Overview Webinar
Grassland Project Protocol V2.0
February 24, 2017

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Agenda

1. Background
2. Presentation of v2.0 updates
3. Registry software updates
4. Audience questions
Section 1

BACKGROUND
Climate Action Reserve

- 501(c)3 nonprofit, founded in 2001
- Voluntary offset registry, and approved Offset Project Registry for CARB
- Adopted 18 offset project protocols in the US and Mexico
- More than 87M credits issued to voluntary and compliance offset projects
Background

- **July 22, 2015**: GPP v1.0 adopted
- **September 2015**: Awarded USDA NRCS Conservation Innovation Grant for outreach, implementation, pilot projects, and protocol update
- **Spring 2016**: Released Project Development Handbook, conducted stakeholder outreach
- **July 2016**: Listed 2 pilot projects in Colorado
- **September 2016**: Initiated protocol update
- **January 2017**: GPP v2.0 Adopted by Reserve Board
Listed, Registered & Completed Projects as of December 31, 2016
GPP overview

• Avoided conversion of grassland to cropland

• Eligibility:
  – Financial threshold as proxy for conversion pressure
  – Suitability threshold to limit projects to arable land

• Quantification:
  – Baseline avoided loss of soil C, as well as emissions from cultivation
  – Project emissions from grazing, compost, fuels, etc.
  – Calculation tool is provided by the Reserve
GPP overview (con’t)

- Permanence ensured through conservation easement, or transfer to federal ownership
- Project area must be grassland for at least 10 years prior to the project
- Verification can be conducted remotely
- Multiple projects can be managed together as a “Cooperative”
- Flexible verification schedules
- Crediting period is up to 50 years
Section 2

UPDATES FROM V1.0 TO V2.0
GPP v2.0 highlights

Major changes in bold

• Allow for irrigation of project area
• **New start date option**
• **New options for suitability threshold**
• **New ecosystem health assessments**
• Removed accounting for shrubs
• Reduced buffer pool contribution for accredited land trusts
• Updated soil texture class names
• Minor language improvements
Terminology change

“Project Developer” is now “Project Owner”

• GPP v1.0 used “Project Developer” as a legal term, referring to the entity with ownership of the GHG emission reductions

• v1.0 usage caused confusion among users

• “Project Owner” has the same definition
Irrigation allowed in project

Irrigation now allowed during project

- GPP v1.0 prohibits irrigation of the project area
- Stakeholders suggested that moderate irrigation can improve rangeland health without significant drawbacks
- v2.0 allows for irrigation
  - Any increases in electricity emissions related to pumping must be accounted for
  - Also need to account for N$_2$O emissions from leaching, volatilization, and run-off
New start date option

New option allows project submittal to define start date

- Very common approach for forestry
- Project is “submitted” when the form is uploaded and the “submit” button is clicked in the registry software

- Only applicable before the project easement is recorded
- Easement must still be in place prior to completion of initial verification
- Simplifies cooperative management
  - Submit all cooperative projects at once and they will all have the same start date
Suitability threshold options updated

Replaced national default with two options:

- **Option 1:** Default value by Major Land Resource Area
- **Option 2:** Local assessment

- Stakeholder feedback that national default was too restrictive for some areas
- Staff analysis concluded that national default was too low for some areas and too high for others
- Staff conducted GIS analysis of the Land Capability Classification of existing cropland, controlling for irrigation
- Non-irrigated threshold by default
- Irrigated threshold available if project can prove access to irrigation in the baseline
Non-irrigated results
Irrigated results
Ecosystem health assessments

Periodic ecosystem health assessments now required for eligibility

– Follow the BLM Rangeland Health Assessment protocol
– Assessments at least every 6 years
– Seriously degraded lands must show improvement

• Allows for a long-term view of the health of the project area, ensuring stability of belowground carbon pools
• Can help identify non-event-related reversals
• Assessment can be completed with minimal training and only a few hours of site activity

https://jornada.nmsu.edu/monit-assess/manuals/assessment
Rangeland Health Assessment protocol

• Ecological Site Description for reference conditions for 17 different metrics
• Assess each metric on a scale of deviation
• Adaptive management to improve degraded areas
• Ineligible for reporting period if condition worsened over time for avoidable reasons

https://jornada.nmsu.edu/monit-assess/manuals/assessment
Accounting for shrubs removed

Woody shrubs removed from v2.0 quantification

- Optional pool in GPP v1.0
- GPP v1.0 does not properly account for shrubs in the context of fire and reversals
- Over two years of outreach, zero stakeholders have expressed interest in accounting for shrubs
- Adds significant effort and complexity to quantification and verification
- Could be re-worked and added back in the future
Risk of financial failure updated

Buffer pool contribution updated: $\text{Risk}_{FF} = 0\%$
where the Project Owner is *accredited* land trust

- V1.0 applies 10% $\text{Risk}_{FF}$ for projects without the Recorded PIA, subordination clause Type I
- Land Trust Accreditation Commission requires proof of financial resources to support the easement into the future, including legal costs
- Accredited land trusts can, categorically, be viewed as a stable counterparties for the PIA
- V2.0 applies 0% risk to these organizations
Soil texture class names updated

Renamed the three soil texture classes

- V1.0 names can be confusing with the various qualifiers used in the soil survey
  - E.g., “Sandy loam” = “Sand”
- Recommended by contractors

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<thead>
<tr>
<th>GPP v1.0</th>
<th>GPP v2.0</th>
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<tbody>
<tr>
<td>Sand</td>
<td>=</td>
</tr>
<tr>
<td>Loam</td>
<td>=</td>
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<td>Clay</td>
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Section 3

REGISTRY SOFTWARE UPDATES
Registry software updates

• New account type: “Project Owner” (PO)
  – Used by Cooperative participants who are the “Project Owner” as defined in the protocol
    • Reduced fee
    • Limited functionality
  – Cooperative Developers use “Project Developer” account type

• Cooperative developer submits and manages projects
  – Cooperative ID assigned by the Reserve Administrator
  – Selects a PO for each project
  – CRTs will be issued to the PO by automatic forward transfer

• Common buffer pool among project types
Section 4

AUDIENCE QUESTIONS
Thank you!

Join us at the following events:

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<tr>
<th>Event</th>
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<tr>
<td>Navigating the American Carbon World</td>
<td>San Francisco, CA</td>
<td>April 19-21</td>
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<tr>
<td>Northwest Grazing Conference</td>
<td>Pendleton, OR</td>
<td>May 10-11</td>
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<tr>
<td>Montana Grassland Workshop</td>
<td>TBD, MT</td>
<td>TBD (summer)</td>
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