

# The Forest Project Protocol

## Key Elements of the Protocol and Considerations for Project Submission as Early Action or Compliance



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RESERVE

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Annual Conference



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# Presentation Themes

- History of the Climate Action Reserve
- Offset Integrity
- How the Forest Protocol addresses Offset Integrity
- Navigating Project Submission and the Alphabet Soup
- Why Early Action?
- Differences between the Reserve's 3.2 Protocol and the Compliance Protocol



# History of the Climate Action Reserve



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- Chartered by state legislation in 2001
  - Mission is to encourage early voluntary actions to reduce emissions and to have such emissions reductions recognized
- Balances business, government, academic, and environmental interests
- Key principles of protocols include:
  - Accuracy, through use of best available science
  - Conservativeness, through erring on side of caution in crediting
  - Transparency, through open public process and information
  - Practicality, through design that standardizes decision-making

# Offset Integrity



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- **Real**
  - Can be measured to a high degree of accuracy
  - Is based on an activity that has occurred, not one that is projected to occur in the future
- **Additional**
  - Occurs outside of any regulatory requirement
  - Would not have occurred but for the incentive provided by a GHG market
- **Verifiable**
  - Can be (and has been) independently verified
- **Enforceable**
  - Ownership is undisputed and enforcement mechanisms exist to ensure all program rules are followed
- **Permanent**
  - Is removed from the atmosphere for a minimum of 100 years





# The Forest Protocol

- Applies Throughout the United States
  - Private and Public Lands
- Three Project Types: *Reforestation, Improved Forest Management, and Avoided Conversion*
- Inventory Requirements
  - Live and dead trees, wood products are required
  - Minimum statistical confidence: +/- 20% @90% Confidence Interval
- Standardized Baseline and Accounting Methods
- Additionality Guidelines
- Requirement for Permanence
- Requirements for Environmental Integrity
- New Rules Allow Aggregation for Small Landowners (Reserve only!)

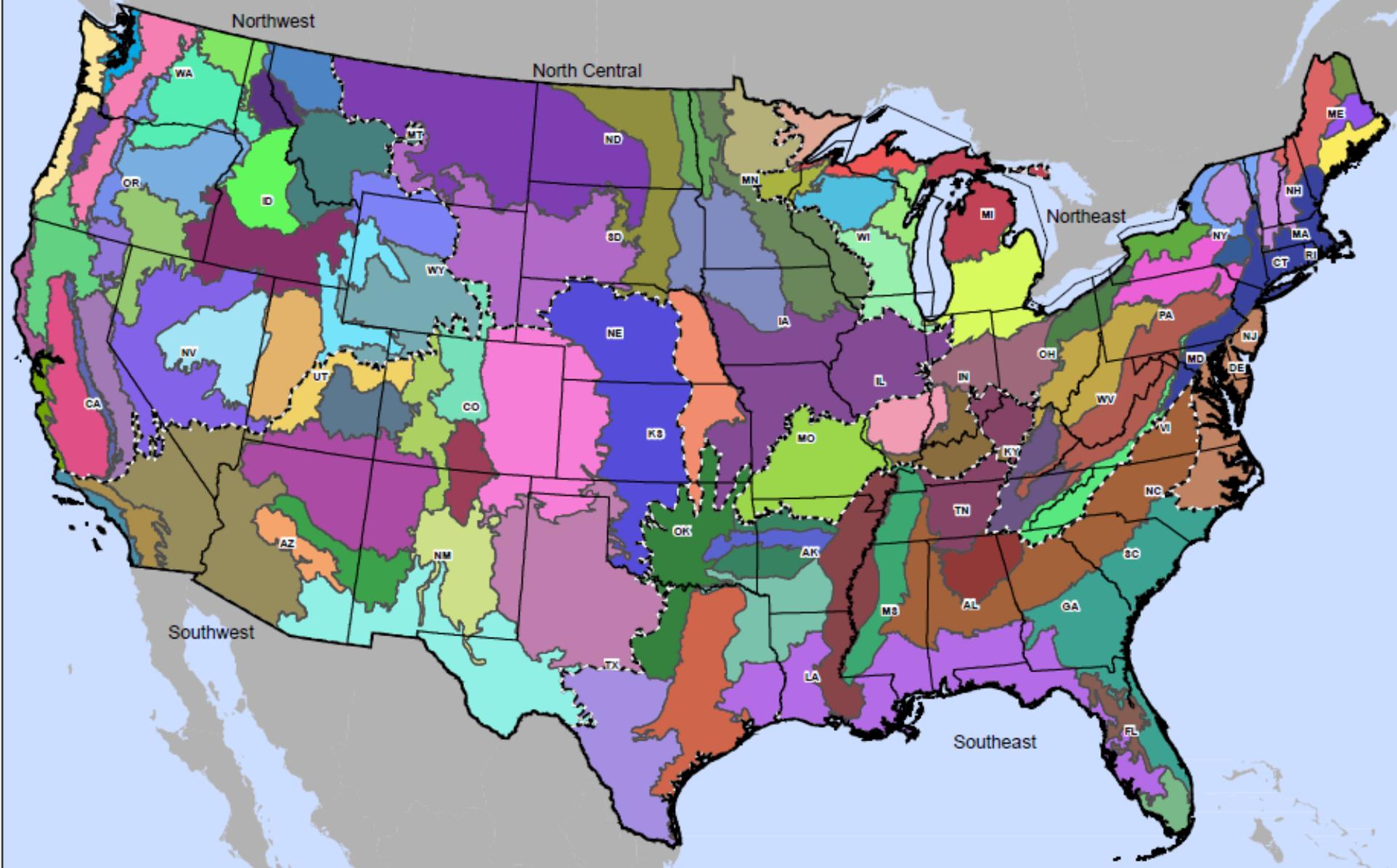


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# Forest Project Baselines

- Credits are issued for exceeding baseline carbon storage
- Baselines Are established for 100 Years (100-Year Crediting Period)
- Baselines must incorporate all legal requirements, including any requirements to:
  - Reforest
  - Buffer watercourses
  - Protect for endangered species
  - Manage under a binding deed restriction or conservation easement
- Baseline defined differently for public lands than private lands





**Legend**

- Supersection Boundary
- U.S. State Boundary
- Key to Larger Scale Maps

0 50 100 200 Miles

**Climate Action Reserve  
FIA Supersections**

Created for Climate Action Reserve Forest Project Protocol



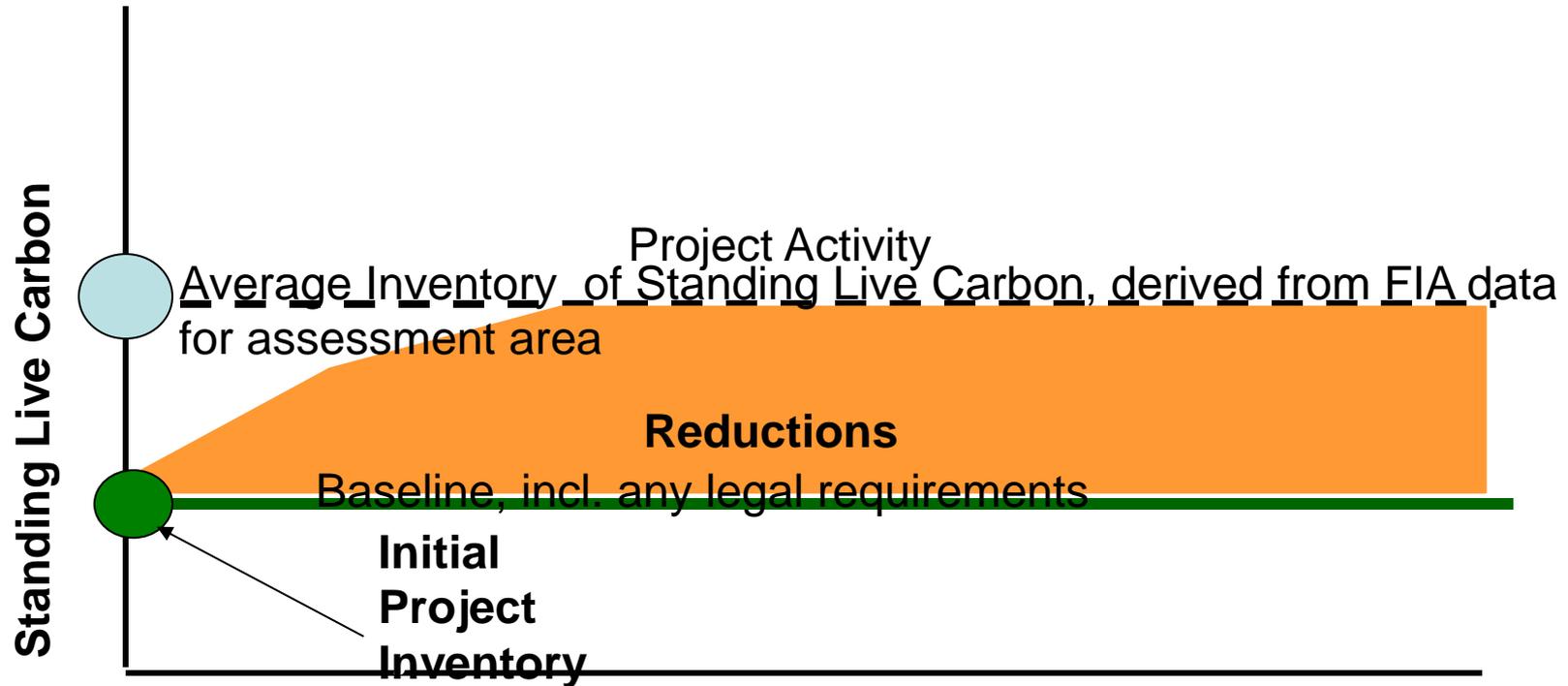
Adapted from:  
Ecological Subregions: Sections and Subsections  
of the Conterminous United States.  
U.S. Department of Agriculture, Forest Service, 2007.

Produced by: Dogwood Springs Forestry, February 2010.  
Projection: Albers

# Improved Forest Management Baseline Determination



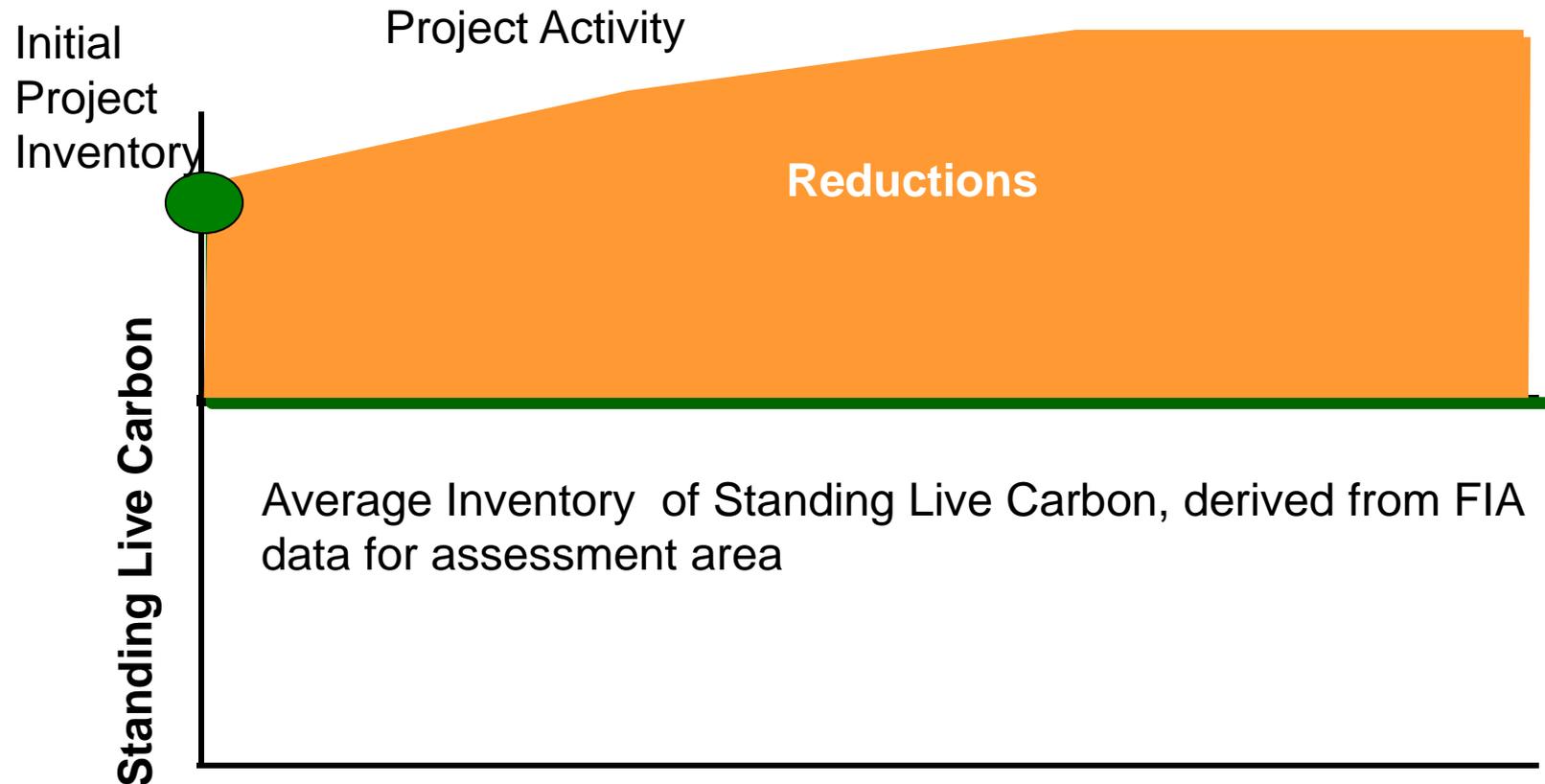
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# Improved Forest Management Projects – Private Lands



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- In this scenario, the project will generate credits for both stock retention and growth





# Additionality

- Carbon credits are awarded for activities that go beyond project baseline, defined by:
  - Legal requirements
  - Standard practice
  - Economic drivers
- Legal requirements include any requirements to:
  - Reforest
  - Buffer watercourses
  - Protect for endangered species
  - Manage under a binding deed restriction or conservation easement



# Accounting for Leakage



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- Leakage is assessed differently for each project type:
  - **Reforestation:** Standard factors used for displacement of crop or grazing land
  - **Avoided Conversion:** Standard conversion factor used
  - **Improved Forest Management:** Standard 20% market leakage factor used (reduced harvest of 1 ton → 0.2 tons leakage)
- Leakage factor is assessed annually and deducted from the calculations of net carbon sequestration and avoided emissions





# Third-Party Verification

- Third-Party Verification Required
  - Site-visit required at first verification and every 6 years thereafter
  - Optional desk-review verification allowed during interim years
- Verifiers Must Be Accredited and Approved by the Reserve
- Credits Issued Based on Difference Between Actual and Baseline Carbon Stocks





# Addressing Permanence

- All credited carbon must be maintained for 100 years from the time of credits are issued
  - **Unavoidable Reversals** are compensated from Buffer Pool administered by Reserve (e.g., fire, wind)
  - All projects contribute to universal buffer pool
  - **Avoidable Reversals** must be compensated by Forest Owner
- Must surrender CRTs equal to carbon reversed
- Compensation of reversals must be forest CRTs
  - If planned harvesting will result in a reversal, plan ahead so that you have enough credits to cover it



# Environmental Integrity



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- Projects are required to:
  - Demonstrate long-term sustainability on entity holdings
  - Manage for diverse native trees with multiple age classes
  - Even-age harvesting limited to 40-acre units
    - No more than 40% of project area can be in age classes less than 20 years
  - Manage for structural elements



# Aggregation Reserve Only

Not for Compliance



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- Objective is to reduce transaction costs for smaller landowners
  - Applies to projects < 5,000 acres
  - Allows for reduced inventory requirements
    - Statistical confidence maintained at aggregate level
  - Allows less frequent verification schedule (with audits)
- Projects still must sign legal agreement with Reserve and follow all other requirements of the Forest Project Protocol



# The Alphabet Soup of Project Navigation



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- Projects are submitted to Offset Project Registries either as compliance projects or as early action projects.

Acronym	Meaning	Description
OPR	Offset Project Registry	A registry accredited by ARB

- OPRs support ARB in the implementation of the cap and trade program by reviewing projects and issuing Early Action Offset Credits and Registry Offset Credits.

Acronym	Meaning	Description
EAOOC	Early Action Offset Credits	CRTs issued against approved CAR protocols are EAOOCs if they meet all the requirements of the regulation. An EAOOC: <ul style="list-style-type: none"><li>• Can include a start date back to 2001</li><li>• Can only include vintages from 2005 – 2014</li><li>• Must be listed prior to January 1, 2014</li></ul>
CRT	Climate Reserve Ton	1 ton CO <sub>2</sub> e issued by CAR against a CAR protocol.
ROC	Registry Offset Credit	1 ton CO <sub>2</sub> e issued by an OPR against the compliance protocol.

# The Alphabet Soup of Project Navigation



ARBOCs are compliance instruments equal to 1 ton CO<sub>2</sub> e

Acronym	Meaning	Description
ARBOC	ARB Offset Credit	<p>Issued upon the cancellation of a ROC or an EAOC by an OPR. ARBOCs are:</p> <ul style="list-style-type: none"> <li>• Issued exclusive by ARB into their tracking system (CITSS)</li> <li>• Do not expire, but are subject to invalidation rules.</li> </ul>
CITSS	Compliance Instrument Tracking System Service	<ul style="list-style-type: none"> <li>• ARB's registry system</li> </ul>

EAOCs can be converted into an ARBOC by the OPO, APD, or EAOC holder. EAOCs must undergo a separate verification (desktop) prior to converting to ARBOCs.

Acronym	Meaning	Description
OPO	Offset Project Operator	An entity with legal authority to implement the project.
APD	Authorized Project Designee	An entity authorized by an OPO to act on behalf of the OPO.



# Why Early Action?

- Projects that were issued credits prior to the compliance protocol were able to sell pre-compliance credits.
- Access to pre-compliance markets EAOCs can include earlier project start dates than the compliance protocol:
  - To 2001 if project was listed prior to April 30, 2010.
  - Only vintages in years 2005 can be transferred to ARBOCs
- EAOCs can include credits derived from carbon pools not included in the Compliance Protocol.
  - Soil carbon from Avoided Deforestation, for example.

# Some Changes with Compliance Protocol



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- Risk of Invalidation: Forest Owners on the hook for project invalidation for a period of 8 years following credit issuance.
  - Invalidation can occur for:
    - Not meeting regulatory requirements
    - Double registry of project credits
    - Material misstatements
  - Invalidation time period can be reduced to 3 years with secondary verification by independent verifier.

# Some Changes with Compliance Protocol



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- Initial OPDR requirements are similar to Reserve's PDD requirements, but OPDR must be provided at the project's submission rather than at first verification.
  - Requires heavy investments into developing a project prior to general affirmation of eligibility.
- Ongoing discussions on whether the use of 'complex estimators' (regression estimators, basal area/carbon estimators) should be limited.



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