

# Grassland Project Protocol Workgroup Meeting 4

December 4, 2014



Call-in: (646) 307-1706  
Code: 712-112-843

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# Roll call

- Reserve staff
- Contractors
- Workgroup

Workgroup Members	Roll Call
Adam Chambers	
Richard Conant	
Joe Fargione	
Billy Gascoigne	
Teresa Koper	
Robert Parkhurst	
Richard Scharf	
Patrick Splichal	
Joel Brown	

# Agenda



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Item #	Expected time	Description
1	12:00 – 12:10	Introduction and review of agenda
2	12:10 – 12:20	Process update
3	12:20 – 12:45	Legal requirement test
4	12:45 – 1:45	Credit and payment stacking
5	1:45 – 2:15	Monitoring
6	2:15 – 2:45	Reporting & verification
7	2:45 – 3:20	Quantification
8	3:20 – 3:30	Next steps
	3:30	Adjourn



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# Process Update

- **Next meeting:** Week 40 (Feb 2-6), date TBD
  - **Scheduling poll:** <http://doodle.com/59fnfgyn2vdwwhu9>
  - Webinar
  - Answer any questions related to the workgroup comment draft protocol
- **Now:**
  - Reserve staff developing the workgroup comment draft
  - Contractor finished modeling
- **December – January**
  - Reserve staff finish the workgroup comment draft



# Protocol Table of Contents

1. Introduction
2. Project Definition
3. Eligibility
4. GHG Assessment Boundary
5. Quantification
6. Monitoring
7. Reporting
8. Verification
9. Glossary
10. References

## Appendices

- A. Development of Performance Standard
- B. Development of Standardized Parameters and Emission Factors
- C. Default Parameters and Emission Factors
- D. Example Project Area Map



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# Section 3: Eligibility

3.1 Location

3.2 Project Start Date

3.3 Additionality

3.3.1 The Performance Standard Test

**3.3.2 The Legal Requirement Test**

**3.3.3 Credit and Payment Stacking**

3.4 Project Crediting Period

3.5 Minimum Time Commitment

3.6 Project Implementation Agreement

3.7 Use of Qualified Conservation Easements or Qualified Deed Restrictions

3.8 Regulatory Compliance



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Agenda Item 3

# LEGAL REQUIREMENT TEST (LRT)

# LRT: Generally Applicable Requirements



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- Legal Requirement Test:
  - No legal requirement to maintain Project Area as grassland, and
  - No legal obstacle to convert Project Area to cropland.
- **Generally applicable requirements:**
  - “Federal, state, or local regulation”
- **Specifically applicable requirements:**
  - “Legally binding mandate, agreement, contract, deed restriction or deeded encumbrance, pre-existing or subsequent”
    - A “legal requirement” could be an agreement entered into voluntarily or an order imposed on the grassland owner.



# LRT: Specifically Applicable Requirements



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- If the non-“breaking” party could prevent the physical conversion of land, i.e., by sending a sheriff to prevent the breaking, the instrument is legally binding.
- If the instrument is in force before the first of either the PSD or the recordation of the qualified conservation easement/PIA, the requirement is pre-existing.
  - What time frame is appropriate as a grace period on the determination of “pre-existing?”
  - 12 months? 6 months? Different times for different types of requirements?

# LRT: Coterminous or Subsequent Legal Instruments



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- If an allowable specifically applicable requirement exists, or is subsequently entered into, the legal instrument must explicitly address soil carbon ownership, and/or permit a carbon project to be undertaken.
  - If the legal instrument does not specifically assign ownership to the soil carbon, or explicitly permit a carbon offset project, the right to claim ownership of the soil carbon and/or to participate in the project is presumed not to exist.
- The terms contained in the recorded legal documents are presumed to be comprehensive.

# LRT: Renegotiation of Specifically Applicable Requirements



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- Reserve may determine, at its discretion, that the terms of an agreement were fairly re-negotiated:
  - Habitat Conservation Plan, Safe Harbor Agreement
  - Deeded encumbrances between unrelated parties
- Original agreement's date must be used for purposes of:
  - Determining PSD (if applicable)
  - Determining whether requirement was “pre-existing”.
- New agreement's terms may be used to determine whether the project meets the LRT.



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Agenda Item 4

# CREDIT & PAYMENT STACKING



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# Credit & Payment Stacking

- Opportunities for landowners to receive multiple payments for ecosystem services that grasslands provide
- Want to address specific opportunities in protocol
  - Credit stacking: Endangered species habitat credits via conservation banks (Endangered Species Act)
  - Payment stacking: USDA NRCS and Farm Service Agency conservation programs
- Key questions:
  1. Is stacking allowed by both programs? If yes, then...
  2. Can you maintain additionality while providing multiple payments?



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# Subsequent Credit Stacking

- Can land in a conservation bank seek carbon credits?
  - Since conservation bank requires protecting land in perpetuity, project area would fail Legal Requirement Test
  - Species credit + carbon credit not allowed
- Can land in a carbon project seek species credit?
  - Fish and Wildlife Service specifies that land used to establish conservation bank must not be previously designated for conservation purposes
  - Carbon credit + species credit not allowed





# Concurrent Credit Stacking

- Landowner seeks carbon credit and species credit at the same time
- Carbon credit is considered an “unbundled” credit
  - Carbon market compensates grassland owners for an individual ecosystem service: GHG sequestration (metric tons CO<sub>2</sub>e/acre)
- Species credit is considered a “bundled” credit
  - Mitigates habitat loss, which is a full ecosystem impact (acre)
  - Credited issued with the expectation that all of the ecosystem services provided by that land are being conserved, including GHG sequestration
- *Proposal: Carbon credit + species credit not allowed*
- *Question: Are there other markets we should address in the protocol?*



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# Payment Stacking

- Guidance needs to address a number of programs
- Guidance needs to address temporal stacking
- Guidance needs to address 2008 and 2014 Farm Bill programs
- *Questions for workgroup:*
  - *Are we focusing on the right subset of programs?*
  - *Does our approach seem sound?*





# Types of Programs

1. **Landscape-scale programs:** prevent grasslands from being converted into cropland through long-term contract or establishing an easement
  - Payment is for the *same activity* that the carbon credit incentivizes
2. **Enhancement programs:** provide financial assistance to landowners to implement discrete conservation practices
  - Payment is for an activity that is *complementary* to the activity that the carbon credit incentivizes



# Landscape-Scale Programs

- Long-term rental contracts with USDA or easements that prevent the conversion of grassland to cropland
  - Agricultural Conservation Easement Program (2014 Farm Bill)
  - Conservation Reserve Program (2008 Farm Bill)
  - Farm and Ranch Lands Protection Program (2008 Farm Bill)
  - Grassland Reserve Program (2008 Farm Bill)
- 2008 Farm Bill contracts receive annual rental payment for enrolled acres or 50% of fair market value of easement
- USDA will honor contracts that were signed by February 7, 2014
  - GPP proposes a 24-month “look-back” window from Effective Date for start date
- Limited information available on ACEP, which replaces 2008 Farm Bill programs moving forward



# Enhancement Programs

- Financial and technical assistance from NRCS and/or FSA to implement specific Conservation Practice Standards (CPS)
  - Environmental Quality Incentives Program (2014 Farm Bill)
  - Conservation Stewardship Program (2014 Farm Bill)
  - Continuous Conservation Reserve Program (2008 Farm Bill)
  - Wildlife Habitat Incentive Program (2008 Farm Bill)
- Short-term contracts with annual cost-share payments for each CPS
- Most CPS do not appear to incentivize *same activity* as GPP, so may not be “stacking”



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# Conservation Practice Standards of Interest

- Brush Management (CPS 314)
- Silvopasture Establishment (CPS 381)
- Fencing (CPS 382)
- Forage Harvest Management (CPS 511)
- Forage and Biomass Planting (CPS 512)
- Range Planting (CPS 550)
- Upland Wildlife Habitat Management (CPS 645)
- Early Successional Habitat Development/Management (CPS 647)
- *Others?*



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Agenda Item 5

# MONITORING



# Monitoring pre-project land use

- To justify the stratification as either 10-30 year grassland or 30+ year grassland
- If Cropland Data Layer is available, use that to identify annual land use
- If CDL unavailable, use one or more of these options:

Contract(s)	Affidavits from unaffiliated parties
Time-stamped photos	Records generated or accepted by a regulatory body
Time-stamped aerial photos	Some combination of these or other options
Tax records	

- We are flexible with these options, but the evidence must cover the relevant time period





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# Monitoring project land use

- Two part demonstration that project area remained unconverted during the reporting period
  1. Review of annual CDL (released every February)
  2. Supplemental evidence
    - This can include, but is not limited to, the items listed on the last slide for demonstration pre-project land use



# Monitoring to prevent overgrazing

- Prescribed grazing management plan
  - Follow NRCS Practice Standard 528: Prescribed Grazing
  - Must identify protection of soil carbon as a management goal
  - Plan must be created through consultation with either a trained professional or an NRCS agent
  - Annual review by qualified entity for first three years, then at least once every six years thereafter (may be the VB if qualified)
- Legal limitations on grazing intensity
  - If project easement contains language to contractually limit overgrazing, this will reduce project risk profile
- Monitoring of grazing activities
  - Must document Animal Grazing Days by livestock category (next slide)





# Monitoring woody biomass

- Optional, only used by projects which elect to quantify emission reductions from baseline loss of woody biomass
- Initial inventory:
  - Use remote sensing to estimate canopy coverage
  - Use ground sampling to develop a ratio of CO<sub>2</sub>e per area
- Ongoing monitoring:
  - Annual remote sensing to confirm canopy coverage
- If we only count non-tree woody biomass, the carbon-to-canopy ratio shouldn't change much over time

# Monitoring project emissions (annual)



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- Grazing
  - Animal Grazing Days by livestock category (for the whole reporting period)
    - $AGD = \text{population} \times \text{grazing days}$
- Fertilizer use
  - Type and amount of organic fertilizer applied
  - Excluding manure from grazing animals
- Burning
  - Acres burned by stratum
- Fossil fuels and electricity
  - Sources, types (fuels), and quantity used (e.g. tractor, diesel, 4 gal)



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Agenda Item 6

# REPORTING & VERIFICATION



# Reporting & verification cycle

- **Reporting period** = the period of time over which emission reductions are quantified
- **Verification period** = the period of time over which emission reductions are verified
  - One verification period could include >1 reporting period
- Initial verification period is one reporting period, beginning with the project start date
- Subsequent VPs may cover multiple RPs, but how many?
  - Forest allows up to 6, but there is no risk from inter-annual fluctuations or stale data
  - Livestock (and ARB <25k projects) have option for 2 year cycles



# Verification activities

- Initial verification must include site visit
  - For cooperatives, not every site must be visited
- Subsequent verification may rely on remote sensing
  - Remote sensing will be used to confirm that the site has not been converted
  - Remote data will confirm maintenance of woody canopy
- Review documentation for project emissions
  - Burning
  - Grazing
  - Fertilizer



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Agenda Item 7

# QUANTIFICATION



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# Woody biomass

- Optional quantification for sites which would have lost a significant amount of woody biomass due to conversion
- Not accounting for sequestration over time
- Remote sensing to estimate area covered by woody species
- Ground sampling to identify woody species and develop carbon-to-canopy ratio
- Guidance based on recent Urban Forest Management Quantification Guidance document
  - <http://www.climateactionreserve.org/how/protocols/urban-forest/>





# Emission factors

- Contractor has finished preliminary emission factor tables
  - Still working on QC and summary statistics

Total possible strata	1,668
Strata not modeled (AK & HI, plus others)	667
Modeled strata with no emission reductions	331
Potentially eligible strata	670

- This is based on using a 10-year emission factor
  - Many strata (154 total) show a baseline increase in SOC during the first few years due to ploughing under the biomass, then SOC loss into the future.
  - Using 10-year EFs would smooth out this variability.
  - 5-year EFs result in exclusion of all of these strata

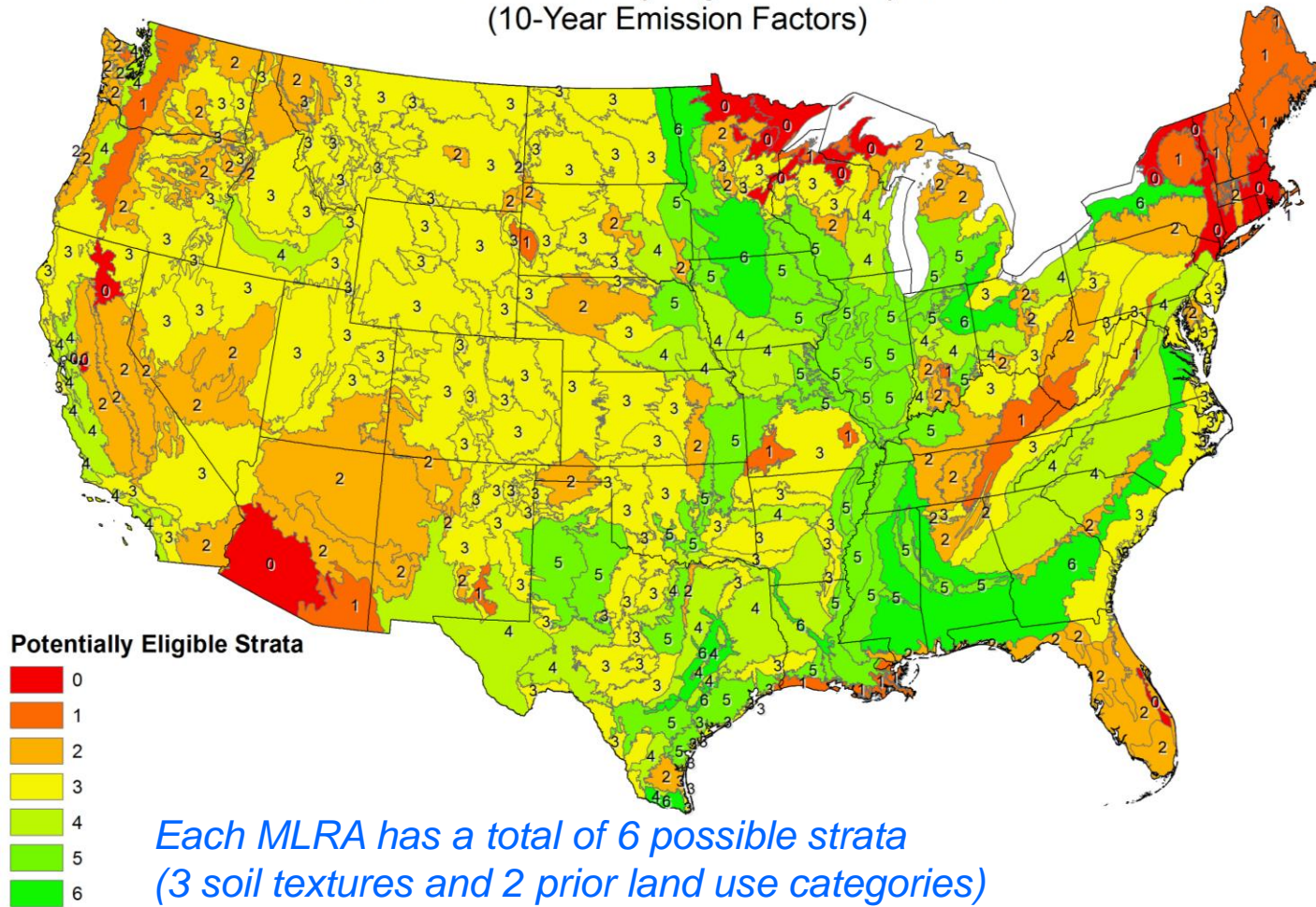




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# Emission factor eligibility map

Number of Potentially Eligible Strata by MLRA  
(10-Year Emission Factors)





# Example calculation tool

- We are working on an Excel-based tool which we will distribute with the Workgroup comment draft
- The basics of the quantification allow you to get a sense of quantitative outcomes for different project scenarios
- The tool will be unlocked, so you will be able to see the impact of adjusting different discount factors
- You are welcome to create project scenarios to send to Reserve staff to support your comments
- *For scenarios we've tried so far, the project emissions and discounts seem to roughly balance the non-soil carbon baseline emissions ( $N_2O$ )*



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Agenda Item 8

# NEXT STEPS



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# Next steps

- If you have additional comments or thoughts based on where we are now, please get in touch ASAP
  - Email Anna ([aschmitz@climateactionreserve.org](mailto:aschmitz@climateactionreserve.org))
- Reserve staff will prepare the official workgroup comment draft
  - Comment period will be 30 days
  - Expect to receive the draft during Week 38
  - Staff will incorporate comments into the public comment draft where appropriate
- Public comment period will begin mid-March





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# Contact Information

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# THANK YOU!

<http://www.climateactionreserve.org/how/protocols/grassland/>