

Esri Forestry GIS Conference

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Forest Carbon Opportunities Part II: the Finite Carbon “Sifting Extension!”

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Carbon again?



About Us

- **Founded in 2009 to connect forestry and carbon finance**
- **Single-source solution for creating & monetizing carbon offsets**
- **Focus exclusively on US based forest carbon projects**
- **Largest forest carbon developer in the US**
- **Work with TIMOs, REITs, NGO's, Public Agencies, Family Forests, and Consultants**

FiniteCarbon

Number and Size = Experience & Commitment

Listed Climate Action Reserve IFM Projects (Out of 46)		
Developer	Projects	Acres
FiniteCarbon	12	166,200
The Nature Conservancy	5	32,456
AgRefresh (out of business)	4	12,930
Eco-products Fund	3	60,000
City of Arcata	3	2,100
Blue Source	1	2,112

- As of April 26, 2012



The California CO₂e Market

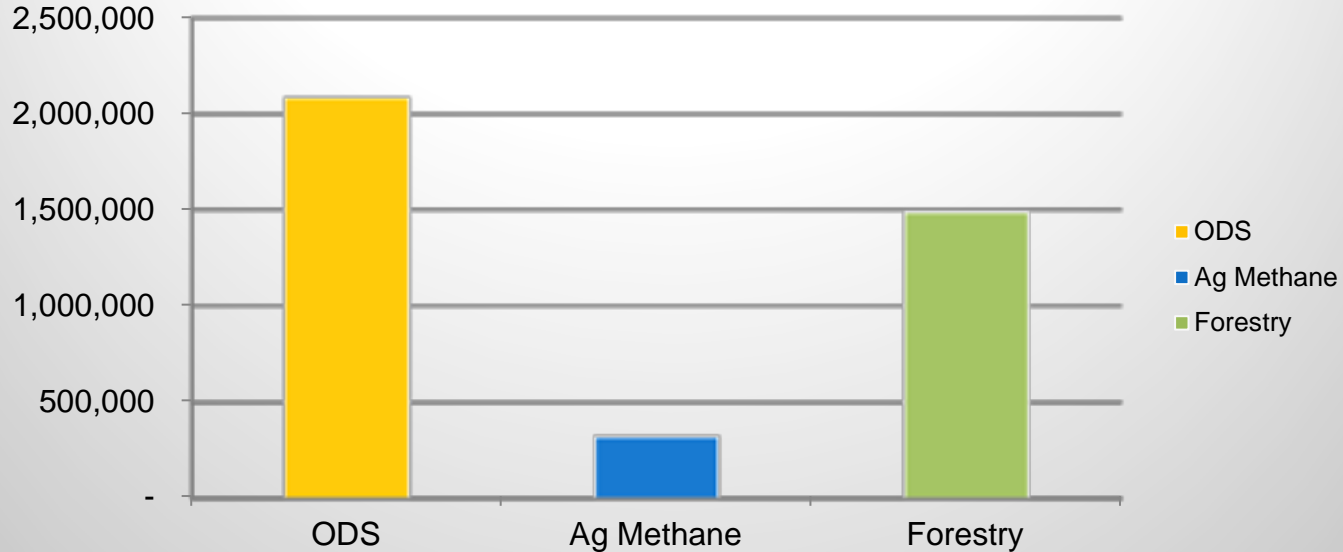
The California Market: Regulated/Compliance

- In October 2011, California ARB officially approved the state's cap-and-trade program
- Offsets allowed to cover up to 8% of emissions
- Four types of projects currently approved for the Compliance Offset Program:
 - Destruction of Ozone Depleting Substances
 - Agricultural Methane (Manure Management Systems)
 - U.S. Forestry
 - Urban Forestry

The California Market: Timing

- **Jan 2012: Official program start date**
- **Aug 2012: “practice auction”**
- **Nov 2012: First auction allowance and opportunity to register ARB offsets**
- **Jan 2013 – Beginning of first compliance period**
- **Jan 2015 – Beginning of second compliance period. Transportation fuels enter the cap and triple the size of the market**

The California Market: Current Offset Supply/Demand



- ***About 220 million offsets will be needed for California alone between 2012 and 2020***

The California Market: Price Estimates

California Carbon Market Analyst Price Forecasts	
Barclays Capital	Allowances will start at \$12 in 2012, average \$40 from 2015-2018 and \$73/allowance from 2018-2020
Reuters	Allowances will average \$36/allowance from 2012-2020
	Offsets will average \$7-10 from 2012-2014, \$13-24 from 2015-2017, and \$24-46 from 2018-2020
Bloomberg	Allowances will average \$37 from 2012-2020

- **Current ARB-eligible CAR forestry offset prices are ~\$8**
- **Current ARB offset future contract prices are \$11 for delivery in December 2013**

A topographic map showing green and yellow contour lines, with a small '5074' label visible. Below the map is a grey gradient background.

With prices like that.....

- **Strategy: optimize management for timber as well as carbon revenue**
- **Objective: maintain or increase baseline timber return while positioning identified properties to capture upside potential from compliance offset sales**
- **Implement: Investigate the potential to increase total timberland returns with Finite Carbon**

No-cost, No-obligation Feasibility Studies (really?)



- **Finite Carbon Project Development Life Cycle**



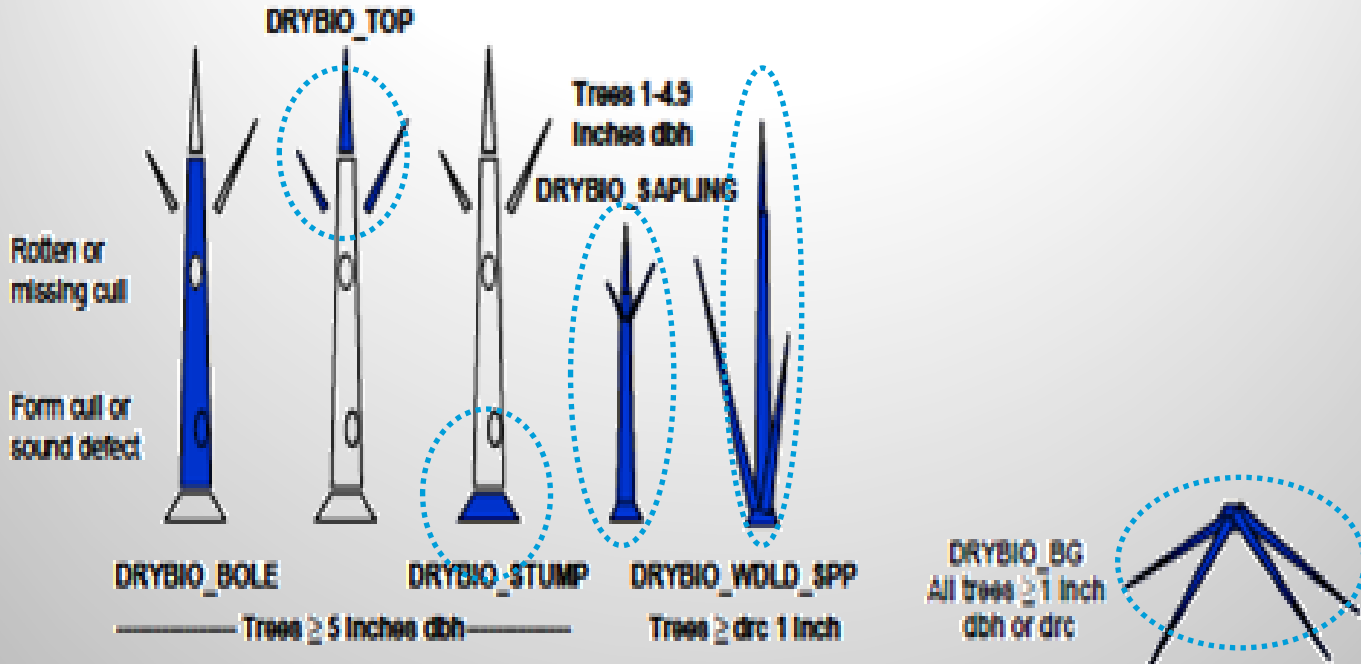
And now, the “Sifting Extension!”

A topographic map showing green and yellow contour lines, with a small number '5074' visible in the upper left. Below the map is a solid grey background.

Identifying Qualified Properties within the Portfolio

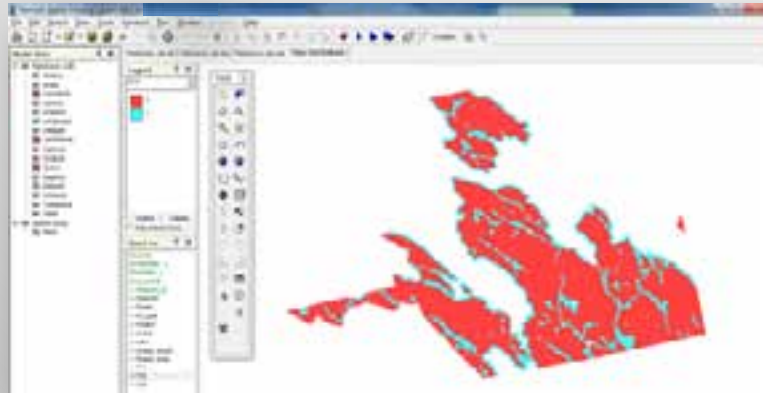
- **Three main strategies to optimize timber and carbon management**
- **Not limited to these three, but they are most common because they fit well with timberland owners' goals and objectives**
- **Whether it's one of the strategies or a combination, we are usually able to apply them and discover at least one property in every timberland portfolio that makes a “good” forest carbon project.**

Strategy 1: Untapped Asset Class



Strategy 2: Special Lands

- **Most timberland portfolios contain non-core or non-strategic lands**
- **Forest carbon projects on special lands produce significant cash yields that would otherwise only carry costs or generate little to no revenue.**



Example: implementing a forest carbon project on SMZs (aqua)

A topographic map showing green and yellow terrain with contour lines. The number '5074' is visible on the map.

Strategy 3: Market Conditions

- **Forest carbon projects create revenue diversity and options to produce more stable yields**
- **Particularly true when the value of carbon competes with or exceeds the value of timber (optimization opportunity)**
- **Timber/carbon optimization utilizes comprehensive forest carbon inventory accounting**

Eligibility + Viability = Project Feasibility

- Lower 48 states
- Start date: January 1, 2007 +
- Certified (FSC, SFI or Tree Farm)
- Private forests (mostly)
- 5,000+ “qualified” acres (meet Strategy 1-3)
- Strategy 1: Untapped Asset Class, +/-or...
- Strategy 2: Special Lands, +/-or...
- Strategy 3: Market Conditions
- Current stocks >/= region average, +/-or...
- Harvests < Growth

Eligibility

Viability



Thank you!

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