


WESTCARB Annual Business Meeting

Emissions Reductions Through Conservation-Based Forest Management

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Roadmap



- Project overview
- Preliminary results
- Lessons learned
- Conclusions to date

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Project Overview: Purposes

Quantitative Assessment:

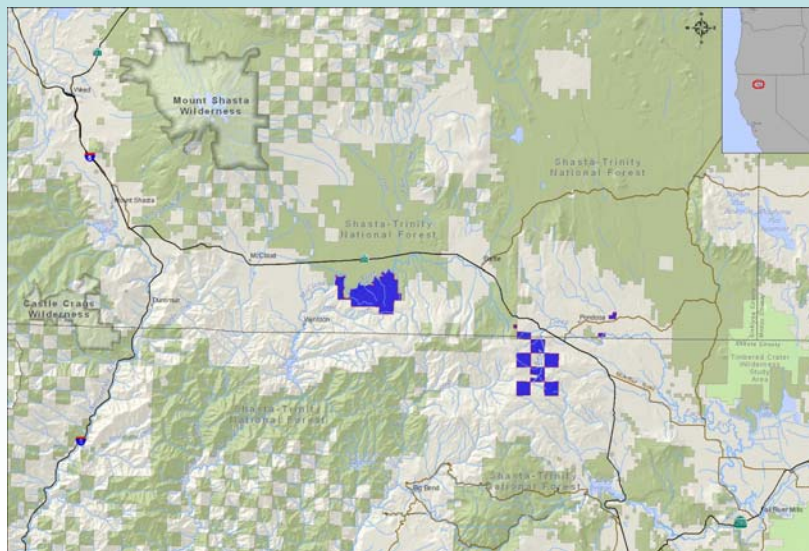
- Existing C stocks
- Potential emissions reductions
- Methodology based on Forest Project Protocols (FPP) of the California Climate Action Registry
- Cost factors

Qualitative Assessment:

- Practicality and effectiveness of FPP in determining C stocks and emissions reductions
- Ability of FPP to address standard GHG accounting principles (e.g., baseline, permanence)



Project Overview: Location



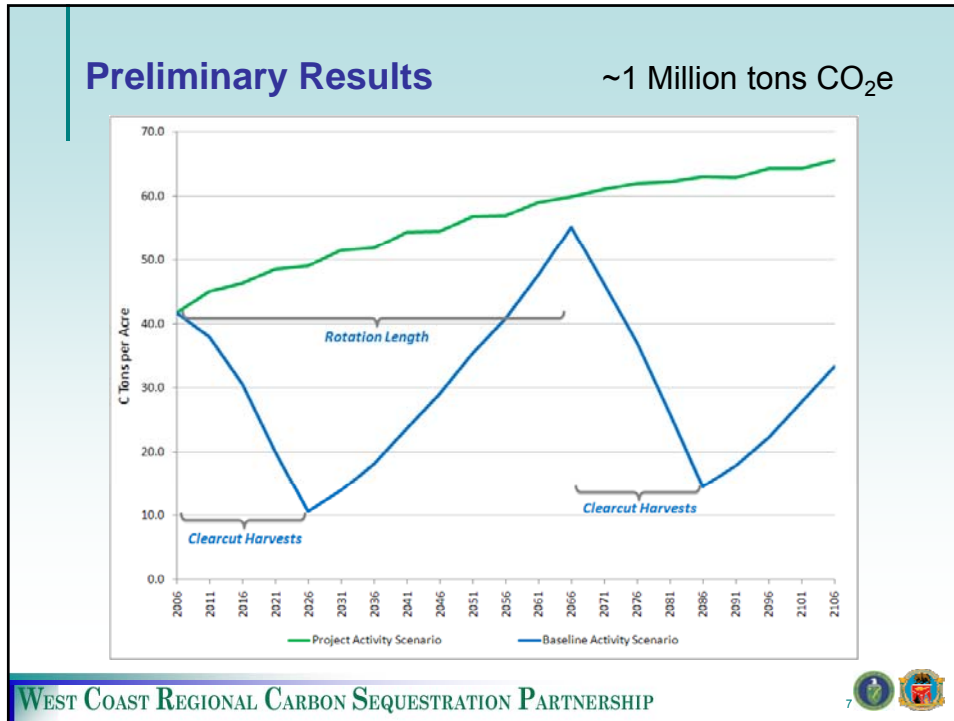
Project Overview: Setting

- Mixed conifer forest – ponderosa pine, sugar pine, incense cedar, white fir, and black oak
- ~10 MBF/acre
- Managed for commercial timber production
- History similar to other nearby commercial properties
 - Managed at or near regulatory standards
 - Even-aged silviculture



Project Overview: Quantitative Analysis

- Measurement of initial existing C stocks
- Calculation of anticipated emissions reductions by comparing baseline activity projection to project activity projection (100 years)
- Baseline = Regulatory standards (CA Forest Practice Rules, Endangered Species Act, etc.)
 - Minimum rotation length for even-aged management (e.g., 60 year rotation for Site II lands)
 - State-mandated stream buffer widths
- Project = Conservation easement restrictions
 - Harvest 80% of growth until 25 MBF/acre stocking achieved
 - Stream buffers extended



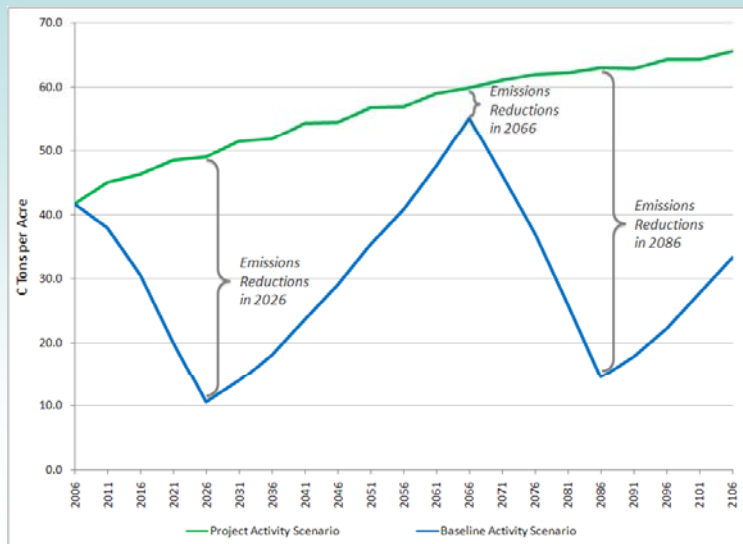
- ### Lessons Learned
- FPP's basic methodology and guidance is effective
 - Measurement requirements exceed conventional timber inventory standards
 - Live trees ≥3" DBH (here, <3% of total live tree pool)
 - Standing dead and lying dead pools
 - Increases inventory cost
 - Monument plot centers for revisitation
 - Not overly burdensome, but resistance by cruisers
 - Difficult to relocate in some forest types
 - Also increases inventory cost
- WEST COAST REGIONAL CARBON SEQUESTRATION PARTNERSHIP 8

Lessons Learned (cont'd)

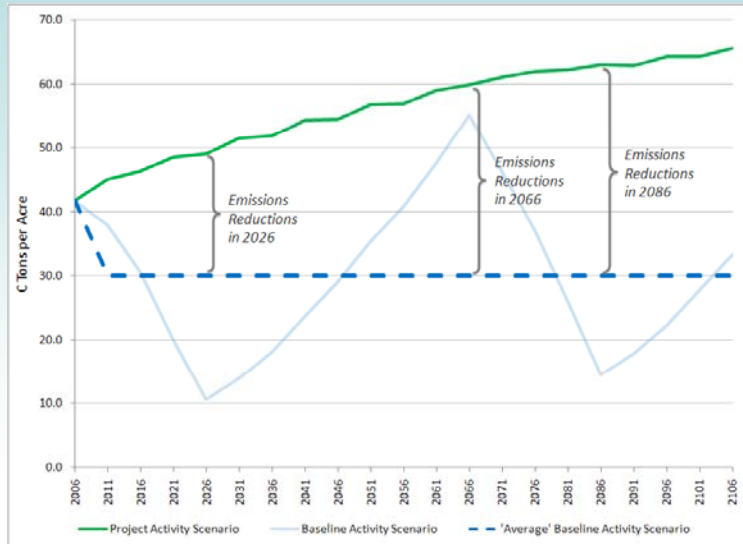
- Allometric biomass equations should be updated
 - Currently based on national-level broad species groups that consider only DBH
 - Local species-specific equations available that consider both DBH and height
- Projections for baseline are good in principle
 - Specific standards for establishing baselines
 - But, accounting issues due to changes in baseline stocks
 - “Average” baseline value to determine emissions reductions



Lessons Learned (cont'd)



Lessons Learned (cont'd)



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Conclusions to Date

- FPP's basic methodology and guidance is practical and effective
 - Recommend improvements to some measurement guidance and update to biomass equations
 - Baseline accounting needs to be addressed
- Increased inventory costs
 - May require retrofitting existing inventory
- ~1 million tons of additional CO₂e
- Project requires detailed work, but can more than pay for itself

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Thank you



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