



DISCLAIMER: ARB has developed this Application For Listing an Improved Forest Management U.S. Forest Offset Project form specific to forest projects using ARB's Compliance Offset Protocol U.S. Forest Projects, June 25, 2015. This form is intended to help Offset Project Operators and Authorized Project Designees meet the listing the requirements in the Compliance Offset Protocol.

The Cap-and-Trade Regulation (Regulation), which appears at sections 95801 to 96022 of Title 17, California Code of Regulations, and the offset protocols incorporated therein, are a set of rules that establish the compliance offset program and the methods for quantifying GHG emission reductions and enhanced sequestration. ARB staff has prepared this document to facilitate meeting a regulatory requirement in a user-friendly format. **Unlike the Regulation and protocols, this form does not have the force of law.** It is not intended to and cannot establish new mandatory requirements beyond those that are already in the Regulation, and it does not supplant, replace, or amend any of the legal requirements of the Regulation or protocols. Conversely, this form's omission or truncation of regulatory requirements does not relieve operators of their legal obligation to fully comply with all requirements of the Regulation and the protocols.

This form is based on the June 25, 2015, version of the Compliance Offset Protocol U.S. Forest Projects and the Cap-and-Trade Regulation as amended effective November 1, 2015. ARB makes every effort to keep its documents up to date; however conformance to Protocol and Cap-and-Trade Regulation requirements are the responsibility of the Offset Project Operator, Authorized Project Designee, and Verification Body as applicable.

APPLICATION FOR LISTING AN IMPROVED FOREST MANAGEMENT U.S. FOREST OFFSET PROJECT				
OPR Staff Use Only	Date Application Received:	OPR Tracking Number:	Date Application Reviewed:	OPR Staff Use Only
PART I. ENTITY APPLYING FOR LISTING				
Is this form being submitted by the Offset Project Operator (OPO) or by the Authorized Project Designee (APD)? Notes: 1. The person completing this form should be an OPO/APD employee. 2. If the APD is submitting this form, the OPO should submit the form <i>Designation of Authorized Project Designee</i> simultaneously.				☐ OPO ☒ APD
Name of Person Completing Form: Brian Shillinglaw		Organization, if applicable: Forest Carbon Partners, L.P.		
Date Form Completed: 25 May 2017		Phone Number: 415-321-3300	Email Address: bshillinglaw [at] newforests-us.com	
Mailing Address: 275 Battery Street, Suite 510		City: San Francisco	State: CA	Zip: 94111
Physical Address: (check if same as mailing ☒)		City:	State:	Zip:
PART II. OFFSET PROJECT INFORMATION				
Offset Project Name: Chugach Alaska Forest Carbon Project				
Offset Project Commencement Date: 06 June 2017		First Reporting Period Start Date: 06 June 2017	First Reporting Period End Date: 06 December 2017	
Provide an explanation and justification for the commencement date. Specify the action(s) that identify the offset project commencement date: The commencement date is the day that listing documentation was submitted to the Offset Project Registry.			Provide the physical address of the project site (if available): Vicinity Yakutak, Alaska	
PART III. OPO/APD/TECHNICAL CONSULTANT INFORMATION				
A. OPO				
OPO Name: Chugach Alaska Corporation			OPO's CITSS ID#: CA <u>2</u> <u>3</u> <u>0</u> <u>0</u>	
Mailing Address: 3800 Centrepont Drive, Suite 1200		City: Anchorage	State: AK	Zip: 99503
Physical Address: (check if same as mailing ☒):		City:	State:	Zip:
Contact Person: Josie Hickel		Phone Number: 907-563-8866	Email Address: josie.hickel [at] chugach.com	
B. APD (if applicable)				
APD Name: Forest Carbon Partners, LP			APD's CITSS ID#: CA <u>1</u> <u>4</u> <u>0</u> <u>3</u>	
Mailing Address: 275 Battery Street, Suite 510		City: San Francisco	State: CA	Zip: 94111

Physical Address: (check if same as mailing ☒):		City:	State:	Zip:
Contact Person: Brian Shillinglaw		Phone Number: 415-321-3300	Email Address: bshillinglaw [at] newforests-us.com	
Part III.C Technical Consultant (if applicable)		☒ No Technical Consultant /Not Applicable		
Technical Consultant Name:		Technical Consultant's CITSS ID# (if applicable): CA _ _ _ _		
Mailing Address:	City:	State:	Zip:	
Physical Address: (check if same as mailing ☐):	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 listing document for more information.</i> If "no," explain how the entity identified as the OPO has the right to undertake and list the project.	☒ Yes ☐ No
B. 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.). The Chugach Alaska Corporation is the owner of fee title to the real property included in the Project Area. Based on preliminary review and inquiry with the Offset Project Operator, property interests held by other parties such as easements and rights of way will not affect the trees and standing timber located within the Project Area.	
C. Describe the forestland and resource ownership for the real property in the project area: The property is held by the Chugach Alaska Corporation, which was formed to represent the people of Chugach under the Alaska Native Settlement Act of 1971. The Chugach Alaska Corporation land holdings include 8 tracts within the three Boroughs of Prince William Sound (Valdez-Cordova), Kenai Peninsula and Yakatak Borough, State of Alaska, USA.	
D. List the name and mailing address of other parties with a material interest in the real property involved in the forest project: N/A	
E. Does the offset project occur on public or private lands? <i>If the project occurs on public lands, proceed to questions E1 and E2. Otherwise, skip to question F. Further documentation is required if project occurs on public lands. Submit as attachment labeled "Attachment B." See Part X of this listing document for more information.</i>	☒ Private ☐ Public
1. Describe the public process that has been used to approve forest management activities and baseline.	
2. Describe the documentation being submitted with this listing document demonstrating approval of planned forest management activities and baseline.	
F. Will the project employ a Qualified Conservation Easement (QCE)? <i>If employing a QCE, proceed to questions F1, F2, and F3. Otherwise, skip to question G. Supporting documentation for a QCE is required. Submit as attachment labeled "Attachment C." See Part X of this listing document for more information.</i>	☐ QCE ☐ Public Ownership
1. Date that the QCE was or will be recorded.	
2. Will the project take place 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.	

G. 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 questions G1 and G2.

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 listing document for more information.

1. Does a limited waiver of sovereign immunity between ARB and the governing body of the Tribe exist?

☐ Yes
☐ No

2. Describe how the land within the Project Area is owned.

PART V. OFFSET PROJECT AREA

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

Latitude of Offset Project Location:

60° 20' 52.85" North (centroid)

Longitude of Offset Project Location:

144° 39' 16.91" W (centroid)

Project Area Total Acreage:

117,000 acres

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.

Assessment areas are defined geographically in Alaska. The entire Project Area falls within the Gulf-NorthCoast-Chugach assessment area in the Southeast and South Central Alaska supersection.

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

Prince William Sound (Valdez-Cordova) Borough, Kenai Peninsula Borough, Yakutat Borough, State of Alaska, USA.

C. Describe how the Project Area was determined.

Forestland was identified within the property boundaries that appeared to be at least moderately stocked, accessible for timber management, and relatively unconstrained by environmental factors.

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

The project is located in rugged coastal mountains, fjords, and glacial valleys. The land cover is primarily coastal rainforest, with many salmon-bearing streams and a lush understory of shrubs and moss. It is used for hunting, fishing, and timber as well as recreation and cultural uses.

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

Forest vegetation is coastal rainforest, primarily Sitka spruce with some areas of spruce-hemlock forest. Hardwoods are present in riparian areas. Several areas of old forest are included in the project area.

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

It is anticipated that the commercial forest included in the project area possesses a site index (Farr 1984) ranging from 39 to 76 with an average of 61 feet tall at 50 years of age. More productive forests and soils are located on valley bottoms with deeper soils and milder weather. Site class is not defined by forest practice regulations in Alaska and is not required for assessment areas in the region. For this reason, site class is not expected to be used in determining the common practice or baseline of the project. We used the site class definitions in Appendix F of the Protocol: high site class areas have growth of at least 85 cubic feet/acre/year, and low site class indicates growth of less than 85 cubic feet/acre/year. Based on preliminary data, one quarter to one half of the Project Area is high site class and the remainder is low site class.

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

The maritime climate of the Project Area has abundant precipitation in both rain and snow. Summer days are long, and daylight hours are short in winter. Land pressures include timber harvest, mining, and development of houses and tourism.

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

Subsistence lifestyles have been practiced around the Project Area for thousands of years by Chugach Alaska Corporation shareholders and their ancestors. European traders and settlers arrived in the area in the 1700s. Modern industrial timber harvest was conducted in the region from the 1960s

through the 1990s. The Project Area includes regenerating stands nearing maturity as well as areas that were not harvested. The Project Area is located in the Prince William Sound (Valdez-Cordova), Kenai Peninsula and Yakutat Boroughs of the State of Alaska, USA. These boroughs do not have zoning restrictions outside of municipal areas. Projected land use is a combination of timber harvest, mining, hunting, fishing, recreation, and tourism.

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

Forest conditions are coastal rainforest of pure Sitka spruce or mixed spruce-hemlock stands. Willows, cottonwoods, and large shrubs such as Sitka alder intermingle in riparian and mountainous areas, and hemlocks are present in the project area. The current age class distribution is a reflection of the harvests and disturbances that have taken place. Mature Sitka spruce stands have mixed ages and are dominated by 100-150 year old trees, with some large trees that are hundreds of years old. Younger trees are present in areas that have been harvested in the past half-century.

Management history varies from clearcuts to old forest stands that have not been intensively treated. Although records are limited from earlier periods, there was likely land management by the Chugach people including use of trees and timber through the 1700s. Large old stumps suggest that some individual trees were cut for timber over the next several hundred years. Modern intensive forest management began in the 1960s when the land was controlled by the State of Alaska and the U.S. Forest Service. Further clearcuts accompanied by road building and natural or artificial reforestation were carried out when Chugach Alaska Corporation obtained title in the 1970s and continued intermittently through the 2000s.

PART VI. OFFSET PROJECT ELIGIBILITY

A. Does the project take place on land that has greater than 10 percent tree canopy cover?

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

☒ Yes
☐ No

B. Indicate how the offset project meets (or will meet) the definition of Natural Forest Management per Table 3.1 in the Compliance Offset Protocol US Forest Offset Projects, June 25, 2015:

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

1. Native species: Will the project consist of at least 95% native species based on the basal area per acre of live trees?

Provide additional information in Attachment G on how the project currently satisfies or will satisfy this requirement.

☒ Yes
☐ No

2. Composition of native species: 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?

Provide additional information in Attachment G on how the project currently satisfies or will satisfy this requirement. If "no", proceed to question 2a.

☐ Yes
☒ No

a) 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 commercial harvesting is either planned or ongoing 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). <i>Provide additional information, if necessary, in Attachment G on how the project currently satisfies this requirement.</i>	
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? <i>Provide additional information in Attachment G on how the project currently satisfies or will satisfy this requirement.</i>	☒ Yes ☐ No
4. Structural elements (standing and lying dead wood): Does the project currently meet the standing dead tree carbon stock requirement? <i>Provide additional information in Attachment G on how the project currently satisfies or will satisfy this requirement.</i>	
C. Describe the management activities that will lead to increased carbon stocks in the Project Area, compared to the baseline. Commercial harvest will be greatly reduced over the project life compared to the baseline by harvesting less than annual growth on average in order to build stocks and by considering uneven-aged management when harvesting occurs.	
D. 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
E. Will the offset project employ broadcast fertilization?	☐ Yes ☒ No
F. Does the offset project take place on land that was part of a previously listed and verified Forest Offset Project on any registry or program? <i>If "yes," proceed to questions F1 and F2. Otherwise, skip to Part VII.</i>	☐ Yes ☒ No
1. Was the previous Forest Offset Project terminated due to an Unintentional Reversal?	☐ Yes ☐ No

PART VII. CARBON STOCK INVENTORY

A. Provide a general description of the inventory methodology to be 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(b) of the Compliance Offset Protocol U.S. Forest Projects, June 25, 2015.
IFM-1 Standing Live:
 The plot design will be a set of 1/20th acre fixed-area plots distributed systematically across the Project Area on a pre-determined grid with random origin. The mapped grid of plots will be loaded into GPS units and plot centers will be located in the field using GPS. Plot centers will be permanently monumented with rebar and flagging. Standard timber cruising tools will be used, including diameter tapes for measuring diameter at breast height (DBH) and laser range finders for measuring distances and tree heights. All standing live trees 5" or greater on the plot will be measured regardless of their merchantability. DBH will be measured to the nearest 1/10th inch using a diameter tape at the point that is 4.5 ft off the ground. Total height will be measured to the nearest foot using a laser range finder or estimated for all trees. On every 4th plot, if a potentially suitable site tree is found, it will be selected and measured to determine site index. Additional information collected on each tree will include species and total percent defect. Height to break will be measured on each standing live tree with a broken top. Check cruising will be conducted on a subset of plots to provide quality assurance. Each

plot will be remeasured at least once every 12 years, as well as after a harvest or natural disturbance. In the years between measurements, plots will be updated by using FVS to grow the inventory forward, following the project's modeling plan. The Project Area may be post-stratified and delineated within a GIS using timber typing, LiDAR data, or aerial imagery. Data will be recorded on on field computers and quality checked for further analysis. All data will be stored on personal computers and back-up drives at New Forests' offices.

IFM-3 Standing Dead:

All standing dead trees at least 5" DHB and 15 ft. tall will be measured on every plot if they are not leaning more than 45 degrees. Diameter and height to top will be measured or estimated for each standing dead tree that meets these criteria, including height to break and estimated total height if the tree has a broken top. Each tree will be recorded for species or hardwood/softwood if applicable, as well as percent defect and decay class.

IFM-6 Soil (if applicable):

Not applicable because no site preparation has occurred.

IFM-7 Carbon in in-use forest products:

The total amount of harvested carbon that will be delivered to a mill to be turned into wood products will be measured in the baseline using the harvest schedule and in the project activity using log and mill receipts.

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

Same as IFM-7 above.

IFM- 9 Biological emissions from site preparation:

Included in the quantification of onsite carbon stocks (IFM-1 and IFM-3) over time if it occurs in the future.

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

Included in the quantification of secondary effects. The total amount of onsite harvested carbon in the baseline will be determined from the cut tree list produced from the baseline harvest prescriptions in FVS, while the total amount harvested in the project activity will be based on actual harvest volumes.

IFM-17 Biological emissions from decomposition of forest products:

Included in the quantification of harvested wood products (IFM-7 and IFM-8).

B. Describe the calculation methodologies to be used to determine metric tons per acre for each of the carbon pools included in the Offset Project Data Report.

IFM-1 Standing Live:

The above ground portion of standing live trees will be calculated using the approved species-specific equations and methodology for determining and biomass of tree bole, bark and branches as required by ARB. Since the project is located in Alaska, there are not separate volume equations required for estimating biomass. This will be completed through a series of database queries applied to the individual tree records in the project's inventory, as well as the baseline projections conducted in FVS. Below ground standing live carbon will be estimated by using the protocol stipulated equation (Cairns et al. 1997). This equation uses plot-level above ground biomass density in tonnes per hectare to predict the below ground biomass in tonnes per hectare. Biomass will be converted to CO₂e using the conversion factors specified in the Protocol by multiplying by 0.5 to to calculate the mass in carbon, by 0.001 to convert from kilograms to metric tonnes, and by 3.667 to convert to MT CO₂e.

IFM-3 Standing Dead:

Gross bole biomass will be calculated using the approved species-specific equations as required by ARB. Biomass will be adjusted for missing tops if trees are recorded as having a broken top in the inventory data. Biomass will be estimated by subtracting a tree's percent defect as estimated during the inventory from the total gross biomass. Density reduction and structural loss in standing dead trees will be accounted for using factors by decay class from Harmon et al. (2011). Belowground standing dead carbon will be calculated as described above for standing live trees using the Cairns equation.

IFM-6 Soil (if applicable):

Not applicable because no site preparation has occurred.

IFM-7 Carbon in in-use forest products:

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

Carbon in harvested wood products will be calculated according to the steps outlined in Appendix C of the protocol, which utilize average wood products factors to account for the long-term storage of wood products in use and in landfills. The procedure begins with an estimate of the total harvested carbon that will be delivered to a mill to be turned into wood products. Next, the series of worksheets from Appendix C in the Protocol will be used to determine the amount of carbon transferred to wood products, the amount stored in in-use wood products, and the amount stored in landfills. The carbon stored in wood products and landfills are summed to determine the total average annual carbon storage in wood products over 100 years.

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

See IFM-7 above

IFM- 9 Biological emissions from site preparation:

Included in the quantification of onsite carbon stocks (IFM-1 and IFM-3) over time.

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

Included in the quantification of secondary effects. Total harvested carbon will be quantified using the same procedure as for standing live trees. The difference between the project and baseline onsite harvested carbon will be multiplied by 20% to get the estimate of secondary effects.

IFM-17 Biological emissions from decomposition of forest products:

Included in the quantification of harvested wood products (IFM-7 and IFM-8).

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:

21,020,000 tonnes CO₂e based on preliminary estimates.

IFM-3 Standing Dead:

1,319,000 tonnes CO₂e based on preliminary estimates.

IFM-6 Soil (if applicable):

Not applicable because no site preparation has occurred.

IFM-7 Carbon in in-use forest products:

0 MT CO₂e

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

0 MT CO₂e

IFM- 9 Biological emissions from site preparation:

Included in the quantification of onsite carbon stocks (IFM-1 and IFM-3) over time.

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

Included in the quantification of secondary effects, which is estimated to be 125,600 tonnes CO₂e.

IFM-17 Biological emissions from decomposition of forest products:

Included in the quantification of harvested wood products (IFM-7 and IFM-8).

**D. Provide the calculation of the offset project's reversal risk rating and expected contribution to the Forest Buffer Account.
947,000 tonnes CO₂e, 19.2%**

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(h) of the Compliance Offset Protocol U.S. Forest Projects, June 25, 2015.

Modeling will be conducted for both the baseline and the project activity (to update the inventory between remeasurements). The Southeast Alaska and Coastal British Columbia variant of the Forest Vegetation Simulator (FVS), which is an approved growth and yield model, will be used for modeling. Clearcutting, commercial thinning and rehabilitation harvests are the silvicultural prescriptions that will be modeled in the baseline. These prescriptions will be used to promote commercial conifer species, primarily Sitka spruce and hemlock. Even-aged regeneration harvests will be conducted on approximately 80 year rotations. Commercial thinning will take place with greater frequency, at strategic points within a rotation. Site index will be calculated from site trees measured during the inventory. Regeneration assumptions will be based on professional knowledge

of local foresters and regeneration plots measured during the inventory for this purpose. Regeneration in clearcuts and rehabilitation harvests will be simulated to reflect active replanting to achieve reforestation requirements. Modeling will incorporate all age and stocking standards specified by the Alaska Forest Resources and Practices Act (11 AAC 95) and associated regulations and Best Management Practices.

A matrix documenting any and all legal constraints affecting forest management activities in the project area, labeled "Attachment H", is required. See Part X of this listing document for more information.

2. Estimate the project's baseline onsite carbon stocks and provide a qualitative description. Explain any annual changes in baseline carbon stocks over time.

The baseline scenario is modeled as a series of commercial harvests distributed over 20-year harvest intervals throughout the 100-year baseline projection. The baseline is projected to reduce initial stocking below common practice over the first 20-year harvest period through a combination of thinning, clearcuts and variable retention harvests. Thereafter, the baseline is projected to harvest an amount equivalent to growth over each 20-year period. The estimate of average onsite carbon in the baseline is 14,050,000 tonnes CO₂e.

A graph portraying the baseline onsite carbon stocks, labeled "Attachment I," and a diagram of the baseline incorporating all required carbon stocks, labeled "Attachment J," are required. See Part X of this listing document for more information.

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

Forest Vegetation Simulator (FVS)

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

87,800 tonnes CO₂e based on preliminary estimates.

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

1. Provide the estimated initial above ground standing live carbon stock per acre for the project, if known.

141.8 tonnes CO₂e / acre

2. Provide the estimated minimum baseline level per acre.

84.9 tonnes CO₂e / acre

3. Provide the weighted common practice value per acre associated with the Project Area.

84.9 tonnes CO₂e / acre

4. Are the Project Area's initial above-ground standing live carbon stocks per acre above or below Common Practice?

If below Common Practice, what is the High Stocking Reference for the Project Area?

☒ Above
☐ Below

Further documentation is required if project below Common Practice. Submit supporting documents as attachments labeled "Attachment K." See Part X of this listing document for more information.

5. 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 6.

☒ Yes
☐ No

a. If "yes" does the Protocol require the use of a weighted average carbon stock (WCS) on lands in the same Logical Management Unit (LMU, as defined in subchapter 1.2 and 5.2.1)?

If "no," skip to question 6.

☒ Yes
☐ No

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

☒ Data available for LMU
☐ Stratified Vegetation Analysis

c. Provide the estimated WCS per acre, if known.

141.8 tonnes CO₂e / acre. The Project Area is the entire LMU.

6. 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. Has an initial forest carbon inventory been conducted for the Project Area?

☐ Yes
☐ No

2. Provide a projection of future changes to Project Area forest carbon stocks extrapolating from historical trends.			
3. Explain how current public policy will affect onsite carbon stocks (as per requirements of subchapter 5.2.2) and how the baseline modeling incorporates constraints imposed by all applicable statutes, regulations, policies, plans, and activity-based funding. Provide documentation of these constraints that include a description, a geographic location and associated agency, narrative of effect, and modeling technique used, per requirements of subchapter 7.1.4(a)(3).			
4. Have carbon stocks in the Project Area been increasing or declining over the preceding ten-year period?			☐ Increasing ☐ Declining
PART IX. ADDITIONAL QUESTIONS			
A. Have any lands within the Project Area ever been listed or registered with any offset project registry or program in the past? <i>If "yes," identify the registry or program and provide details on the issued credits below.</i>			☐ Yes ☒ No
B. 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 registry or program and provide details on the issued credits below.</i>			☐ Yes ☒ No
Registry/Program:	Reporting Period(s):	Vintage(s):	Number of Credits Issued:
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.E 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. ☒ N/A			
C. If a Qualified Conservation Easement (QCE) has been recorded, provide a copy. The listing information contained in this form and the documents attached to it will eventually be submitted to ARB so submitting a copy of the QCE as an attachment to this listing document fulfills the requirement in 7.1.1.1(a)(20) of the Compliance Offset Protocol U.S. Forest Projects, June 25, 2015 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.G, 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. Provide descriptions and a georeferenced GIS shapefile(s) of the Project Area including: 1. Governing jurisdictions, and latitude/longitude coordinates 2. Public and private roads (shapefile only) 3. Towns (shapefile only) 4. Major watercourses (4th order or greater), water bodies, and watersheds (shapefile only) 5. Topography (shapefile only) 6. Townships, ranges, and sections (shapefile only) 7. Existing land cover and land use (description with optional shapefile) 8. Forest vegetation types (description with optional shapefile) 9. Site classes (description with optional shapefile) 10. Land pressures and climate zone/classification (description with optional shapefile) 11. Historical land uses, current zoning, and projected land use within the Project Area (description with optional shapefile)			
F. Provide supporting documentation demonstrating that the offset project takes places on land that has greater than 10 percent tree canopy cover.			
G. Provide additional information on how the project satisfies the Natural Forest Management criteria set forth in table 3.1 of Section 3.1(a)(1).			
H. Attach a matrix documenting any and all legal constraints affecting forest management in the project boundary. Matrix must include: 1. A description of each constraint 2. The applicable geographic range for each constraint 3. The local, state, or federal agency associated with each constraint			

4. A narrative describing the effect of the constraint on forest management
5. A description of the modeling used to implement the constraint

- I. 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 that meets the requirements of Section 7.1.1(a)(29).
- J. Attach a diagram of the baseline incorporating all required carbon stocks.
- K. For 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, and include a summary of volume harvested over the past 10 years. ☒ 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 5.2.1(e)(2) of the Protocol. ☐ N/A

PART XI. ATTESTATIONS AND OPO SIGNATURE

 Initial	I certify under penalty of perjury under the laws of the State of California the GHG reductions and/or GHG removal enhancements for				
	Project Name: Chugach Alaska Forest Carbon Project		from	Crediting Period Start Date: 06 June 2017	to Crediting Period End Date: 06 December 2041
will be measured in accordance with the Compliance Offset Protocol U.S. Forest Projects, June 25, 2015, and all information required to be submitted to ARB is true, accurate, and complete.					
 Initial	I understand I am voluntarily participating in the California Greenhouse Gas Cap-and-Trade Program under title 17, article 5, and by doing so, I am now subject to all regulatory requirements and enforcement mechanisms of this program and subject myself to the jurisdiction of California as the exclusive venue to resolve any and all disputes arising from the enforcement of provisions in this article.				
 Initial	I understand that the offset project activity and implementation of the offset project must be in accordance with all applicable local, regional, and national environmental and health and safety laws and regulations that apply to the offset project location. I understand that offset projects are not eligible to receive ARB or registry offset credits for GHG reductions and GHG removal enhancements that are not in compliance with the requirements of the cap-and-trade program.				
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: 			PRINTED NAME: Brian Shillinglaw		
TITLE: Director, Investments & Operations			DATE: 6 June 2017		

Background for Application of Listing an Improved Forest Management U.S. Forest Offset Project

Section 95975 of the Cap-and-Trade Regulation describes the requirements and process for an Offset Project Operator (OPO) or Authorized Project Designee (APD) to list an offset project with an approved Offset Project Registry. This form is designed to help an OPO or APD fulfill the requirements of Section 95975 of the Cap-and-Trade Regulation and of Section 7.1.1 of the Compliance Offset Protocol U.S. Forest Projects, June 25, 2015, for listing an offset project. The U.S. Forest protocol designates three project types: Avoided Conversion, Improved Forest Management, and Reforestation. This form is designed for Improved Forest Management projects only. The information in the completed form should be submitted to the approved Offset Project Registry with which the OPO or APD would like their offset project listed.

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 Application for Listing an Improved Forest Management U.S. Forest Offset Project

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 Applying for Listing:

- Indicate whether the Offset Project Operator (OPO) or Authorized Project Designee (APD) is submitting the information for project listing. Section 95975(a) of the Cap-and-Trade Regulation requires that the OPO and, if applicable, the APD must register with ARB for the Cap-and-Trade Program prior to listing a project. It also requires that neither the OPO nor APD be subject to any Holding Account restrictions imposed as part of an enforcement action. To register with ARB, please visit the website for Compliance Instrument Tracking System Services (CITSS): <https://www.wci-citss.org/>
- List the name, phone, email address, and mailing and physical address of the person submitting the information. If the mailing and physical addresses are the same please check the box and leave the physical address fields blank. 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. Indicate the offset project commencement date and the start and end dates of the first reporting period; approximations are acceptable if precise dates are unknown.
- 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 when the Project Area is transferred to public ownership, when a conservation easement on the Project Area is recorded, or when submitting the offset project listing information.

Part III. OPO/APD Information:

- Enter contact information for the Offset Project Operator (OPO), Authorized Project Designee (APD), and Technical Consultant for the offset project. Every project will have an OPO. If a project does not have an APD or Technical Consultant, please mark the box indicating the project does not have an APD or Technical Consultant and leave the appropriate fields blank.
- For the OPO and, if applicable, the APD and Technical Consultant, enter the entity's name, its CITSS ID number (if applicable), its mailing address, and the name, phone number, and e-mail address of a contact person for the entity.

The CITSS ID is six characters in length, with two letters followed by four numbers (e.g., "CA1234"). **DO NOT PROVIDE THE OPO's or APD's 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 listing form 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 listing form for more information on the precise requirements.
- The Project Area should be determined following the requirements of chapter 4 of the Compliance Offset Protocol U.S. Forest Projects, June 25, 2015.
Assessment areas shall be determined by referencing the Assessment Area Data File available at:
http://www.arb.ca.gov/cc/capandtrade/protocols/usforest/usforestprojects_2015.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 listing form for more information on the precise requirements.
- Details on the eligibility requirements for Improved Forest Management Projects can be found in subchapters 2.2, and 3.1 of the Compliance Offset Protocol U.S. Forest Project, June 25, 2015.
- Details on the Natural Forest Management criteria can be found in Table 3.1 in the Compliance Offset Protocol U.S. Forest Project, June 25, 2015.

Part VII. Carbon Stock Inventory:

- Projects are not required to have completed a full carbon stock inventory at the time of listing, but OPOs/APDs should be familiar with Appendix A and have a plan for how they will meet the requirements therein. Therefore, a general description of the project's inventory methods and procedures, consistent with the requirements in Appendix A(b), is required at the time of listing. ARB recognizes that some information provided will be preliminary and based on best estimates. If the project's inventory methodology changes between the time of listing and submission of the first OPDR, this should be reported as a change to the information submitted at project listing when submitting the first OPDR.
- Subchapter 5.2 of the Compliance Offset Protocol U.S. Forest Projects, June 25, 2015 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, June 25, 2015 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. An approximation of the contribution to the Forest Buffer Account is acceptable.

Part VIII. Offset Project Baseline:

- Projects are not required to have a finalized baseline at the time of listing, but OPOs/APDs should be familiar with Appendix B and have a plan for how they will meet the requirements therein. A complete modeling plan reflecting the requirements in Appendix B(h) is therefore required at the time of listing. ARB recognizes that some information provided will be preliminary or based on best estimates. If the project's modeling plan or baseline estimates change between the time of listing and submission of the first OPDR, this 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.

- Subchapter 5.2 of the Compliance Offset Protocol U.S. Forest Projects, June 25, 2015 outlines the approved quantification methodologies for Improved Forest Management Projects.
- ARB approved growth models can be found in Appendix B(a) of the Compliance Offset Protocol U.S. Forest Projects, June 25, 2015.
- When a requirement 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 question was not inadvertently left unanswered.

Part IX. Additional Questions:

- Answer both questions. If the answer to either 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 application for listing.
- 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.
- Requirements for considering legal constraints can be found in subchapter 5.2.1(e)(1). Further details on modeling carbon stocks can be found in Appendix B of the Protocol.

Part XI. Attestations and OPO Signature:

- Section 95975(c) of the Cap-and-Trade Regulation requires three attestations for listing an offset project. The required attestations are provided in this section. Each attestation should be initialed by the person signing the form.
- The first attestation requires the applicant to provide the offset project name and the start and end dates of the crediting period to complete the statement. The offset project name should match the name entered in Part II. The dates for the offset project's crediting period must also be provided. Please note that the dates provided in the attestation are for the crediting period, not for the first reporting period provided in Part II. The crediting period dates may be approximate if precise dates are not known.
- Section 95975(d) requires the attestations in Section 95975(c) to "be provided to an Offset Project Registry with the listing information, if being listed with an Offset Project Registry."
- The individual signing the document must be registered in CITSS as the OPO's Primary Account Representative or Alternate Account Representative. 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 person's signature, printed name, corporate title, and date signed.

Please contact your Offset Project Registry with any questions.