

# FOREST CARBON WORK PLAN

June 4, 2015

**Objective:** This work plan outlines specific tasks needed for developing material and writing the Forest Carbon Plan. Each task has been assigned to an FCAT subcommittee as lead. Tasks with an asterisk (\*) should refer to the guidance document (Forest Resource Evaluation Method) for data analysis steps. Note: The task numbers (i.e. roman numerals) correspond with the numbering system in the Forest Carbon Plan Outline (Feb. 9<sup>th</sup>, 2015).

## **Task I: Develop Introduction for the Forest Carbon Plan (Section I)**

Lead: Policy Subcommittee

Task: Develop material and write section I (Introduction)

Sub-Task I.a – I.c: Synthesize existing material on AB32 Scoping Plan and requirements for developing a Forest Carbon Plan.

Sub-Task I.d: Describe the purpose of the plan and what it is expected to accomplish.

## **Task II: Develop section on FCAT Vision, Goals, and Objectives (Section II)**

Lead: Policy Subcommittee

Task: Develop section II of Forest Carbon Plan on FCAT visions and Goals

Sub-task II.a – II.c: Draft text to incorporate FCAT vision, goals, milestones, and desired future conditions.

Sub-task II.d: Review and summarize related agency plans.

## **Task III (a – c): Forest Conditions in California (Section III)**

Lead: FRAP lead for III.a – c; Inventory Subcommittee lead for III.d; Co-benefits Subcom lead for III.e

Task III.a – III.c: Develop and write section III of the Forest Carbon Plan that describes the forest land base, climate change impacts, wildfire, and drought impacts.

Sub-task III.a: Create tables from updated information on: ownership, forest types, species composition and stand characteristics. Use updated information from Forest and Range Assessment, FIA, and related forestry data sources.

Sub-task III.b: Write section on Climate Change Impacts on Forests. Refer to material from previous climate change reports and Forest & Range Assessment. Include information on drought related impacts; tables and graphics on tree mortality.

Sub-task III.c: Write section on Risk of Uncharacteristically Large, Intense Wildfires. Create summary tables on: acres at high risk to wildfire, burn severity acres by ownership, wildfire history, and other fire related data tables as needed.

## **Task III.d: Forest Carbon Inventory**

Lead: Inventory Subcommittee

Task: Develop material and write section that describes the current status and trend in forest carbon inventory. Utilize FIA and related data sources.

Sub-task III.d.1: Review possible inventory data sources and GhG reporting methods. Make recommendations to FCAT on the specific data sources and the reporting format that will be used to report on forest carbon status and trends. Clarify which carbon pools and emission sources will be reported on by FCAT.

Sub-Task III.d.2: Create draft tables on carbon pools, emission sources, and inventory trends. Make draft tables and maps available to FCAT subcommittees for review and internal planning. Finalize inventory tables and write section on Forest Carbon Inventory and incorporate tables on carbon pools and emission sources.

Sub-Task III.d.3: Make recommendations to FCAT on future monitoring needs.

### **Task III.e: Co-benefits\***

Lead: Co-benefits Subcommittee

Task: Develop material and write section III.f of the Forest Carbon Plan that describes co-benefits.

Note: Follow methods in guidance document for Forest Resource Evaluation Method.

Sub-Task III.e.1: Define core co-benefits and the priority landscapes that can be used to represent co-benefits. Use FRAP web viewer to review and select priority landscapes. Create a table that list the core co-benefits and associated priority landscapes. The guidance document provides a sample list that can be adopted or modified for this sub-task.

Sub-Task III.e.2: Estimate the acreage of priority area by ownership group. FRAP will provide a GIS tool to combine priority landscapes and produce acreage summaries by ownership class.

### **Task III.f: Forest Projects and their Climate and Co-benefits**

Task: Summary of programs by State, Federal, Non-Profit, and Private that provide climate benefits.

Note: This could be merged with section VI (Recommended Management Actions and Investment Opportunities)

Sub-Task III.f.1 – III.f.3: Synthesis of State, Federal, Non-Profit, and Private programs that provide climate benefits and estimate current level of investment.

### **Task IV: Policy and Regulatory Framework (Section IV)**

Lead: Policy Subcommittee, State & Public Lands

Task: Write a synthesis of the current regulatory framework and existing policies that directly or indirectly influence forest management. Highlight known barriers or constraints for enhancing climate benefits from forests.

Sub-Task IV.a-e: Develop a table that provides a summary of State and Federal regulations and the forest management actions that they directly influence. Write section on policy and regulatory framework.

**Task V: Integrated Goals and Targets for Forest Carbon and Enhancing Co-benefits\***

Lead: Policy Subcommittee; support State and Pub Lands for V.a.1 and V.a.4

Note: Follow methods in guidance document for Forest Resource Evaluation Method.

Task: Write section that describes the planning goals and targets for the Forest Carbon Plan. Include both statewide and regional targets. Further, describe investment opportunities and economic considerations.

Sub-Task V.a.(1-5): Develop planning targets. See the guidance document for method used to set planning targets (Step 4; table 4). Setting planning targets will be based on estimated amount of priority area for core co-benefits by ownership group (Step 2; table 1 and Step 3 table 3).

Sub-Task V.b(1-4): Estimate level of investment needed to reach planning targets. See guidance document for methods on developing an estimate of the level of investment needed (Step 5 table 5). This approach can be done to create a statewide investment table as well as Regional investment tables.

Sub-Task V.c: Create a table that summarizes investment opportunities, economic considerations, and constraints. Write section discussing economic considerations. Incorporate findings from literature synthesis to be conducted under the Resource Economic Study.

**Task VI: Recommended Management Actions and Investment Opportunities (Section VI)\***

Lead: State & Public Lands Subcommittee VI.a and VI.b; CNRA lead for VI.c; ARB lead for VI.d

Task: Develop a synthesis of proposed management actions and investment opportunities.

Note: Follow methods in guidance document for Forest Resource Evaluation Method.

Sub-Task VI.a: Create table showing management actions and supported co-benefits. Create an additional table that shows the acres treated by management actions and ownership group. (See guidance document (step 3 – tables 2 and 3).

Sub-Task VI.b: Develop supporting tables and figures that summarize Wood Products and Biomass Utilization. Integrate tables and figures into a section that describes trend in wood products and biomass utilization and proposed management actions, and opportunities.

Sub-Task VI.c: Brief synthesis of research needs. Should summarize research needs identified from the CAT Research Plan and the 4<sup>th</sup> Climate Change Assessment.

Sub-Task VI.d: Summary of Carbon Offset Programs for forestry and level of investment

Sub-Task VI.c: State any Policy Change Recommendations.

### **Task VII: Implementation, Reporting, and Monitoring**

Lead: Co-benefits Subcommittee for VII.a; Inventory Subcommittee for VII.b

Task: Write section that discusses options for implementing the Forest Carbon Plan. In addition, describe the reporting and monitoring requirements for FCAT.

Sub-Task VII.a: Develop a broad timeline for implementation and resource needs.

Sub-Task VII.b: Identify current programs that can be used for monitoring and reporting (i.e. CalMAPPER). Make recommendations and identify resources needed to provide ongoing monitoring and program reporting for FCAT.

### **Task VIII: Publication and Stakeholder Outreach**

Lead: CAL FIRE for Publication and Policy Subcommittee for Outreach

Task: Develop admin draft of Forest Carbon Plan and final publication

Note: Route admin drafts of Forest Carbon Plan through FCAT leadership. Coordinate with ARB to ensure consistency with in design with other State climate reports.

Sub-Task VIII.1: Create chapter template including a format guide for authors. This should include sub-heading format, preferred format for figures, references, etc.

Sub-Task VIII.2: Integrate draft text from each section into admin draft report. Perform editing of individual sections, formatting, and collating into a single report.

Sub-Task VIII.3: Develop graphics and figures suitable for publication.

Sub-Task VIII.4: Develop and executive summary. Submit draft report to publications group for editing, formatting and posting.

Sub-Task VIII.5: Stakeholder Outreach. Conduct webinar/public meetings to vet admin draft of Forest Carbon Plan with stakeholders.

Sub-Task VIII.6: Web posting of report and supporting material.

## Timeline for Tasks

	<b>Start Date</b>	<b>End Date</b>	<b>Status</b>	<b>Page Range</b>
Task I: Introduction for the Forest Carbon Plan				1 - 2
Task II: FCAT Vision, Goals, and Objectives				2 - 4
Task III: Forest Conditions in California				5 - 10
Sub-Task III.d: Inventory				5 - 10
Sub-Task III.e: Co-Benefits				10 - 15
Task IV: Policy and Regulatory Framework				5 - 10
Task V: Integrated Goals and Targets for Forest Carbon and Enhancing Co-benefits				5 - 10
Task VI: Recommended Management Actions and Investment Opportunities				10 - 15
Task VII: Implementation, Reporting, and Monitoring				5 - 10
Task VIII: Publication and Stakeholder Outreach				0

## Milestones (partial)

02.2015 – FCAT Public Workshops and Report Outline

06.2015 – FCAT adopts Work Plan and Data Analysis Guide

06.2015 – FCAT signs agreement with UCB for Resource Economics Study

09.2015 – FCAT development of forest inventory tables

09.2016 – Release Draft of Forest Carbon Plan

10.2016 – 11.2016 – Public Workshops on Forest Carbon Plan

12.2016 - Completion of Forest Carbon Plan

## Work Plan – Task Summary

Task	Lead	Support	Resources Needed	Time Frame	Dependency	Collaborators	Purpose-Central Issues
I	Policy				none	CAL EPA/ G.O.	Intro & purpose
II	Policy		Summary of Management Plans		none	State & Public Lands	Vision & Scope
III (a-c)	FRAP		Assessment, FIA and GIS Layers		none	USFS review / SNC	Characterizing Forest Land base
III (d)	Inventory		FIA data tables		none	CALFIRE, ARB USFS	Forest Carbon Inventory Tables & Synthesis
III (e)	Co-Benefits		P.L./ GIS tool *see guidance doc step 2 table 1		None		P.L. acres by ownership group
IV	Policy		Information on State and Federal policies and regulations related forest carbon		none	CAL EPA CNRA CAL FIRE USFS	Policy and Regulatory Framework
V (a)	Policy SubC		Completion of steps 2 & 3. Priority areas and management actions		III. F IV	CAL EPA CNRA CAL FIRE USFS	Set planning targets for investments
V (b)	Policy SubC		Priority Areas Management Actions Planning Targets		III. F IV VI a	FCAT	Set level of investment
V (c)	Policy SubC		Literature synthesis and supporting information from Resource Econ Study		None	CAL FIRE USFS ARB	Economic Consideration
V (d)	Policy Subc		Literature synthesis; information from section IV		none		Constraints on Investment
VI (a)	Policy SubC State/Pub Lands		Management Actions Treatment acres FACS CALMapper		Yes, dependent on III .f		Define management actions that produce carbon and co-benefits
VI (b)	State/Public Lands		inventory data UC biomass website		none	biomass working group	Defining role of biomass and wood products for carbon benefit.
VI (c.)	CNRA (JR)		CAT Research Plan 4th CCA Research		none	CNRA & CAL EPA	Define Research Needs
VI (d)	ARB		Data from climate registry		none	CAL EPA CNRA CAL FIRE	Existing programs that have an offset protocol
VII (b)	Inventory		FIA Data, CalMapper, and other data sources		VI	CAL FIRE ARB USFS	Program Tracking and monitoring effectiveness
VIII	Publication & Outreach		Draft text, tables, figures for each section		I - VII	FCAT	Integrate sections into final report