Forest Projects in the California Cap-and-Trade

Joel Levin
Vice President

ACES Conference
December 8, 2014
Eligibility

- Forest can be anywhere in the U. S.
- Forest owner can be:
  - Private individuals
  - Companies
  - Land trusts
  - Local or state government
  - Tribes
- Federal lands excluded
- Aggregation not permitted
Forest Project Types

• Reforestation
  – Less than 10% canopy cover for at least 10 years, or following a significant natural disturbance that has removed at least 20% of the trees

• Avoided Conversion
  – Remove threat of conversion to non-forest use and ensure continued forest cover by conservation easement or dedication to a government agency

• Improved Forest Management
  – Activities that increase forest-based sequestration and/or decrease emissions
Start Date

• Start date is beginning of activity that increases carbon storage or reduces emissions

• Reforestation: Start of tree planting, site preparation, or removal of impediments to regrowth

• Avoided conversion: Recording a conservation easement or transfer to public ownership

• Improved forest management:
  – Change in ownership
  – Record easement
  – Submit listing documents

• Can be any time after January 1, 2007
Crediting Period

• 25 years and then can be renewed
  – No defined limit on renewals
Additionality

• Because of the carbon finance, the project developer is changing behavior, going beyond standard practice
  – Regulatory additionality
  – Performance standard

• Standardized approach
  – Additionality is based on how similar forests are being managed, rather than guessing how a particular landowner would act
Baseline Setting

FIA Data and Common Practice

- FIA data selected because:
  - Wide application
  - Longevity
  - Unbiased
  - Standardized

- Assessment Areas are units of land that are the basis for calibrating project accounting to local values in IFM.

- These factors are used for purposes of baseline determination, assessing fire risks, addressing diversity requirements, and more.

- Assessment areas are land units with similar environmental, economical and regulatory drivers.
Improved Forest Management Projects

- In this scenario, the project will generate credits for both stock retention and growth.
Improved Forest Management Projects

- In this scenario, the project will generate credits for growth only.
Avoided Conversion Projects

• Projects must demonstrate:
  – Suitability of project area for conversion
  – Legal permissibility of conversion
  – Significant risk of conversion, as determined by disparity in land-use value (40%) according to an appraisal

• Baseline determined by likely effects of conversion, as substantiated by an appraisal and similar regional practices
Reforestation Projects

• Projects allowed only where:
  – There has been a significant natural disturbance (and the landowner is not required by law to reforest); or
  – Land has been out of forest cover for at least 10 years

• For projects following natural disturbance, economic evaluation required to determine that baseline is not reforestation

• Baseline defined by modeling carbon stocks without reforestation activity
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 CARB (e.g., fire, wind)
- **Avoidable Reversals** must be compensated by Forest Owner
  - Must surrender credits equal to carbon reversed (in some cases, plus penalty if terminated)
- If planned harvesting will result in a reversal, plan ahead so that you have enough credits to cover it
Long-Term Sustainability

• All forest landholdings of project operator must demonstrate long-term sustainability of planned harvest levels:
  • May be met with SFI, FSC, or Tree Farm certification; or
  • May have a state-approved long-term management plan
• Limit even-age management to stands of no more than 40 acres
Natural Forest Management

- The protocol is not intended for plantation forestry
- Project should employ natural forest management to move in the direction of the type of native forest that would naturally be found in that area:
  - Diversity of native species
  - Multiple age classes
  - Retain deadwood
  - Limited use of even-age management
How it Works: The Project Registration Process

1. Open Accounts with Reserve and CITSS
2. Submit Project to Reserve
3. Hire Verifier, Conduct Verification
4. Verifier Submit Report to the Reserve
5. Registered
   - ROCs Issued by Reserve
   - ROCs canceled in Reserve, ARBOCS issued in CITSS
   - CARB approves and notifies Reserve
   - Submit project to CARB

Each reporting period

Sell your ARBOCs!
Who is doing the projects? Many different ownerships

• Land trusts (Conservation Fund, Nature Conservancy)
• Families
• TIMOs (Potlatch Forest Holdings)
• Forestry companies (Sierra Pacific Industries)
• Industrial corporations (Norfolk Southern Railway)
• Cities (Arcata)
• States (California)
• Tribes (Yurok Tribe)
• Environmental Organizations (National Audubon Soc.)
The project pipeline

• 6 million credits issued by ARB on 11 projects
  – Another 4 million issued by the Reserve being converted

• 102 projects have been submitted to the registries
  – Over 1 million acres

• Leading states
  – California
  – Michigan
  – North Carolina
  – South Carolina
  – New Hampshire
Project Scale

- Range of project sizes: 106 acres – 229,000 acres
  - Average size is 20,700
- Credits per acre: 2 tonnes/acre – 100 tonnes/acre
  - Average is 11 tonnes
  - Depends largely on stocking levels
Supply and Demand

- Between 100 million and 200 million tonnes of offsets will be demanded by regulated companies through 2020
- 13 ½ million offsets issued by ARB to date
- Most likely scenario: demand will exceed available supply through 2020
- Pricing: Currently ~$9/tonne
  - Expected to be ~13/tonne by 2020
- If project developers can do projects in this price range—the demand should be there!
Want to Learn More?

Navigating the American Carbon World

APRIL 28-30, 2015