

Project Management Plan

Project Carbon and Biomass Change Date January 14, 2016

Project Goal

| Goal Statement | Project Lead | Target Date |
|--|----------------|-------------|
| RMA will continue to provide scientific leadership to efforts - both domestic and international – aimed at providing baseline information on carbon change. Biomass estimates from comprehensive forest inventories are essential for quantifying the amount and distribution of carbon. | Sharon Stanton | |

Expected Outcomes/Benefits/Measurable Results

| Expected Outcomes & Benefits | Measurable Results |
|---|---|
| <ul style="list-style-type: none"> • Provide (much-needed) empirical data to test existing conceptual models of carbon flux. • Address the connection between fuels, fire severity, and carbon storage in the western US. • Integrate FIA field plot data with remote sensing information to improve carbon estimates. • Work with NFS to update Climate Scorecard requirements and inform forest plan revisions. • Improve models that examine the efficacy, outcomes, and economic feasibility of fuel treatments. • Assess effects of management on forest carbon pools. • Use inventory and remotely sensed information to reconstruct long-term changes in carbon stores and investigate causes of flux. • Highlight RMA's work in carbon monitoring and research. | <ul style="list-style-type: none"> • Updated and improved techniques/equations for calculating tree volume, biomass, and carbon. • Improved multi-level inventory designs that more accurately scale field-based estimates of biomass to landscape and region scales. • Use post-fire measurements to determine amount of carbon consumed during fires of different intensities. • Determine roles of decay and regrowth in carbon balance of post-fire recovery • Provide annual updates to the US GHGI • Work with Hawaii to develop baseline carbon stores used to determine carbon credits for cap & trade systems. • Contribute to NASA collaboration on Carbon Monitoring System (CMS) linking field data, lidar, and Landsat change data. • Develop alternative sampling techniques to support countries with less field data. |

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Project Deliverables

| | |
|---|--|
| <p>Short Term Deliverables (1 year)</p> <ul style="list-style-type: none"> • Pull together study plans for existing projects to identify potential areas of overlap and/or future collaboration. • Organize a brown bag seminar series of short talks highlighting existing research. • Produce PNW RMA Carbon briefing paper. • | <p>Long Term Deliverables (2 – 5 years)</p> <ul style="list-style-type: none"> • Publications documenting improved techniques. • Assess the role of fire and disturbance on carbon pools. How important is fire? • Improve estimates of non-tree biomass stores. • Efficacy of multi-level sampling design used in Tanana Valley pilot? |
|---|--|

Success Factors Critical to Project Success (Select 1 to 3)

| |
|---|
| <p>Improve public relations and self-promotion by telling a more compelling story - Produce products that are relevant and “newsworthy” to broad and diverse audiences.</p> |
| <p>Clearly define and document cross-functional roles, expectations, and goals within and when working across teams to quickly resolve challenges and confusion.</p> |
| |

Who Is Impacted by or Invested in the Project? / Who should we collaborate with?

| | |
|---|--|
| <p style="text-align: center;">Impacted</p> <ul style="list-style-type: none"> • Entire RMA program and FIA nationally. • VMaRS, VeMSA, and IRAM most heavily impacted as collaborators and those conducting the research using existing data. | <p style="text-align: center;">Collaborate With</p> <ul style="list-style-type: none"> • PNW-RS, NFS, other FIA units, university researchers. |
|---|--|

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Challenges

| Can Influence? | Challenges |
|----------------|--|
| | Keeping ourselves at the forefront of this competitive line of research being done by many agencies and researchers. |
| | Convincing non-federal partners of the value of this research. |
| | Devising mechanisms to establish and manage larger projects that cut across teams and partners. |
| | Convincing established scientists to work together / collaborate and give up some ownership of projects. |

Assumptions

- | | |
|--|--|
| <ul style="list-style-type: none"> • Scientists will see the benefit of collaborating. • Results/products are interesting and useful to more than our federal clients. | <ul style="list-style-type: none"> • Funding will be available • Partners will be interested and motivated. • We have enough analytical bench strength. |
|--|--|

Keys for Successful Execution and Deployment

| |
|--|
| 1. Fill existing staff vacancies. |
| 2. Build some positive PR about the overall value of carbon research and that RMA has the experts already. |
| 3. Align existing related work to build synergy across researchers and teams. |
| 4. Build the necessary compilation systems, especially for non-tree data (DWM, VEG) |
| 5. |
| 6. |

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Keys for Successful Execution and Deployment

| |
|-----|
| 7. |
| 8. |
| 9. |
| 10. |

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Major Milestones (Leading Indicators for Project Completion)

| Major Milestone | Milestone Leader | Due | Done |
|---|------------------|----------|------|
| 1. Produce Carbon Research briefing paper | Sharon | 11/15/15 | Y |
| 2. Develop project charter | Sharon | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| 9. | | | |

Leading Indicators for Results

| Leading Indicator | Timing |
|-------------------|--------|
| 1. | |
| 2. | |
| 3. | |

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Leading Indicators for Results

| Leading Indicator | Timing |
|-------------------|--------|
| 4. | |

Proactive Recovery Planning

A) Brainstorm Potential Internal Breakdowns (circle 1-3 of most likely to surface)

- Interior Alaska implementation pulls away existing resources
- Too many other priorities
- Inability to hire following retirements
-

B) Recovery Plans (for 1-3 internal breakdowns most likely to surface)

- Focus on existing research projects already part of this portfolio and focus support to see those to completion before starting new ones.
- Continue working together as a program to prioritize and let go of unsuccessful or nonessential work

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Next Actions

| What | Who | Due | Done |
|---|-------------------------|-----|------|
| 1. Discuss with leadership team: just how much to push? Determine priority for level of effort. | Joe | | |
| 2. If deemed priority, determine potential funding for collaborative efforts. | Leadership team | | |
| 3. Gauge interest among land cover / land use scientists. | | | |
| 4. If interest, host land cover / land use “state-of-the-science” webinar/meeting. | Joe, Sharon, Andy, Hans | | |
| 5. Request proposals to integrate the projects. | | | |
| 6. Manage the projects and portfolio. | | | |

Due dates have been omitted given this priority is ranked 4th among our top priorities and will likely need to await additional funding and time.