitude and longitude
 6. Existing land cover and land use (optional)
 7. Forest vegetation types (optional)
 8. Site classes (optional)
 9. Land pressures and climate zone/classification (optional)
 10. Historical land uses, current zoning, and projected land use within the Project Area (optional)
 11. A georeferenced shape file (or other electronic file that can be read in a geographic information system) that clearly identifies the Project Area and boundaries. *Note that the georeferenced shape file may constitute the required map if it includes the required map information listed above.*
- F. Provide supporting documentation demonstrating that the offset project takes places on land that has greater than 10 percent tree canopy cover.**
- G. Attach a graph portraying the baseline onsite carbon stocks with time depicted on the x-axis and metric tons CO₂e depicted on the y-axis.**
- H. Attach a diagram of the final baseline incorporating all required carbon stocks.**
- I. Provide a projection of baseline and actual harvesting volumes from the Project Area over 100 years.**
- J. For IFM projects on private lands ONLY: If the Project Area's initial above-ground standing live carbon stocks are below Common Practice, submit an affidavit testifying that the inventory depicted over the past 10 years (used to determine the High Stocking Reference for the Project Area) is reasonably accurate. Also include a summary of volume harvested over the past 10 years.** ☒ N/A
- K. For IFM projects on private lands ONLY: Attach supporting documentation identifying the legal constraints within the Project Area. A 'constraints' table with the following categories may be provided for simplicity with the following information: narrative of legal constraint, identification of specific governing law guiding the constraint,**

acreage, silviculture method, retention strategy.

☐ N/A

- L. For projects on private lands ONLY: Provide a description and supporting evidence, if applicable, that the growth and harvesting regime assumed for the baseline is financially feasible based on the qualifications in Section 6.2.1.3 of the Protocol. ☐ N/A

PART XI. OPO/APD SIGNATURE

Note: The person signing this Initial Reporting Period report should be the same person signing the accompanying U.S. Forest Offset Project Data Report Annual Reporting Period – All Project Types report.

In signing this form, I certify under penalty of perjury of the laws of California that the information contained in this form is true, accurate, and complete. I further certify that I am an Account Representative of the Offset Project Operator (OPO).

SIGNATURE:

Edward L. Mann

PRINTED NAME:

Edward Mann

TITLE:

Director of Forestry

DATE:

1/14/2019

Background for U.S. Forest Offset Project Data Report Initial Reporting Period – Improved Forest Management

Section 95976(d) of the Cap-and-Trade Regulation specifies reporting requirements for offset projects participating in the Compliance Offset Program. Offset Project Operators (OPO) or Authorized Project Designees (APD) are required to submit an Offset Project Data Report (OPDR) within four months of the end of each (annual) Reporting Period. The Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 and Compliance Offset Protocol U.S. Forest Projects, November 14, 2014 both require additional information to be included with the initial OPDR. This form is designed to help OPOs and APDs provide the extra information required for an initial OPDR by U.S. Forest offset projects. The information in this form is submitted to the approved Offset Project Registry that is listing the offset project and should also be provided to the ARB-accredited verification body that will be verifying the Offset Project Data Report.

The information to be provided in this form closely mirrors information provided in the application for listing a U.S. Forest offset project. OPOs and APDs may wish to copy the information in their project's application for listing to the extent that the information provided at the time of that application has not changed.

Where to Submit Information Contained in This Form

Please complete the information on the form using your computer. Then print, sign, and scan the form. The completed and signed information and all supporting documentation should be submitted to the appropriate [Offset Project Registry](#).

Copies of this form can be downloaded from the ARB website at:
<http://www.arb.ca.gov/cc/capandtrade/offsets/forms/forms.htm>

Detailed Instructions for U.S. Forest Offset Project Data Report Initial Reporting Period – Improved Forest Management

This form is protected with restricted editing to facilitate completing the form. If the applicant wishes to unprotect the form, the password is "form".

Part I. Entity Submitting Report:

- Indicate whether the Offset Project Operator (OPO) or Authorized Project Designee (APD) is submitting the Offset Project Data Report.
- List the name, organization, phone number, and email address of the person submitting the information. This person should be an employee of the OPO or APD, whichever entity is making the submission. The person submitting the information need not be the same person as the contact person listed for the OPO or APD in Part III and also need not be the person signing the form in Part XI.
- The person submitting the information should indicate the date the form is completed.

Part II. Offset Project Information:

- Provide the name for the offset project. Also provide the project's identification number from the approved Offset Project Registry listing the project. The ARB project identification number may also be provided if known.
- Indicate the offset project commencement date and the start and end dates of the first reporting period. Unlike with the listing form, approximations are no longer acceptable for these dates since precise dates should be known.
- Project commencement for an Improved Forest Management Project must be linked to a discrete, verifiable action that delineates a change in practice that increases sequestration and/or decreases emissions relative to the forest project's baseline. This date could be triggered by the transfer of property ownership, recordation of a conservation easement on the Project Area, or when submitting the offset project listing information.

Part III. OPO/APD Information:

- Enter contact information for the OPO and APD submitting the report. Every offset project will have an OPO. If an offset project does not have an APD, please mark the box indicating the Offset Project does not have an APD and leave the remaining fields blank.

- For both the OPO and, if applicable, the APD, enter the entity's name, its mailing address, and the name, phone number, and email address of a contact person for the entity. Also include its CITSS ID number. The CITSS ID is six characters in length, with two letters followed by four numbers (e.g., "CA1234"). **DO NOT PROVIDE THE CONFIDENTIAL CITSS ACCOUNT NUMBER**, which begins with the CITSS ID number followed by a hyphen and more numbers.

Part IV. Land Ownership:

- This part includes questions regarding land ownership and property interests.
- Further documentation is required based on the responses to some questions. See Part X of this report for more information on the precise requirements.

Part V. Offset Project Area:

- This part asks for qualitative descriptions of the offset Project Area.
- Maps are required to complement the descriptions provided in this part. See Part X of this report for more information on the precise requirements.
- The Project Area should be determined following the requirements of Section 4 of the U.S. Forest protocol.
- Assessment areas shall be determined by referencing the Assessment Area Data File available at: <http://www.arb.ca.gov/cc/capandtrade/protocols/usforestprojects.htm>

Part VI. Offset Project Eligibility:

- The questions in this part are designed to facilitate the determination of project eligibility for Improved Forest Management Projects.
- Further documentation is required based on the responses to some questions. See Part X of this report for more information on the precise requirements.
- Details on the eligibility requirements for Improved Forest Management Projects can be found in Sections 2.1.2, 3.1, and 3.8 of the U.S. Forest protocol.
- Details on the Natural Forest Management criteria can be found in Table 3.2 in the U.S. Forest protocol.

Part VII. Carbon Stock Inventory:

- Projects are required to have completed a full carbon stock inventory for the initial Offset Project Data Report. Unlike the inventory provided at the time of listing, a general description of the project's inventory methods with preliminary best estimates is no longer sufficient to meet the regulatory requirements. If the project's inventory methodology changed between the time of listing and submission of the initial OPDR, this change should be reported as a change to the information submitted at project listing when submitting the first OPDR.
- Section 6.2 of either the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 or the Compliance Offset Protocol U.S. Forest Projects, November 14, 2014 outlines the approved quantification methodologies for Improved Forest Management Projects. Further details on completing a forest project carbon inventory can be found in Appendix A of the Protocol. (There are some differences in section 6.2 and Appendix A between the two versions.)
- Follow the steps in Appendix D of the U.S. Forest protocol to quantify the project's reversal risk rating.
- The project's expected contribution to the Forest Buffer Account is determined annually based upon the project's risk of reversal and is calculated by multiplying the project specific reversal risk rating by the total net GHG reductions/removals achieved by the project. Unlike the listing application, for this OPDR an approximation of the contribution to the Forest Buffer Account is not acceptable.

Part VIII. Offset Project Baseline:

- For this OPDR, unlike the project listing application, projects are required to have a finalized baseline. A modeling plan with preliminary best estimates is no longer sufficient to meet the regulatory requirements. If the project's modeling plan or baseline estimates changed between the time of listing and submission of the initial OPDR, this change should be reported as a change to the information submitted at project listing when submitting the first OPDR.
- Note that IFM projects located on public land must present documentation demonstrating explicit approval of the offset project's management activities and baseline. These projects may report changes to the baseline within the initial OPDR if the changes have gone through a public review process and meet the Protocol requirements regarding explicit approval of the project's baseline.
- This part is divided into three sections: questions required for all Improved Forest Management Projects; questions for Improved Forest Management Projects on private lands; and questions for Improved Forest Management Projects on public lands. Answer the questions applicable to the project.

- A diagram and graph are required to complement the descriptions provided in this part. See Part X of this report for more information on the precise requirements.
- Section 6.2 of either the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 or the Compliance Offset Protocol U.S. Forest Projects, November 14, 2014 outlines the approved quantification methodologies for Improved Forest Management Projects. Instructions for considering legal and financial constraints can be found in Sections 6.2.1.2 and 6.2.1.3, respectively. Further details on modeling carbon stocks can be found in Appendix B. (There are some differences in section 6.2 and Appendix B between the two versions.)
- ARB approved growth models can be found in Appendix B, Section B.1 of either the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 or the Compliance Offset Protocol U.S. Forest Projects, November 14, 2014. (There are some differences in Appendix B between the two versions.)

Part IX. Other Offset Programs:

- Answer all questions. If the answer to any question is “yes,” identify the registry or program and provide details on the issued credits in the space provided.

Part X. Attachments:

- Provide each attachment on a separate sheet of paper and submit along with the completed Initial Reporting Period-Offset Project Data Reporting Form.
- To aid with tracking each attachment, it is recommended that the attachments are labeled to correspond with the letter in Part X that they refer to (e.g. “Attachment B”).
- When an attachment is not applicable to the project being listed, please select the “N/A” (Not Applicable) checkbox next to the requirement so that it is clear that the attachment was not inadvertently left off.

Part XI. OPO/APD Signature:

- The individual signing the document must be registered in CITSS as the OPO’s Primary Account Representative or Alternate Account Representative for the entity submitting the information. The individual signing the document may be an APD employee and/or representative; but to sign the document, the individual must be an Account Representative on the OPO’s CITSS account.
- Please provide the individual’s signature, printed name, corporate title, and date signed.
- There are no attestations for this report. The attestations required for the Offset Project Data Report are included in the form U.S. Forest Offset Project Data Report Annual Reporting Period – All Project Types.

Please contact your Offset Project Registry with any questions regarding the OPDR.