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*

*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.*

PART I. ENTITY SUBMITTING REPORT

Is this form being submitted by the Offset Project Operator (OPO) or by the Authorized Project Designee (APD)? *Note: The person completing this form should be an OPO/APD employee.*

☒ **OPO**
☐ **APD**

Name of Person Completing Form:		**Organization, if applicable:**
Edward C. Murphy		Sierra Pacific Industries
Date Form Completed:	**Phone Number:**	**Email Address:**
05/26/2017	(530) 378-8131	emurphy@spi-ind.com

PART II. OFFSET PROJECT INFORMATION

Offset Project Name:	**OPR Project ID#:**	**ARB Project ID#** (if known):
Sacramento Canyon ARB001	CAR1041	CAFR5038

Offset Project Commencement Date:	**First Reporting Period Start Date:**	**First Reporting Period End Date:**
12/19/2013	1/1/2014	2/3/2015

Provide an explanation and justification for the commencement date. Specify the action(s) that identify the offset project commencement date.

Justification of commencement date is the verifiable action based on SPI management decision to commit to an ARB compliant carbon project for a period of over 100 years and submit the offset project listing information for this Forest Project per section 3.2 in the ARB US Forest Protocol dated 10/20/2011.

Optional: Provide the nearest town/city to the Project Area:

PART III. OPO/APD INFORMATION

A. OPO

OPO Name:			**OPO's CITSS ID#:**
Sierra Pacific Industries (SPI)			CA 1 5 5 5
Mailing Address:	**City:**	**State:**	**Zip:**
PO Box 496014	Redding	CA	96049-6014
Contact Person:	**Phone Number:**	**Email Address:**	
Edward C. Murphy	(530) 378-8000	emurphy@spi-ind.com	

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:**	

Submit the information in this form to the appropriate Offset Project Registry

PART IV. LAND OWNERSHIP

A. Is the Offset Project Operator (OPO) the owner in fee for the Project Area?
Further documentation is required for all projects. Submit as attachment labeled "Attachment A." See Part X of this OPDR document for more information.
If "no," explain how the entity identified as the OPO has the right to undertake and list the project.
Yes. Refer to Attachment A.

☒ **Yes**
☐ **No**

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.).
SPI is the fee owner of all lands included in the Forest Project

C. Does the offset project occur on public or private lands?
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.

☒ **Private**
☐ **Public**

1. **Describe the public process that was used to evaluate the forest management activities and policy decisions concerning the offset project.**
   N/A
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.**
   N/A

D. Does the project employ a Qualified Conservation Easement (QCE)?
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.

☐ **QCE**
☐ **Public Ownership**

1. **Date that the QCE was recorded.**
   N/A
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.**
   N/A

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**

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.

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.
   N/A

PART V. OFFSET PROJECT AREA

Maps depicting specific elements of the Project Area are required for all projects.
Submit supporting documentation as attachments labeled "Attachment E." See Part X of this document for more information.

Latitude of Offset Project Location:	Longitude of Offset Project Location:	Project Area Total Acreage:
41.081292	-122.303566	16,957.81

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.
The 16,957.81 acres in this Forest Project is entirely located within the Southern Cascade Mixed Conifer Assessment Area. (High Site Class). The Forest Project is forested and dominated by evergreen trees with hardwoods, and therefore Southern Cascade Mixed Oak Woodland is N/A assessment area. The Forest Project's elevations ascends to about 5,100', and therefore the Southern Cascade High Elevation Conifer assessment area is also deemed N/A.

B. Identify and describe the governing jurisdiction(s) applicable to the Project Area.

California Department of Forestry and Fire Protection (CALFIRE) and is in Shasta County.

C. Describe how the Project Area was determined.

SPI included all commercial forest lands, that can meet the permanence requirement of the protocol, in this logical management unit within the state planning watersheds and road systems that access them. The acreage was determined from SPIs' proprietary GIS.

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

The Forest Project area is forested and the associated land use is managed as commercial forestland. Refer to Attachment F.

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

Mixed conifer forests (see answer to Part V (I) for percent distribution by species basal area at project initiation)

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

Relative to high and low sites, this project is considered High Site, and therefore the High Site Common Practice statistic shall be used for the entire Forest Project.

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

Portions of this project area are in the viewshed of Highway 5, but otherwise there are no significant development pressures and the land is zoned Timber Production Zone (TPZ) under California law. The Forest Project is a mountainous and forested landscape within the Cascade Biotic Province. The climate is semiarid and mostly cool, but seasonal changes are well defined with snow common in the winter and warm temperatures in the summer. Mean annual precipitation is 65 inches of rain and snow with 90% of this occurring between the months of November and April.

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

The historic, current and the reasonably foreseeable future is commercial forest land for both the Forest Project area and surrounding forest lands. Much of the surrounding lands are federally owned managed by the USFS and they are not zoned by Shasta County. Castle Crags State Park borders portions of the northern edge of the project. The general makeup of the surrounding lands, not controlled by the USFS or the State, are predominately lands owned and managed by commercial timber companies, (Roseburg Resources, Sierra Pacific Industries, Crane Mills, Fruit Growers Supply, and Timber Products) and overwhelmingly zoned TPZ.

Refer to the following supporting document for landownership:
1. Refer to “Confidential sac_mow with zoning.pdf”

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

The project consists primarily of young growth, unevenaged timber stands (approximately 88% of the area). Some evenaged stands exists and are diverse in age with majority less than 20 years old at Forest Project’s commencement date. The merchantable stands have been selectively logged for over 80 years. Shown below is the % distribution by basal area of the listed native species (refer to Confidential OPDRInit_SacBasalPercentage.xls):

PP	SP	WF	RF	DF	IC	MC	HW
4.33%	3.75%	4.76%	0.00%	58.74%	3.70%	0.25%	24.48%

PP: Ponderosa Pine; SP: Sugar Pine; WF: White Fir; RF: Red Fir; DF: Douglas-fir;
IC: Incense Cedar; MC: Miscellaneous Conifer; HW: Hardwoods.

Refer to the following supporting document for age class distribution:
1. "Confidential_SacRegen_PWS_Analysis.xlsx" (watershed scale analysis)

PART VI. OFFSET PROJECT ELIGIBILITY

A. Does the Project Area have a canopy cover that is greater than 10 percent? *Supporting documentation is required. Submit as attachment labeled "Attachment F." See Part X of this document for more information.*	☒ **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. N/A	
C. Does the entity submitting this report declare that the offset project has not and does not employ broadcast fertilization?	☒ **Yes** ☐ **No**
D. Indicate how the offset project meets the definition of Natural Forest Management per Table 3.2 in the Compliance Offset Protocol US Forest Offset Projects, October 20, 2011:	
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.** *If "no," proceed to question 1b. Otherwise, skip to question D2.*	☒ **Yes** ☐ **No**
b) Describe how the project will meet this requirement. N/A (refer to V(1))	
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?** *If "no," proceed to questions 2b and 2c. Otherwise skip to question D3.*	☒ **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. N/A. As depicted above in Part V(I), there's no single species exceeding the Southern Cascade Mixed Conifer Assessment Area's (High Site Class) "Species Diveristy Index" of 65% at Project Commencement. The Forest Project project area meets this constraint.	
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? *If "no," proceed to question 3c. Otherwise, skip to question D4.*	☒ **Yes** ☐ **No**
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. N/A. Refer to "Confidential_SacRegen_PWS_Analysis.xlsx" (watershed scale analysis)	

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?

The current standing dead wood stocks are 0.44 metric tons of carbon (net), and when converted, is 1.61 metric tonnes of CO2e per acre (net; above & below ground). These estimates are based on applying CAR's qualification guidance (11/15/2012) procedures under 2.7. In this case, the 1 metric ton standard of carbon per acre is higher than 1% of standing live carbon stocks, and therefore the required carbon stocks in standing dead are below the minimum requirements for the project area.

SPI has management policies and practices for maintenance and protection of existing standing and lying dead wood as well as specific silvicultural practices that maintain the processes that cause mortality (standing dead wood) over time. As part of SPIs' habitat retention polices in its evenaged units, SPI provides sites where the natural process of density induced mortality is allowed to continue, thus providing the one controlable causitive agent for future standing dead wood recruitment to continue to produce standing dead wood. These forest elements are very difficult to model (very poor predictive power), but we will continue to monitor these structural elements with our continuing forest inventory over time and report them to the verifier to show continued meeting of the required amounts. SPI does not plan or intend to remove lying dead wood in any of its commercial activities, in fact SPI requires that when snags must be felled for safety and operational needs, that the resulting lying dead wood be retained on site.

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

Annual management actions in the form of investments in forest thinning, pre-commercial thinning and planting to return and maintain optimum stocking creates a net increase in the rate of sequestration. These actions/investments are matched by the annual management decision and investment in the form of holding otherwise merchantable timber to maintain this increased stocking of carbon on the project area when it is legally permissible to reduce that stock as evidenced by the baseline scenario.

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: Is the project transitioning to the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011, 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 the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011.

IFM-1 Standing Live: Refer to Confidential OPDRInit_Attachment_VII(A): Inventory Methodology

IFM-3 Standing Dead: Refer to Confidential OPDRInit_Attachment_VII(A): Inventory Methodology

IFM-6 Soil (if applicable): N/A

IFM-7 Carbon in in-use forest products: This will be calculated from the cubic scale of annual harvested wood and following the protocol methodology. Baseline will be calculated from the Average Baseline Harvest following the protocol methodology.

IFM-8 Forest product carbon in landfills (if applicable): This will be calculated from the cubic scale of annual harvested wood and following the protocol methodology. Baseline will be calculated from the Averaged Baseline Harvest following the protocol methodology.

IFM- 9 Biological emissions from site preparation: OPDR "not quantified because SSR #IFM-6 is not included because none of the reasons to include it were triggered and IFM-9 allows no quantification when IFM-6 is not applicable".

IFM-14 Biological emissions/removals from change in harvesting on forestland outside project area: No such changes will occur SPI forestlands outside the project area as a result of the independent 3rd-party certification process identified in VI D(3) above, but the protocol provides for using a standardized 20% leakage factor applied to the difference in actual harvest volume and the averaged harvest volume in the baseline scenario. So we will calculate this value when annual harvest values are available.

IFM-17 Biological emissions from decomposition of forest products: The process/methodology followed for IFM-7 already takes into account the net carbon remaining after decomposition is considered and therefore it could be reported.

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: Each tree's carbon is calculated using the US Forest Service FIA National Program biomass equations, summed & weighted across strata, and then divide by acres to calculate a weighted averaged for the Project area. These are the equations described in the Forest Offset Protocol Resources section of ARB's webpage. To derive net carbon values, gross average carbon values were adjusted for missing segments and defect according to the CAR Quatification Quidance for use with Forest Carbon Projects dated 11/15/2012. For more details, Refer to Attachment Part VII(A): Inventory Methodology. The Cairn's equation (Cairns, Brown, Helmer, & Baumgardner, 1997) was used to calculate CO2e in the below-ground portion and is calculated at the plot level.

IFM-3 Standing Dead: Each snags carbon is calculated using the US Forest Service FIA National Program biomass equations, summed & weighted across strata, and then divide by acres to calculate a weighted average for the Project area. These are the equations described in the Forest Offset Protocol Resources section of ARB's webpage. To derive net carbon values, gross average carbon values were adjusted for missing segments and decay class according to the CAR Quatification Quidance for use with Forest Carbon Projects dated 11/15/2012. For more details, refer to Attachment Part VII(A): Inventory Methodology. The Cairn's equation (Cairns, Brown, Helmer, & Baumgardner, 1997) was used to calculate CO2e in the below-ground portion and is calculated at the plot level.

IFM-6 Soil (if applicable): N/A

IFM-7 Carbon in in-use forest products: Actual annual harvest will be cubic scaled and the percent by product category will be determined from SPI mills or the regional table and then the carbon remaining in use will be calculated based upon the protocol methodolgy.

IFM-8 Forest product carbon in landfills (if applicable): This will be calculated from the cubic scale of annual harvested wood and following the protocol methodology. For Baseline, it will be calculated from the Averaged Baseline Harvest following the protocol methodology.

IFM- 9 Biological emissions from site preparation: OPDR "not quantified because SSR #IFM-6 is not included because none of the reasons to include it were triggered and IFM-9 allows no quantification when IFM-6 is not applicable".

IFM-14 Biological emissions/removals from change in harvesting on forestland outside project area: No such changes will occur SPI forestlands outside the project area as a result of the independent 3rd party certification process identified in VI D(3) above, but the protocol provides for using a standardized

20% leakage factor applied to the difference in actual harvest volume and the averaged harvest volume in the baseline scenario. So we will calculate this value when annual harvest values are available.

IFM-17 Biological emissions from decomposition of forest products: The process/methodology followed for IFM-7 already takes into account the net carbon remaining after decomposition is considered and therefore it could be reported.

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: 197.58 metric tons CO2e/acre in above and below ground standing live carbon dioxide equivalents (net)

IFM-3 Standing Dead: 1.61 metric tons CO2e/acre in above and below ground standing live carbon dioxide equivalents (net)

IFM-6 Soil (if applicable): N/A

IFM-7 Carbon in in-use forest products: Actual annual harvest will be cubic scaled and the percent by product category will be determined from SPI mills or the regional table and then the carbon remaining in use will be calculated based upon the protocol methodolgy. Following the protocol methodology carbon in in-use forest products for the Baseline calculates out to a project area total of 9,975 MTC02e per year.

IFM-8 Forest product carbon in landfills (if applicable): This will be calculated from the cubic scale of annual harvested wood and following the protocol methodology. Baseline IFM-8 will be calculated from the Average Baseline Harvest following the protocol methodology. Following the protocol methodology carbon in landfills for the baseline calculates out to a project area total of 6,398 MTCO2e per year.

IFM- 9 Biological emissions from site preparation: Not quantified because SSR #IFM-6 is not included because none of the reasons to include it were triggered and IFM-9 allows no quantification when IFM-6 is not applicable.

IFM-14 Biological emissions/removals from change in harvesting on forestland outside project area: No such changes will occur on SPI forestlands outside the project area as a result of the independent 3rd party certification process identified in VI B(3) above, but the protocol provides for using a standardized 20% leakage factor applied to the difference in actual harvest volume and the averaged harvest volume in the basline scenario. Thus it can only be calculated with actual harvest volumes each year. For Baseline, average harvests following the protocol methodology this calculates to a project total of 11,132 MTCO2e per year.

IFM-17 Biological emissions from decomposition of forest products: The process/methodology followed for IFM-7 already takes into account the net carbon remaining after decomposition is considered and therefore it will be reported in any year when actual harvest occurs. For Baseline, average harvests following the protocol methodology this calculates to a project total of 5,292 MTCO2e per year.

D. Provide a summary of inventory confidence statistics.

Forest Project Confidence Statisics (Net Live & Snag, Above & Below)

SE% = 1.01% SE% (90% Confid.) = 1.66%

Refer to "Confidential_SacCalcs_20142015 - Base_Summary_Stats sheet"

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

`Project Contribution to the Buffer Account Based on risk for the Forest Project.

Risk Category	Contribution from Risk	
Financial Failure	Default Risk	5%
Illegal Forest Biomass Removal	Default Risk	0%
Conversion	Default Risk	2%
Over-Harvesting	Default Risk	2%
Social	Default Risk	2%
Wildfire	Calculated Risk from worksheet	4%
Disease or Insect Outbreak	Default Risk	3%
Other Catastrophic Events	Default Risk	3%

(per ARB formula) Total Reversal Risk% (100% - 80.76%) = 19.24%

So the estimated expected contribution to the Forest Buffer Account is (MtCO2e):

Current Reporting Period - 1 yr = 662,284 * 19.24% = 127,424

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 Compliance Offset Protocol U.S. Forest Projects, October 20, 2011.

Refer to "OPDRInit_ConfidentialAttachment_VIII(A)(1).pdf"

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.

162.09 metric tons CO2e/acre (net) is the starting baseline above and below ground live and dead standing carbon stocks. This estimate is based on calculating the below ground at the plot level for both IFM-1 & IFM-3 combined, aggregated up to the strata level, and then weighted to obtain this estimate.

As shown in Attachment G the actual baseline stocks vary overtime as the common practice harvest and growth scenarios are applied, once averaged, there are no annual changes that need explanation.

3. Optional: Identify the approved growth model that will be used for the project.

SPI utilizes the UC Berkely Coop growth and yield model CACTOS and a stand table projection system that meets the protocol requirements.

4. Harvest Planning

a. Is harvesting planned in the Project Area? ☒ **Yes** ☐ **No**

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

b. **Optional:** Does the project use a harvest schedule model? ☐ **Yes** ☒ **No**

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

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

N/A

5. Provide an estimate of carbon that will be stored long-term in harvested wood products in the baseline.

The baseline average annual onsite harvest, which following the protocol methodology carbon in in-use forest products for the baseline calculates out to a project area total of 16,372 MTCO2e 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.

159.68 metric tons CO2e/acre (net) in above ground live carbon stocks.

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

128 metric tons CO2e/acre in above ground live carbon stocks.

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

The project's initial above-ground standing live carbon stock is above the 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 I." 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.

N/A

☒ **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:

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 J". See Part X of this reporting document for more information.

Refer to OPRDRInit_ConfidentialAttachment_J_Constraints.pdf & OPDRInit_ConfidentialAttachment_VIII(A)(1).pdf - Modeling Plan

6. Provide a description of the modeling techniques used to simulate the effect of any constraints on carbon stocks.

Each scenario applied to each strata and logging unit was modeled to meet the required Forest Practice Rule constraints including minimum required stocking, WLPZ canopy retention requirements and buffer widths, and in even age management unit timing SPI employs its own 10 year adjacency planning constraint, to clearly meet the State's 5 year requirement. Since this is a physical layout of timing, adjoining WLPZ buffer units are scheduled for harvest entry at the same time as the adjacent evenaged unit. For unevenaged management units and in the baseline harvest scheduling in any particular unit is generally timed with 10 year reentry schedules.

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

Refer to Confidential OPRDRInit_Attachment_J_Constraints.pdf & Confidential OPDRInit_Attachment_VIII(A)(1).pdf - Modeling Plan

7. How will 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**

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. N/A	
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. N/A	
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? *If "yes," identify the goal(s) and provide details on the reductions and removal enhancements (under "Number of Credits Issued") below.*	☐ Yes ☒ No

Registry / Program / Goal(s):	Reporting Period(s):	Vintage(s):	Number of Credits Issued:
N/A	N/A	N/A	N/A

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 Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 to provide ARB with a copy.**

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(l) of the Cap-and-Trade Regulation.**

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 CO_2e depicted on the y-axis.**

H. **Attach a diagram of <u>the final baseline</u> incorporating <u>all</u> required carbon stocks.**

I. **For IFM projects on <u>private lands ONLY</u>: 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.**

J. **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.**

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 C Murphy	**PRINTED NAME:** Edward C. Murphy
TITLE: Manager, Information and Ecosystem Services for	**DATE:** 05/26/2017

Submit the information in this form to the appropriate Offset Project Registry

Sierra Pacific Industries Alternate Account Representative for the Sierra Pacific Industries CITSS Acount	

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, requires 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 offset projects using Compliance Offset Protocol U.S. Forest Projects, October 20, 2011. This information 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 an offset project using the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011. 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 Compliance Offset Protocol U.S. Forest Projects, October 20, 2011.
- 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 Compliance Offset Protocol U.S. Forest Project, October 20, 2011.
- Details on the Natural Forest Management criteria can be found in Table 3.2 in the Compliance Offset Protocol U.S. Forest Project, October 20, 2011.

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 the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 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.
- Follow the steps in Appendix D of the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 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 the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 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 of the Protocol.
- ARB approved growth models can be found in Appendix B, Section B.1 of the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011.

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.

Submit the information in this form to the appropriate Offset Project Registry