Housekeeping

• All attendees are in listen-only mode
• Please submit your questions in the GoToWebinar question box and we’ll try to answer them at the end, time permitting
• We will follow up via email to answer any questions not addressed during the meeting
• The slides (in Spanish and English) and a recording of the presentation will be posted online
Agenda

1. Climate Action Reserve
2. Background
3. Process and timeline for update
   • **Note: the deadline to submit the Statement of Interest for the Workgroup is Sept 30th**
4. Review considerations for the update
   • Safeguards and eligibility
   • Additionality
   • Forest inventory
   • Mangrove and jungle considerations
   • Permanence
5. Questions, comments, & next steps
Climate Action Reserve

- NGO founded in 2001
- 21 offset protocols: México, USA, & Canada
- >550 Projects & 165M+ credits issued
- Mission to promote market-based solutions
Reserve Program in Mexico

- MOU with 6 border states & California to develop protocols (2008)
  - MOU with 6 border states & California to develop protocols

- First forest project listed (2009)
  - First forest project listed

- First livestock projects listed in the Registry (2013)
  - 33 Livestock Projects listed in the Registry

- First forest credits issued (2015)
  - First forest credits issued

- First landfill credits issued (2016)
  - First landfill credits issued

- First urban forest credits issued (2017)
  - First urban forest credits issued

- First aggregate issued credits (2018)
  - First aggregate issued credits

- First mangrove projects listed (2019)
  - First mangrove projects listed

- 2016-2019: 15+ trainings 50+ PO/PDs 4 VBs (2020)
  - 2016-2019: 15+ trainings 50+ PO/PDs 4 VBs

- Revisiting livestock projects (2021)
  - Revisiting livestock projects

- Launch MFP V3.0 update (2021)
  - Launch MFP V3.0 update
Background

- V1.0: published in 2013
  - Workgroup and public comment period

- V1.1-V1.5: published from 2016 to 2017
  - Errata and Clarifications V1.5: August 2019

- V2.0: published in 2020
  - Workgroup and public comment period
  - Key updates:
    - Activities allowed to differentiate between areas under forest use and areas without it
    - Additionality requirements for areas without forest use
    - Secondary Effects for improved forest management activities
    - The inclusion of a non-intensive monitoring and quantification methodology for certain urban, agroforestry and silvopastoral activities
  - Errata and Clarifications V2.0: August 2021
# Process and Timeline for Update

<table>
<thead>
<tr>
<th>Step</th>
<th>Details</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
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<tr>
<td><strong>Workgroup conformation</strong></td>
<td>Kickoff Meeting</td>
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<td>Presentation of SOI: sept16-30</td>
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<td>Meeting: Additionality</td>
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<td>Meeting: Mangrove and Rainforest</td>
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<td>Meeting: Safeguards</td>
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<td><strong>Public comment period</strong></td>
<td>March, 1st to March, 31</td>
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<td>Comments revision and Protocol update</td>
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<tr>
<td><strong>Approval by the Reserve’s Board of Directors</strong></td>
<td>June 2022</td>
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Workgroup Formation

• Stakeholder participation & feedback is critical to protocol development

• The Reserve assembles an intensive multi-stakeholder workgroup to advise protocol development and produce rigorous, well-vetted, and credible protocols
  – Strive for balanced representation from industry, project developers, environmental NGOs, verification bodies, independent consultants, academia, and government bodies
  – Interested stakeholders invited to submit Statement of Interest (SOI) forms

  • **Deadline for submitting SOI is Sep 30th**

  • **SOIs can be downloaded here:**
    [https://www.climateactionreserve.org/how/protocols/mexico-forest/revision-del-protocolo-forestal-para-mexico/](https://www.climateactionreserve.org/how/protocols/mexico-forest/revision-del-protocolo-forestal-para-mexico/)
  
    – Requires commitment to ~4-5 workgroup meetings plus additional protocol reviews, familiarity with the feedstocks, technologies, and/or end uses for which the protocol is being developed, and solid understanding of project-based GHG accounting
Workgroup Process and Expectations for Workgroup Members

Process

• Reserve staff identify and solicit feedback on specific protocol criteria
• Reserve staff schedule and hold meetings (~2-3)
• Reserve staff produce draft protocol for review
• Reserve staff revise protocol based on feedback

Expectations

• Review, comment on and provide recommendations on specific protocol criteria
• Participate in meetings via webinar
• Provide written comments on draft protocol
CONSIDERATIONS FOR PROTOCOL UPDATE
Protocol Major Changes

- Safeguards and Eligibility
- Additionality
- Forest Inventory
- Considerations for Mangrove and Rainforest
- Permanence
## Section 2: Activity Definitions

<table>
<thead>
<tr>
<th>Activity Area</th>
<th>Description</th>
</tr>
</thead>
</table>
| Agroforestry and Silvopastoral                    | • The primary human activity is agriculture and/or grazing  
• The land cover type is defined as agriculture or grassland  
• Trees are either planted or otherwise encouraged from natural regeneration |
| Improved Forest Management (IFM)                  | • The primary land cover is forest  
• The forest has an authorized forest management program for the purposes of commercial timber harvest |
| Reforestation                                     | • Trees are planted manually or encouraged through site preparation activities  
• On lands that are not in forest cover on the project start date and have not been in forest cover within the past 5 years, or on lands that have recently experienced a natural disturbance that reduced live tree stocking below 50% live canopy cover  
• It could have been a forest in the past, but hasn’t been in the last 5 years |
| Restoration                                       | • The sequestration associated with the protection and restoration of natural forests  
• Ongoing commercial harvest operations is not a permitted use  
• Restoration activities may include protected areas (where forest management is not allowed) and noncommercially viable forests that are degraded or at high risk of degradation and deforestation |
| Small Urban Forests                               | • The planting and management of less than 10 contiguous hectares of 10% canopy cover  
• Urban areas as defined by the INEGI National Geostatistical Framework (>2,500 inhabitants or municipal centers independent of their population) |
| Large Urban Forests                               | • The planting and management of more than 10 contiguous hectares of 10% canopy cover  
• Non-natural forests  
• Urban areas as defined by the INEGI National Geostatistical Framework (>2,500 inhabitants or municipal centers independent of their population) |
Social Safeguard requirements for ejidos and communities to meet include:

<table>
<thead>
<tr>
<th>Category</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Free, Prior, and Informed Consent</strong></td>
<td>• Hold an Assembly to discuss project themes and topics prior to voting</td>
</tr>
<tr>
<td></td>
<td>• Hold a vote to approve the project</td>
</tr>
<tr>
<td><strong>Meeting Notification, Participation, and Documentation</strong></td>
<td>• Describe how notices of assemblies take place</td>
</tr>
<tr>
<td></td>
<td>• Provide space and opportunity for participation</td>
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<tr>
<td></td>
<td>• Publicly document the meetings</td>
</tr>
<tr>
<td><strong>Project Governance</strong></td>
<td>• Identify a project coordinator to represent the community/ejido to the Reserve and to verifiers</td>
</tr>
</tbody>
</table>
## Section 3: Environmental Safeguards

<table>
<thead>
<tr>
<th>Environmental Safeguard</th>
<th>Applicable Activities</th>
<th>Activity Area Guidelines</th>
</tr>
</thead>
</table>
| 1. Maintenance of forest carbon stocks | All | - Activity Areas must maintain or increase standing live and dead carbon stocks over the project life  
- Determined by a running 10-year average of carbon stocks within the Activity Areas. |
| 2. Native Species | IFM, Restoration, Reforestation | - Activity Areas must demonstrate verified continuous progress towards achieving a goal of 95% native species within the Activity Areas  
  a. For IFM and Restoration: must be met within 50 years  
  b. For Reforestation: must be met immediately following the establishment of a new forest stand |
|   | Large Urban Forests | - Activity Areas may not reduce the percent of native species throughout the project life |
| 3. Composition of Native Species | IFM, Restoration, Reforestation | - Activity Areas must demonstrate verified continuous progress towards meeting the composition of native species  
  a. For IFM and Restoration: must be met within 50 years  
  b. For Reforestation: must be met immediately following the establishment of a new forest stand |
<p>|   | Large Urban Forests | - If a single species comprises more than the proportion indicated in the protocol, the proportion of the dominant species may not be intentionally increased throughout the project life |</p>
<table>
<thead>
<tr>
<th>Environmental Safeguard</th>
<th>Applicable Activities</th>
<th>Activity Area Guidelines</th>
</tr>
</thead>
</table>
| 4. Maintenance of forest land cover throughout the Project Area | IFM, Restoration, Reforestation, Agroforestry, Silvopastoral | • Forest land cover outside the Activity Areas but within the Project Area must not decrease as a result of human activities over the project life  
• If a decline in forest land cover in excess of 5% is detected during a full verification, the project must rectify the forest cover loss through reforestation in the subsequent 6 reporting periods |
| 5. Sustainable harvesting practices | IFM | • Where harvest occurs within the Activity Areas in a contiguous area larger than 5 hectares, a tree, or group of trees, representative of the age cohort that was harvested, can be no further than 100 meters from other trees |
| 6. Maintenance of natural land cover | Reforestation | • Forest Projects should take into consideration the effects of project activities on ecological processes  
• Where project activities result in the conversion of natural land cover, the Forest Owner must provide justification to be approved by the Reserve |
Review and Update Considerations

• Are the activity definitions sufficiently clear?
  – Clarification needed for the agroforestry definition?
• Are the social safeguards sufficient?
• Are there are ways to strengthen the social safeguards?
• Should the environmental safeguards be modified for rain forest?
Section 3.12: Additionality

A project is considered additional if it wouldn’t have been implemented without the incentive of a carbon market

- Forest projects must satisfy the following tests:

Legal Requirement Test:
- GHG removals must be above what would result from compliance with any legal regulations
- Attestation of Voluntary Implementation

Performance Standard Test:
- Standardized analysis to analyze the risks of forest cover loss and conversion of forest cover
- Carbon above baseline is considered additional
- Different methodologies used for each activity type
Section 3.12.2.3: Performance Standard Test: Restoration Activity Areas

• Based on evidence of risks to forest inventories: an analysis of the drivers of deforestation and degradation that can affect land use

• **Forest Land Cover Risk Tool:**
  
  – **Section 1:** examines the legal restrictions that would affect forest canopy cover
  
  – **Section 2:** establishes the risk of deforestation due to the presence of agricultural activities, biophysical characteristics, urban development, and economic pressures affecting land management decisions
    
    • If an Activity Area demonstrates sufficient risk of deforestation, the Activity Area may pass the performance standard test without completing the third section
  
  – **Section 3:** evaluating the presence of degradation
    
    • Must demonstrate the loss of forest cover through the use of remotely sensed data
    
    • The protocol has a standardized methodology for estimating canopy cover from remotely sensed data
    
    • Must have canopy cover below the default value established according to the ecoregion where the Activity Area is located
Forest Land Cover Risk Tool
Review and Update Considerations

• Are there deforestation and degradation risk factors not included in the tool that should be considered?
• Are there considerations for different ecosystems, like mangroves and rain forests?
• Are there more recent or relevant studies for Mexico that should be considered?
• Is the tool correctly demonstrating and calculating when a forest presents deforestation and degradation risk factors?
Section 5: Permanence, Tonne/Year Accounting, and CRT Issuance

Forest Projects must comply with the standard of permanence:

- Climate benefits of the projects must be “permanent,” which is defined for forest projects as a period of 100 years
- One credit (CRT) is emitted for every tonne of CO$_2$e removed from the atmosphere for a period of 100 years
- Permanence is guaranteed through the signing of a Project Implementation Agreement
A Project Implementation Agreement (PIA) is a contract between the Reserve and the Forest Owner:

- The PIA establishes the obligation of the Forest Owner to comply with protocol requirements
- The Forest Owner can define the length of the contract
  - Contracts on communal property are limited by law to a period of 30 years
  - The PIA can be renewed annually
  - The number of credits issued depends on the commitment
- The PIA must be notarized and registered with the RAN or the Public Registry (Registro Publico)
Commitment periods less than 100 years will receive a fraction of the total credits:

- Ejidos and communities can’t sign a contract for periods of time greater than 30 years
- The protocol uses tonne/year accounting to ensure permanence
- For each additional tonne of CO$_2$e, credits will be issued proportionally to the commitment period relative to the permanence period of 100 years
Section 5: Tonne/Year Accounting and CRT Issuance

Tonnes secured in the short term will have additional annual issuances over time, which serves as an incentive to achieve long-term permanence:

- 30% of credits will be issued in the first year once the 30-year contract is signed.
- Each year the contract is renewed, 1% more of the credits will be issued until all the credits sequestered in the first year have been issued.
- 30-year contracts signed to get to a permanence period of 100 years.
- This repeats every year that additional carbon is sequestered.

![Graph showing carbon sequestered and credits issuance](image)
Review Considerations for the Update

- Agrarian Law interpretation and its implications for PIA signing and for the permanence mechanisms
- Processes to make easier the signing and renewal of PIAs
- Minimum crediting period for projects that sign a commitment period of less than 100 years
Section 4: GHG Assessment Boundary

A Forest Project must include the next sources, sinks and reservoirs:

1. Standing live tree carbon
2. Shrubs and herbaceous understory carbon: emissions from site preparation (Reforestation activities)
3. Standing dead tree carbon
10. Mobile combustion emissions from site preparation activities (Reforestation)
13. Biological emissions from clearing of forest land outside the Activity Area for agriculture and/or grazing
14. Biological GHG emissions or removals from changes in timber harvesting on forestland outside the Activity Area
Review and Update Consideration

• Soil carbon inclusion, particularly for mangroves
  – Efficient Methodologies for its quantification and verification
Appendix B. Quantifying Carbon Stocks in Activity Areas: Intensive Inventory Quantification Methodology

Large Urban Forestry, Reforestation, Restoration and Improved Forest Management Activity Areas must use the intensive inventory methodology:

1. Developing Initial Activity Area Inventories
   i. Activity Areas Sampling Methodology
   ii. Calculate Standing Living and Dead Trees Carbon
   iii. Calculate the Confidence Statistic

2. Determination of Activity Area Baseline

3. Carbon Inventory Update and Determination of Onsite Actual Carbon Stocks per Activity Area
# B.1.2 Calculating the Carbon in Standing Live and Dead Trees

<table>
<thead>
<tr>
<th>Steps</th>
<th>Description</th>
<th>Tools/Process Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Calculate the cubic volume and biomass (grams) in each tree.</td>
<td>CALCBOBK calculates volume and/or biomass directly from the input variables, usually DBH and total height, from the forest inventory. The equations used by CALCBOBK are published on the Reserve’s website.</td>
</tr>
<tr>
<td>2</td>
<td>Convert the biomass to CO$_2$e tonnes</td>
<td>The biomass estimates from step 1 are converted to tonnes CO$_2$e by dividing the biomass estimate (in grams) by 1,000, multiplying the quotient by 0.5 (to convert the value to carbon) and again by 3.67 (to convert the value to CO$_2$e). The product is tonnes CO$_2$e per tree.</td>
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</tbody>
</table>
| 3     | Adjust the tree’s CO$_2$e tonnes based on defect percentages assigned to each tree. | Defect – Bottom 33%  
60% x CO$_2$e tonnes in gross tree (Step 2) x Defect% (Bottom 33%)  
Defect – Middle 33%  
30% x CO$_2$e tonnes in gross tree (Step 2) x Defect% (Middle 33%)  
Defect – Top 33%  
10% x CO$_2$e tonnes in gross tree (Step 2) x Defect% (Top 33%)  
Sum Defect  
Sum of CO$_2$e defect from each step above  
Adjusted CO$_2$e  
CO$_2$e tonnes (Ste 2) – Suma Defect |
| 4     | Adjust CO$_2$e estimate for dead and dying trees | Dead trees are multiplied by .5 and dying trees are multiplied by .75 to account for decomposition that impacts Wood densities. All other trees remain unchanged. |
| 5     | Expand the CO$_2$e tonnes estimate in each tree to a per hectare basis. | Multiply the CO$_2$e tonnes estimate in each tree by the weight required to represent the plot estimate on a per hectare basis:  
25 x CO$_2$e Tonnes (Step 5) for trees sampled in 1/25$^{th}$ hectare radius  
100 x CO$_2$e Tonnes (Step 5) for trees sampled in 1/100$^{th}$ hectare radius. |
B.1.3 Calculating Confidence Statistics: Projects with Multiple Activity Areas

For Forest Projects with multiple Activity Areas, the TSE for inventory data associated with individual Activity Areas varies on a sliding scale based on the total number of Activity Areas.

<table>
<thead>
<tr>
<th>Number of Participating Activity Areas in the Forest Project</th>
<th>Target Sampling Error (TSE)</th>
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<tbody>
<tr>
<td>2</td>
<td>7%</td>
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<tr>
<td>3</td>
<td>8%</td>
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<tr>
<td>4</td>
<td>9%</td>
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<td>5</td>
<td>10%</td>
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<td>6</td>
<td>11%</td>
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<td>13</td>
<td>18%</td>
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<tr>
<td>14</td>
<td>19%</td>
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<tr>
<td>15+</td>
<td>20%</td>
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<table>
<thead>
<tr>
<th>Actual Sampling Error at 90% Confidence Level</th>
<th>Confidence Deduction</th>
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</thead>
<tbody>
<tr>
<td>0 - TSE%</td>
<td>0%</td>
</tr>
<tr>
<td>TSE to 20%</td>
<td>(Actual sampling error – TSE %) to the nearest 1/10th per cent</td>
</tr>
<tr>
<td>Greater than 20%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Review and Update Considerations

• Inclusion of stratification for Forest Inventories
• Other considerations:
  – Border Plots
  – Modifications for mangroves and rainforest?
Next Steps

• **For interested stakeholders:**
  – Submit a Statement of Interest to become a workgroup member by Sep 30\(^{th}\)
  – Send us an email to receive updates as an observer
  – Email us feedback anytime

• **For Reserve:**
  – Form workgroup
  – Start drafting!!
  – First workgroup meeting in October, potentially Oct 21\(^{st}\) (via webinar)
QUESTIONS OR COMMENTS?

Send SOIs to: Policy@climateactionreserve.org

Amy Kessler: akessler@climateactionreserve.org
Aurelia Casarrubias: acasarrubias@climateactionreserve.org