

Forest Carbon Works

Exploring opportunities in carbon for Vermont forest owners



Zach Barbane
Director of Projects and Operations



**Forest
Carbon**
WORKS

About ecoPartners



Expert developers and technical consultants for domestic and international forest carbon projects

California's Compliance Market

Cap-and-trade system regulated by the CA Air Resources Board

Legislative support recently signed to continue system until 2030

Allowances have price floor, increasing annually

- Long-term demand
- Reliable pricing

Results of system show a decrease in GHG emissions and large economic contributions

Compliance vs Voluntary Markets

Compliance (CARB)

- Intensive reviews
- Backed by regulation
- Minimum 25 years of crediting and 100 years of monitoring
- Price floor

Voluntary

- Shorter commitment
- Variability in market
- Lower cost of development

Barriers to Small Landowners

(Traditional Project Development)

Inventory

- Different from traditional timber inventories
- Time and cost intensive

Development

- Cost intensive
- Requires specialization (modeling, volume/biomass calculations, documentation, knowledge of methodologies/standards, navigating registries/state/marketplaces)

Verification

- Comprehensive third party audit
- Due to rigor of program, high costs

Forest Carbon Works as the Solution!



Innovative smartphone technology

Helping small forest owners to access the benefits of the carbon market & get paid for their conservation efforts

Plot ID	Plant Number	Type	File Name	Version	Circle ID	Laser Distance (ft)	Fresh (kg)	Time
1	0	Border Tree	IMG_20160625_090040.jpg	0	2772	2.6	-12.354048	6/25/2016 9:00 AM
1	1	Border Tree	IMG_20160625_090053.jpg	0	2772	19.9	-8.219586	6/25/2016 9:00 AM
1	2	Border Tree	IMG_20160625_090056.jpg	0	2772	11.2	-8.917649	6/25/2016 9:00 AM
1	3	Border Tree	IMG_20160625_091022.jpg	0	2772	27.2	-8.045157	6/25/2016 9:01 AM
1	4	Border Tree	IMG_20160625_091049.jpg	0	2772	19.4	-8.2522657	6/25/2016 9:01 AM
1	5	Border Tree	IMG_20160625_091111.jpg	0	2772	9.9	2.451147	6/25/2016 9:01 AM
1	6	Border Tree	IMG_20160625_091119.jpg	0	2772	25.5	-1.3900646	6/25/2016 9:01 AM
1	7	Border Tree	IMG_20160625_091223.jpg	0	2772	16.3	-6.521008	6/25/2016 9:01 AM
1	8	Border Tree	IMG_20160625_091730.jpg	0	2772	25	-6.380384	6/25/2016 9:01 AM
1	11	DBH	IMG_20160625_092012.jpg	0	2772	7.8	-5.377394	6/25/2016 9:02 AM
1	2	DBH	IMG_20160625_092222.jpg	0	2772	8.4	-1.993444	6/25/2016 9:02 AM
1	3	DBH	IMG_20160625_092331.jpg	0	2772	7.5	0.385886	6/25/2016 9:02 AM
1	0	Bolt	IMG_20160625_092637.jpg	0	2772	89.9	-4.392405	6/25/2016 9:06 AM
1	1	Bolt	IMG_20160625_092639.jpg	0	2772	89.8	11.66208	6/25/2016 9:06 AM
1	2	Bolt	IMG_20160625_092644.jpg	0	2772	7.6	31.20546	6/25/2016 9:06 AM
1	3	Bolt	IMG_20160625_092646.jpg	0	2772	96.2	51.127697	6/25/2016 9:06 AM
1	4	Bolt	IMG_20160625_092707.jpg	0	2772	71	-6.8954322	6/25/2016 9:07 AM
1	5	Bolt	IMG_20160625_092719.jpg	0	2772	71.2	22.02975	6/25/2016 9:07 AM
1	6	Bolt	IMG_20160625_092719.jpg	0	2772	33.3	38.591343	6/25/2016 9:07 AM
1	7	Bolt	IMG_20160625_092713.jpg	0	2772	33.3	56.26157	6/25/2016 9:07 AM
2	0	Border Tree	IMG_20160625_091027.jpg	0	2772	2.7	-7.171321	6/25/2016 9:10 AM
2	1	Border Tree	IMG_20160625_091029.jpg	0	2772	4.3	-8.368726	6/25/2016 9:10 AM
2	2	Border Tree	IMG_20160625_091034.jpg	0	2772	8.2	-13.862799	6/25/2016 9:10 AM
2	3	Border Tree	IMG_20160625_091036.jpg	0	2772	5.8	-13.97631	6/25/2016 9:10 AM
2	4	Border Tree	IMG_20160625_091043.jpg	0	2772	7.9	-11.815443	6/25/2016 9:10 AM
2	5	Border Tree	IMG_20160625_091042.jpg	0	2772	6.5	-12.833663	6/25/2016 9:10 AM
2	6	Border Tree	IMG_20160625_091045.jpg	0	2772	6.4	-14.3915255	6/25/2016 9:10 AM
2	7	Border Tree	IMG_20160625_091047.jpg	0	2772	2.9	-8.448744	6/25/2016 9:10 AM
2	8	Border Tree	IMG_20160625_091041.jpg	0	2772	4.9	-15.363032	6/25/2016 9:10 AM
2	9	Border Tree	IMG_20160625_091104.jpg	0	2772	12.2	-6.6396995	6/25/2016 9:11 AM
2	10	Border Tree	IMG_20160625_091111.jpg	0	2772	24.7	-9.6127121	6/25/2016 9:11 AM
2	11	Border Tree	IMG_20160625_091122.jpg	0	2772	27.4	-17.379105	6/25/2016 9:11 AM
2	12	Border Tree	IMG_20160625_091129.jpg	0	2772	31.1	-19.26839	6/25/2016 9:11 AM
2	13	Border Tree	IMG_20160625_091132.jpg	0	2772	26.7	-17.573332	6/25/2016 9:11 AM
2	14	Border Tree	IMG_20160625_091135.jpg	0	2772	28.4	-18.444286	6/25/2016 9:11 AM
2	15	Border Tree	IMG_20160625_091202.jpg	0	2772	18.4	-2.848883	6/25/2016 9:12 AM
2	16	Border Tree	IMG_20160625_091223.jpg	0	2772	15.9	-2.596798	6/25/2016 9:12 AM

Advanced inventory data processing

... and more!

FCW: Creating Better Access

Cost Minimization

- Spread fixed-costs over multiple projects in region
- Reduce inventory, development, and verification costs
- Standardized platform (easy online application)
- No major upfront costs or commitments required

Remove Complexity

- Paid per acre, per year
- Six-year renewable, concurrent terms
 - FCW handles all heavy lifting
- Automated reporting to state
- Standardized prerequisites

FCW Prerequisites & Responsibilities

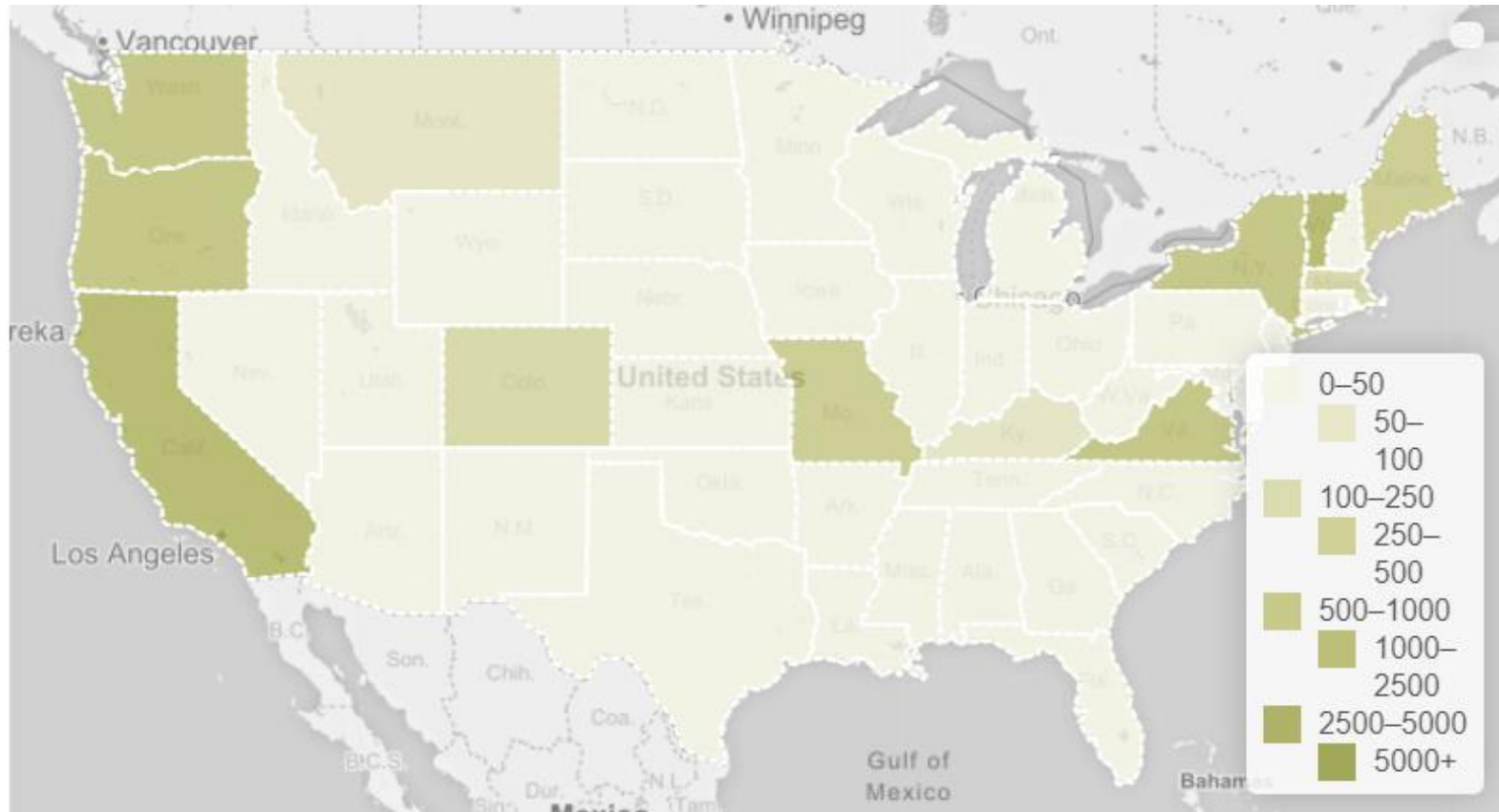
Prerequisites

- Minimum 40 acres private land in contiguous USA
- Must own timber rights
- Harvests must be legally allowed but not legally required
- All owners must enroll all forested ownerships

Responsibilities

- Long-term commitment (125 year minimum)
- Provide access to FCW team & forest technicians
- Coordinate commercial harvests with FCW
- Annual reporting and periodic re-measurement

Our Progress



- Free inventories services conducted for successful applicants
- Inventory data collected on approx. 9,000 acres

Proof of Concept

Stewart Family Forest Project: Piloted Success



- 120 acres east of Portland, Oregon
- Fourth generation family forest
- Being paid approx. \$10K annually for first 6 year period
- Project recently passed comprehensive third party audit – credits soon to be issued

Regional Progress



The Northeast

- **15 properties** inventoried since 2018
- Properties range in size from **19 acres to 800 acres**

Vermont

- **15 landowners** with properties cruised or in the pipeline
- Properties range in size from **73 acres to 800 acres**
- High amount of organic interest

Looking Forward: FCW in Vermont

Growth & Access

- Expansion into region already planned
 - Office and full-time dedicated team by end of 2021
 - Targeting 10 regional projects by 2021, additional 10+/year thereafter
- Provide local support for accessing the market
- Educate landowners & forestry professionals about management options
- Become anchor for regional carbon interest

Collaboration

- Grow relationships within the community
 - Land trusts, landowner groups, forestry professionals, wood products groups,
 - Help foresters to expand available services for their clientele



Thank You!



www.forestcarbonworks.org
zbarbane@ecopartnersllc.com
415-634-4650



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