

Forest Projects on Tribal Lands

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Climate Action Reserve

- Non-profit offset project registry founded in 2001
- Four major roles:
 - Develop standardized offset project protocols through a public process
 - Train and oversee independent project verification bodies
 - Operate voluntary greenhouse gas (GHG) offset project registry for North America
 - Accredited Offset Project Registry (OPR) for California cap-and-trade program
- Over 50,000,000 credits issued, **~20% from forests**



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-  Forest
-  Urban Forest
-  Livestock
-  Landfill
-  Organic Waste Digestion
-  Coal Mine Methane
-  Ozone Depleting Substances
-  Nitric Acid Production
-  Organic Waste Composting

Listed, Registered & Completed Projects as of October 8, 2013





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Forest Carbon Basics

- Trees take up atmospheric CO₂ and convert it to biomass (carbon sequestration)
- Rate of sequestration depends on the forest attributes
 - Species, site class, management practices
- Tonnes of stored carbon are quantified and converted to tonnes of CO₂e (“carbon dioxide equivalent”)
 - CO₂e is the common currency of carbon markets
 - 1 carbon credit = 1 tonne CO₂e emission reductions or atmospheric removals



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Forest Offset Protocol Highlights

- Projects anywhere in the United States (except Hawaii)
- Three project types:
 - Reforestation
 - Avoided Conversion
 - Improved Forest Management
- Standardized methods
- Requirement for permanence (100 years)
- Requirements for sustainability
- Crediting period of 25 years, renewable



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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



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Additionality

- Due to carbon offset revenue, the Forest Owner is changing behavior to increase carbon storage
 - Regulatory additionality
 - Carbon storage above and beyond all binding requirements
 - Performance standard
 - Carbon storage above and beyond common practice
- Standardized approach
 - Additionality is based on how similar forests are being managed, rather than guessing how a particular landowner would act



Commencement Date

- Commencement date is defined by change in management practice that can be demonstrated to a verifier
- Examples:
 - Change in ownership
 - Record a conservation easement
 - Submit project to OPR
- Commencement date can be any time on or after January 1, 2007



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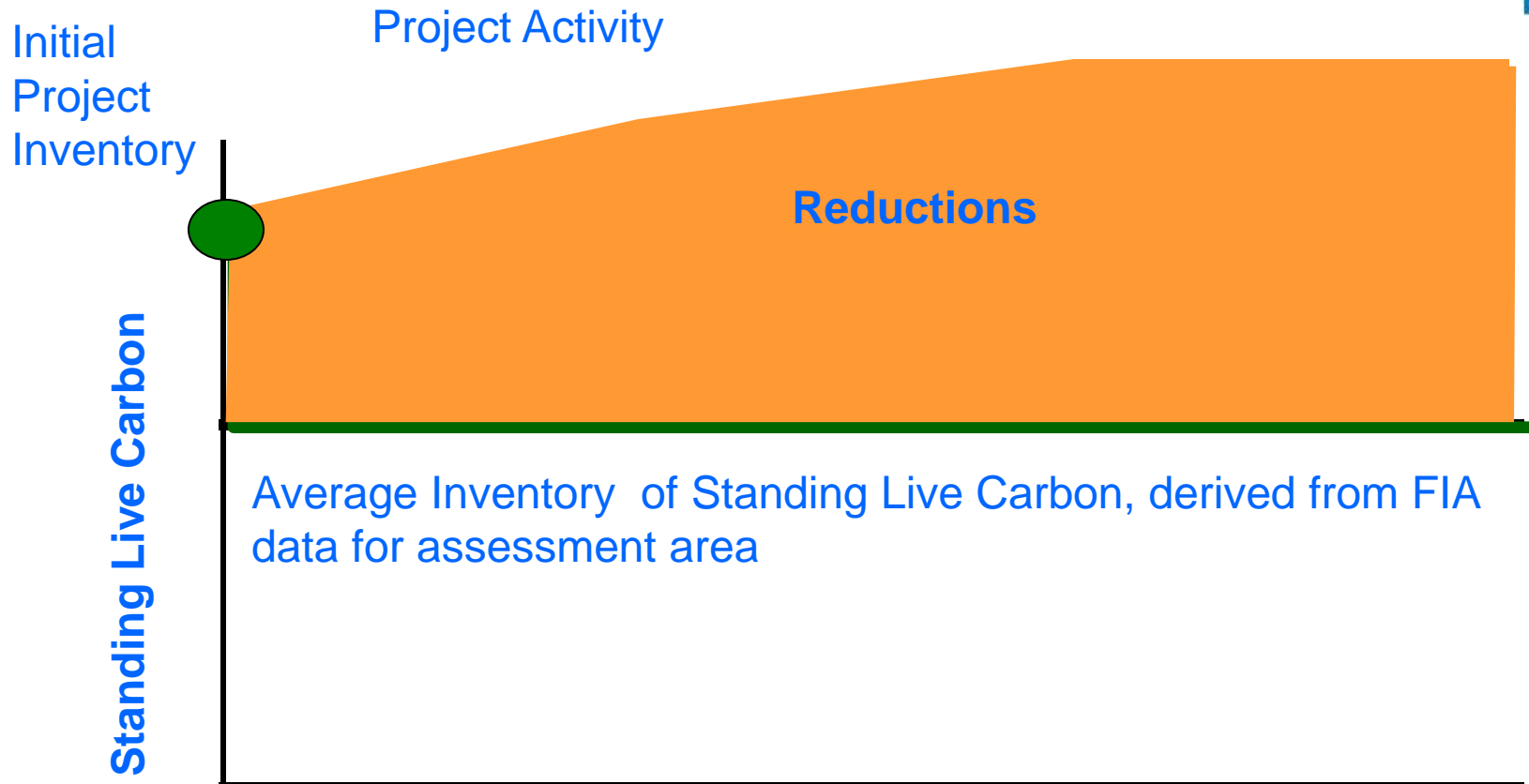
Forest Project Baselines

- Credits Are Issued for Exceeding Baseline Carbon Storage
- Baselines Are Established for 100 Years (25-Year Crediting Period, with renewals)
- 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
- Other Requirements Depend on Project Type

Improved Forest Management Projects



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- This project will generate credits for both stock retention and new growth



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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 according to an appraisal
- Baseline determined by likely effects of conversion, as substantiated by an appraisal and similar regional practices
- Loss of carbon from conversion modeled over time



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Inventory

- An inventory of carbon stocks is required at beginning of project
- Ground based sampling required
- Plots must be updated at least every 12 years



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Reporting & Verification

- Annual reporting
- Third-Party Verification Required
 - Site-visit required at first verification and every 6 years thereafter
 - Optional “less-intensive” verification allowed during interim years
- Verifiers must be accredited and approved by CARB
- Credits issued based on difference between actual and baseline carbon stocks



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Permanence

- All credited carbon must be maintained for 100 years from the time credits are issued
- Unavoidable Reversals are compensated from Buffer Pool administered by CARB (e.g., fire, wind)
- Avoidable Reversals must be compensated by Offset Project Operator (Forest Owner)
 - Must surrender other compliance instruments equal to carbon reversed
 - Forest owner agrees to be bound by California regulation



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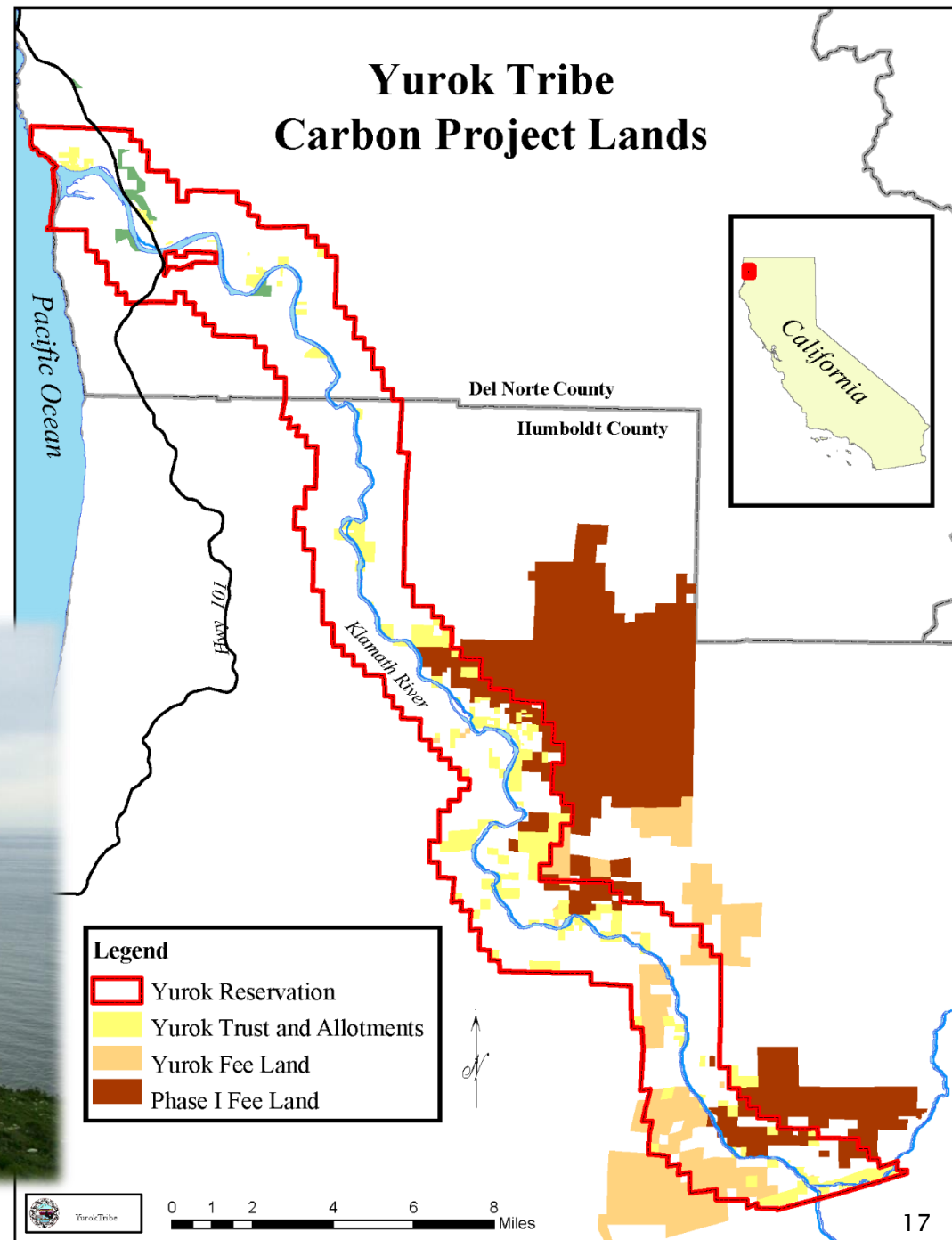
Forest Carbon Projects and Tribal Interests

By Nathan Voegeli
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January 29, 2015

Forest Projects on Tribal Lands Webinar hosted by the Climate Action Reserve

The Yurok Tribe has multiple Improved Forest Management Projects totaling over 30,000 acres that have brought over 1.75 million carbon offsets to market



Project Benefits

- Restore lands and waters degraded by past timber practices
- Land management consistent with culture and traditions
- Way to monetize differences in forest land management



Forestry Offset Projects in a Tribal Context

- Developing a project is a political issue
- Ongoing uncertainty in protocol interpretation as applied to Tribes
- 100 year commitment
- Limited waiver of sovereign immunity
- Fee versus trust lands
- Pre-registration risks rather than post-registration risks

A scenic landscape featuring a river flowing through a forested area. In the foreground, a rocky shoreline with grey stones and some green moss is visible. The river has a blueish-green hue and white rapids. The background is a dense forest of tall evergreen and deciduous trees on a hillside under a blue sky with wispy clouds.

Conclusion

- Improved Forest Management projects can help Tribes finance land and natural resource management and restoration
- Most issues unique to the tribal context can be addressed prior to significant financial investment

Considering Forest Carbon Projects

Presentation for Tribal Landowners

Climate Action Reserve Webinar

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Outline



1. About New Forests
2. CA Carbon Market Overview
3. Key Considerations for Tribes
4. Working with Project Developers



About New Forests

About New Forests



Global timberland and environmental market investor. New Forests manages over \$2 billion in capital for investments in sustainable timberland and associated environmental markets such as carbon sequestration.



Projects developed for the California market. We successfully registered the first California compliance protocol forest carbon offset project. We are currently developing over 119,000 acres of projects for landowner partners.



Tribal carbon project experience. We are the only project developer to successfully verify and register projects on Native American trust and fee land to date. In 2014, we successfully registered an 8,000 acre project with the Yurok Tribe. We have also developed a 5,500 acre project with the Round Valley Indian Tribes, which was issued offset credits on January 28, 2015.



Offset sales track record. We have sold 2.6 million forest carbon offsets into the California carbon market in delivered and forward contracts. We are a leading supplier in the market. We have delivered millions of dollars of revenue to landowner clients, including Native American forest landowners.



Carbon Market Overview

Carbon Market Overview

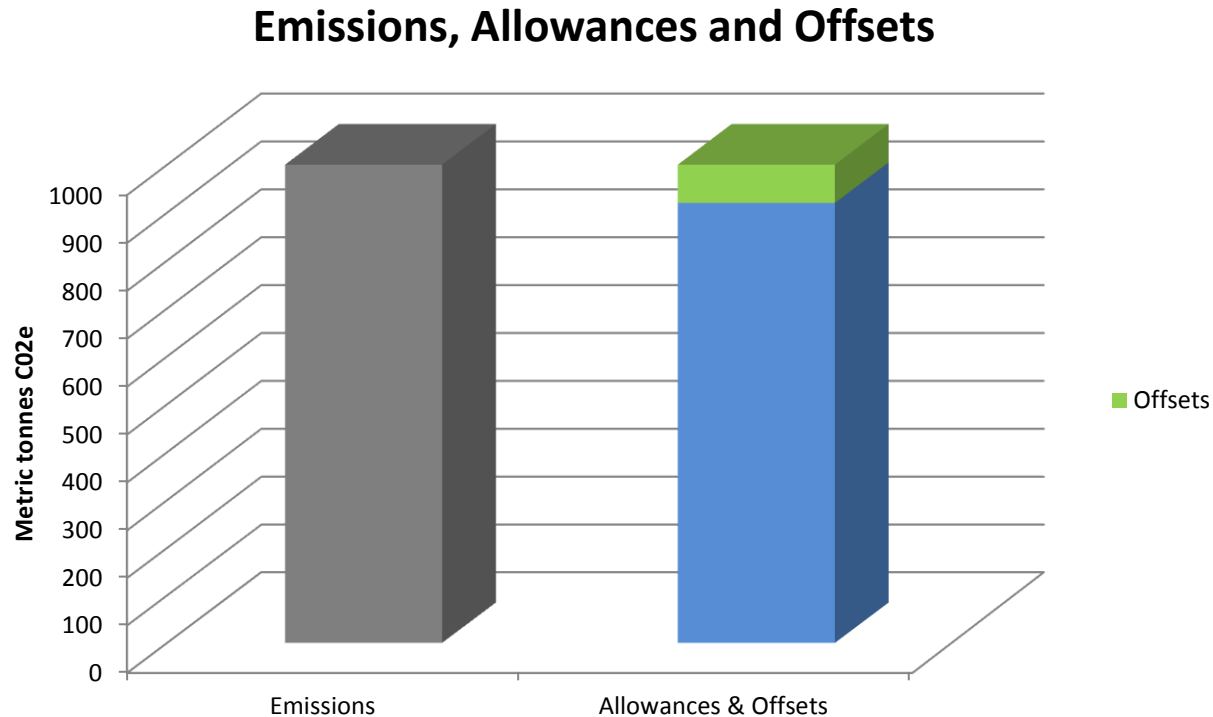
AB32. In 2006, the State of California enacted the “California Global Warming Solutions Act” or “AB32”, which requires a reduction in greenhouse gas emissions to 1990 levels by 2020.

Cap and Trade. AB32 mandated the creation of a cap and trade market to help reduce greenhouse gas emissions. This is largest carbon market in North America and the second largest in the world by value.

Offsets. The cap and trade market includes the use of offsets. Analysts expect demand for 150-200 million tonnes in aggregate by 2020.

Supply-constrained market. Current offset supply is constrained relative to demand.

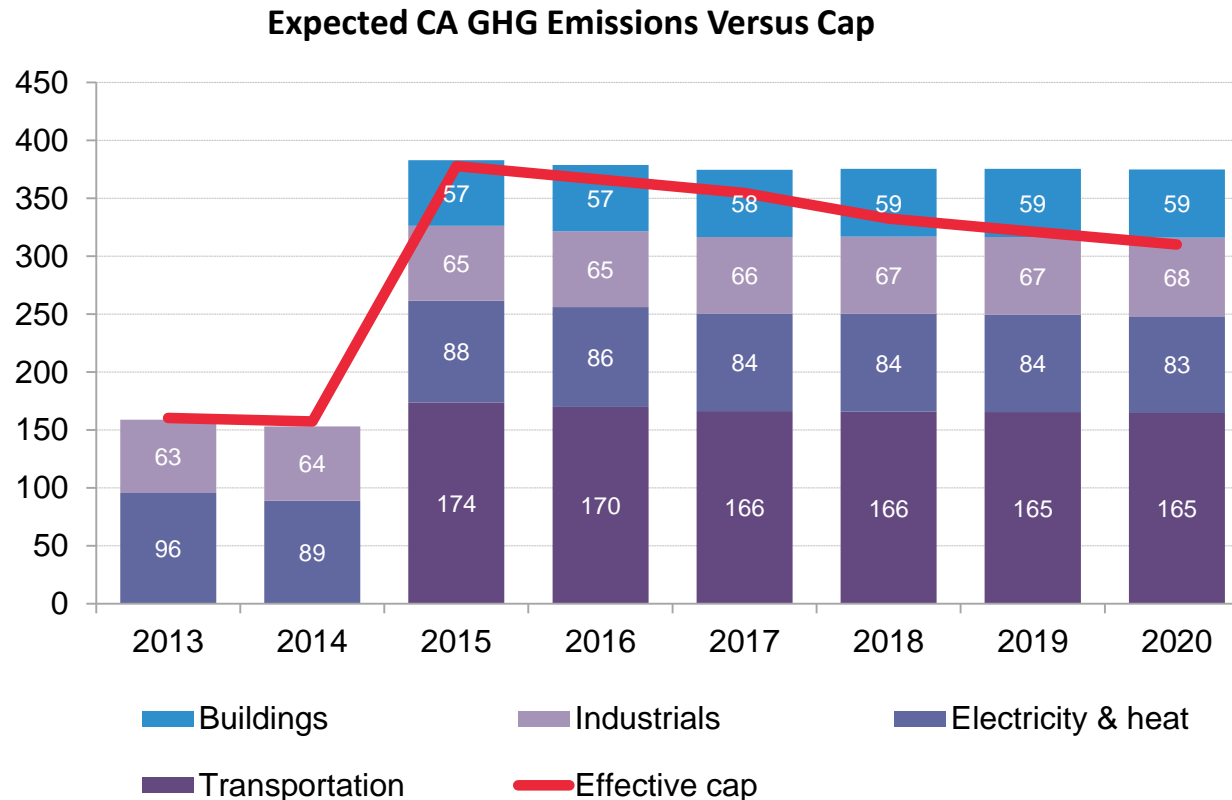
How does the California carbon market work?



Regulated businesses must have an allowance or offset for every ton of greenhouse gas pollution emitted. They may use offsets to meet compliance obligations for no more than 8% of their pollution.

Approximately \$2,650,000,000 in allowances have been sold at California state auctions from November 2012 through November 2014.

How does the CA system reduce emissions?



The cap, or limit on emissions, is set by the number of allowances issued, which declines over time relative to expected emissions.

This forces investment in emission reductions, including offset projects.

Project Development and Maintenance Process

1. Project Feasibility Assessment
2. Project Listing
3. Inventory Design & Installation
4. Project and Baseline Scenario Modeling
5. Initial Offset Project Data Report
6. Third-party Verification, Registry & ARB Review
7. ARB Offset Credit Issuance
8. Annual Offset Project Data Report
9. Periodic Third-Party Verification and ARB Offset Credit Issuance



Key Considerations for Tribes

Key Considerations for Tribes

1. Goodness of fit with forest management objectives and strategic plans
2. 100-year permanence obligation and impact on future land use flexibility
3. Forecast revenue versus opportunity cost, risk and long-term monitoring/maintenance costs
4. Limited waiver of sovereign immunity
5. BIA approval
6. Key risks (not an exhaustive list)
 1. Offset credit invalidation
 2. Inventory quality
 3. Price risk



Working with Project Developers

Considering project developers

- If you decide to proceed with a project, why consider working with an offset project developer?
 - Project developers can contribute:
 - Project finance
 - Expertise in biostatistics and sampling design, growth and yield modeling, harvest scheduling and optimization, carbon modeling, GIS
 - Experience with the offset protocol, third-party verification, and contacts at project registries and the California Air Resources Board
 - Credit sales management
- Tribes with ready capital and extensive in-house forestry and GIS departments could consider developing projects in-house
 - However, given complexity of system, consider an initial project of moderate scale with a project developer as an introduction to the system, then moving project development in-house on subsequent forest projects

What to look for in a project developer

- Experience in the California compliance forest protocol
 - Particular experience with tribal projects
- Strong alignment of interests
- Financial stability
- Duration of commitment to the project
- Credit sales management
 - Track record, system for credit sales among clients
 - Any indemnifications of buyers for offset invalidation?
- Excellent references
- Strong relationships with verifiers, registries and ARB
- In-house forestry expertise
- Happy to work with your timelines, not theirs – no pressure



Conclusion

Conclusion

- The California carbon market has created a significant new commodity market that many Native American tribes are well-situated to benefit from
- The California forest carbon offset protocol can offer meaningful revenue support for conservative, sustainable forest management
- Participating in the market also carries risks, and the forecast revenue from a project must be weighed against the risks
- It is worth considering working with a project developer, but close consideration should be given to counterparty evaluation and selection
- Take your time – this is a long-term decision



www.newforests.com.au
www.forestcarbonpartners.com

Improved Forest Management Carbon Offset Projects on Tribal Lands



A brief discussion of community education, tribal policymaking, and regulatory obstacles

Presentation by:
Michael-Corey F. Hinton

Preliminary Community Considerations

- Community education is key
 - Transparency in process
 - Buy in from community members
 - Consideration of long term stewardship and protection of natural resources
 - 100 year commitment
- Infrastructure to implement improved forest management practices
 - GHG reductions resulting from improved forestry management practices must be “permanent” See *17 C.C.R. 95802(a)(265) and Sec. 95970(a)(1)*
 - Existing forestry management infrastructure should be in place
 - Proficient forestry staff and communication with tribal policy makers is critical to success
 - Training opportunities for the next generation

Tribal Policy Making Considerations

- Transparency and deliberate policy decisions
- Feasibility studies
- Project development partners
 - How should development agreements be structured?
 - Due diligence and market research
- Limited waiver of sovereign immunity
- Consideration of tribal liability and legal representation
- Investing for the future
 - Financial management
 - Protecting against invalidation

Regulatory Issues: State of California

- Before listing:
 - Submission and approval of tribal waiver of sovereign immunity by ARB. 17 C.C.R. 95975(l)(1)-(2)
 - Consent to suit by the State of CA ARB in the courts of the State of California
 - Demonstrate proper adoption of waiver in accordance with tribal law
 - “Proof of federal approval of the Tribe’s participation in the requirements” of the cap-and-trade program or documentation that BIA approval is not required
 - Establishment of registry accounts
- After listing:
 - Ongoing compliance with ARB regulatory requirements for reporting, verifications, and inventories

Regulatory Issues: U.S. Department of the Interior

- 25 U.S.C. 81 (Section 81)
 - Secretarial approval only required where 1) a contract exists with a tribe 2) the contract encumbers tribal land; and 3) the contract term is seven years or more
 - Working with the Regional Office's Solicitor will be necessary
 - Compliance with federal tribal forestry management regulations
 - Corrective Action Plans/Amendment to Forest Management Plans
- Outlook
 - National guidelines for tribal projects are forthcoming
 - Obama Administration supports carbon emission reductions
 - Sustainable economic development for tribes

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Questions?



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Thank You!

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