

















































AND NATURAL RESOURCES



















































Science. Restoration. Partnership.















Agenda

TUESDAY, OCTOBER 22

8:30 am Agenda Review, Reflections from Day 1

8:35 am Success Stories 3

9:00 am Climate Crisis and Forest Conservation

10:00 am Break

10:20 am Climate Crisis (continued)

11:00 am Partnership Initiatives Updates 3

11:15 pm Strategic Direction

12:20 pm Closing Thoughts

12:30 pm Adjourn and Lunch



Success Stories 3:

Lauren Imgrund, Deputy Secretary, Pennsylvania Department of Conservation and Natural Resources

Rob Etgen, President, Eastern Shore Land Conservancy

Kristin Thomasgard, Readiness and Environmental Protection Integration (REPI) Program Director, Department of Defense

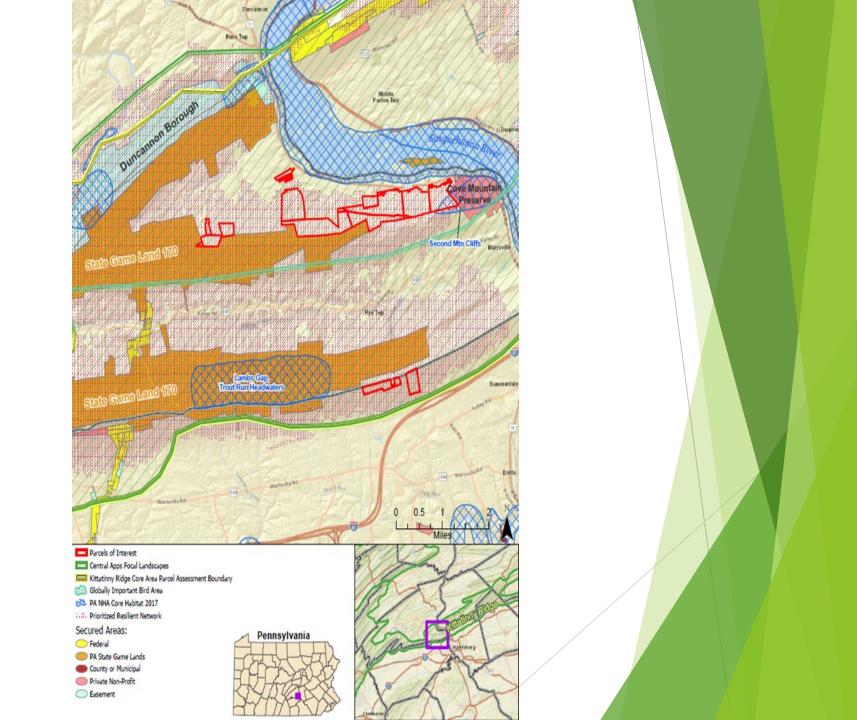
Forest Conservation and Climate Resiliency on Cove Mountain

Lauren S. Imgrund

Deputy Secretary for Conservation and Technical Services Pennsylvania Department of Conservation & Natural Resources

DCNR Grants on Cove Mountain

- DCNR has recently provided funding to TNC for 2 projects on Cove Mountain
 - Conservation easement on approximately 1,592 acres
 - Acquisition of approximately 352 acres
 - ► These parcels are adjacent to State Game Lands and The Appalachian Trail
- ► TNC is in negotiations to purchase 15 parcels totaling 1204 acres that would connect the Cove Mountain Preserve with State Game Lands, The Appalachian Trail and the 1,592 acre conservation easement
 - Upon purchase, this property will qualify for TNC's Working Woodlands program



TNC's Working Woodlands Program: Potential for Cove Mountain

- TNC's Working Woodlands Program offers forest landowners with 2,000+ acres opportunities to ensure sustainable forest management while generating revenue from improved timber management and from the growing carbon market.
- Working Woodlands provide three key benefits:
 - Carbon Credit Revenue
 - Forest Certification
 - Working Forest Conservation Easement



Climate Resiliency on Cove Mountain and the Kittatinny Ridge

- The Kittatinny Ridge has been identified as a climate resilient landscape meaning it is an essential connection through Pennsylvania for migrating species and plays a key role in preserving the forests, clean streams and biodiversity through the entire Appalachian chain
- ► These key features have attracted more attention to the Kittatinny Ridge as scientists and conservationists find the landscapes that will be vital for the ability of our natural world to adapt to climate change





DCNR's Newest Conservation Landscape: The Kittatinny Ridge

- With strategic planning currently underway, the landscape has already outlined six overarching goals:
 - Conserve land, protecting more than 700 of the highest priority parcels
 - Conserve native habitat and wildlife to support species diversity
 - Share conservation research including regarding habitats, management activities, history and communities
 - Provide clean and plentiful water
 - Protect ridge and trail landscapes through municipal action such as planning and zoning tools
 - Community engagement to raise awareness about the connection between natural resources and economic revitalization



The Climate Crisis and Forest Conservation

Peter Stein, Managing Director

The Lyme Timber Company LP 23 South Main St. | Hanover NH | 03755 www.lymetimber.com

Ph: (603) 643-3300







The Climate Crisis and Forest Conservation

Chesapeake Conservation Partnership 10th Annual Meeting

October 22, 2019











The Lyme Timber Company

About Lyme

The Lyme Timber Company LP is a private timberland investment management organization (TIMO) that focuses on the acquisition and sustainable management of forest lands with unique conservation values in the US and Canada.

Lyme's portfolio includes approximately 800,000 acres of forestland and rural real estate. Major timberland holdings are located in the Northeast, Appalachian region, California, and US south. Lyme recently announced the acquisition of all of Weyerhaeuser's lands in Michigan.

The Lyme team specializes in the negotiation and sale of working forest conservation easements that restrict development on lands but allow income generation from sources such as sustainable timber harvesting, recreational leasing and the sale of carbon-offset credits. To date, Lyme has permanently conserved approximately 820,000 acres of its historical portfolio through the sale of working forest conservation easements and other conservation instruments.

Lyme also provides consulting services to private grant-making foundations and currently advises the Doris Duke Charitable Foundation, Donnelley Foundation, and William Penn Foundation.

About Peter Stein

Peter joined Lyme in 1990. He has significant experience in conservation-oriented forestland and rural land purchases and dispositions. Peter develops conservation sale strategies on properties being evaluated or managed by Lyme and also leads Lyme's conservation advisory business.

Previously, Peter was Senior Vice President of the Trust for Public Land. He is the co-founder of the Conservation Finance Network and the International Land Conservation Network. In addition, he is a former Board Chair of the Land Trust Alliance and served as a founding Commissioner of the Land Trust Accreditation Commission.



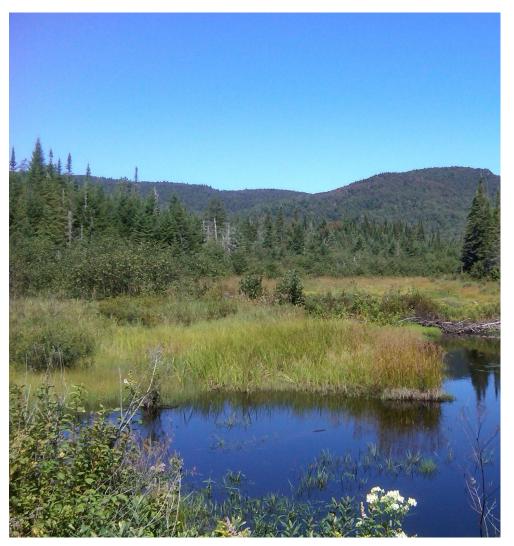








Lyme's Experience / Track Record



- Completed Working Forest Conservation Easement transactions in 12 States and 1 Canadian province.
- Active California Air Resources Board carbon offset projects in Tennessee, Maine, West Virginia, and soon in Alabama, Wisconsin, and Michigan.
- Created "fund-owned" operating companies in California, New York, Tennessee, Florida, West Virginia, Pennsylvania, and soon to be in Michigan.
- Supply chain investments in Pennsylvania and West Virginia.
- Conservation fee sales in Wisconsin, Maine,
 New Hampshire, Quebec, and New York.
- Created five co-mingled private equity funds for forestland and ecosystem service investments, vintages 2001, 2005, 2010, 2014, 2018.
- Launched the Lyme Conservation Opportunities
 Fund in January 2019.

LYME TIMBER









Natural Climate Solutions: Theory of Change

"Natural climate solutions are vital to ensuring we achieve our ultimate objective of full decarbonization and can simultaneously boost jobs and protect communities in developed and developing countries."

Christiana Figueres
Former Executive Secretary,
United Nations Framework Convention on Climate Change

All the ways **we** can deliver natural climate solutions:

How:

- Conservation of working landscapes
- Avoided habitat conversion and degradation
- Improved forestry
- Reforestation and restoration
- Fire management
- Soil health improvements
- Food production and supply chain sustainability
- Avoid sprawl-like development patterns

We:

- Land Trusts
- Private Landowners
- Public Agencies
- Policy NGOs
- Citizens and Electeds













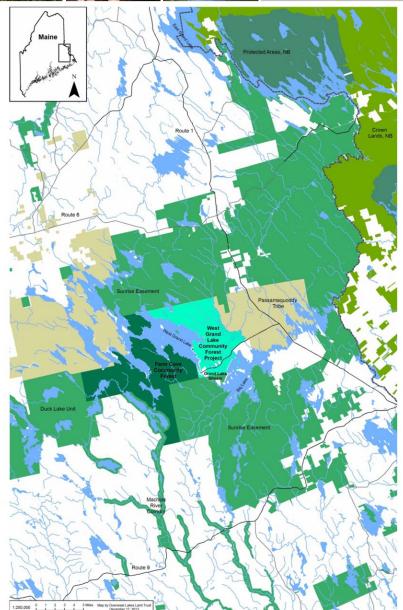
Grand Lake Stream, Maine





















In 2008, The Lyme Forest Fund purchased 22,000 acres in southeastern Maine, known as **Grand Lake Stream**

Deal Overview:

December 2008

July 2012

2014 and 2016

June 2016

Property Purchase

Conservation Easement Sale

Carbon Credit Sales

Encumbered Property Sale as Community Forest

Lyme pays \$19.3 million through a combination of fund equity, option payment from land trust partners and New Markets Tax Credit financing

State pays \$7.3 million for conservation easement over entire property, with funding from the Federal Forest Legacy Program and Land for Maine Future's funding from the State of Maine

In partnership with carbon developer, Lyme sold carbon credits for Improved Forest Management (IFM) through the California Air Resources Board which administers AB32 - California's

GHG Can & Trade

Downeast Lakes Land Trust (DLLT) purchased encumbered land for use as a community forest using proceeds from carbon sales on adjacent property, plus philanthropic support, plus a NRDA payment

Lyme conducts sustainable timber harvest activities in accordance with conservation easement requirements











Based on significant conservation priority and potential for a community forest, Downeast Lakes Land Trust approached The Lyme Timber Company about purchasing the property to conserve it



Conservation Attributes

- Adjoining more than 1,000,000 acres of existing conserved lands in Maine and New Brunswick
- 17 miles of lake shoreline protected
- 42 miles of interior streams protected
- Over 3,000 acres of wetlands forever wild
- Deer wintering areas and other critical wildlife habitats conserved

Community Development Attributes

- Sustainable timber harvests maintaining jobs in the woods
- Public recreation opportunities
- Local town acquisition of 172 acres for future mixed use development, affordable workforce housing, a transfer station and light industry
- Creation of an expanded community forest, providing community control over natural resource management decisions











\$19.3 million purchase price

\$4.8 Fund equity

Investors include high net worth individuals, foundations, other endowments and pension funds

Investors expect a market rate return

\$12.5 million bridge financing through the Federal New Markets Tax Credit Program

NMTC financing available because property is located in economically distressed census bureau. Financing achieved in partnership with a Community Development Financial Institution (CEI) \$2.0 million option payment from DLLT

Provides DLLT the exclusive option to purchase conservation easement and encumbered property

Option payment credited towards purchase of conservation easement and encumbered property











The Lyme Conservation Opportunities Fund (COF) seeks to generate attractive riskadjusted returns through strategies that achieve durable environmental benefits

Degradation of natural resources

Legislation and regulation

Marketbased compliance Investments that deliver environmenta I benefits

Investment thesis:

- Environmental markets can be inefficient for their nascence, regulatory complexity, and capital requirements
- Attractive risk-adjusted returns exist in these markets for investors that can source, evaluate, and manage investment opportunities and deliver the durable environmental benefits for which the markets were created

Impact thesis:

- Environmental markets help mitigate climate change and stem environmental degradation at scale by attracting financially motivated investors
- Investments protect high conservation value real estate and deliver important ecosystem services, including water quality protection, carbon sequestration, and habitat protection











The COF targets investments where public interest and government regulation have created markets for ecosystem services and conservation outcomes

Mitigation Banks

- A mitigation bank is a degraded property restored to its original ecological condition.
- Federal laws require public and private entities to mitigate the ecosystem impacts of development and infrastructure projects by restoring ecosystems similar to those damaged.
- The owner of an approved mitigation bank can sell credits to public and private entities who need to mitigate their nearby impacts.

Forest Carbon Sequestration

- Trees absorb carbon dioxide from the atmosphere and store carbon in biomass and soils.
- Many companies (utilities, airlines, and manufacturers) that emit carbon now have regulatory or voluntary commitments to reduce emissions.
- Forest landowners can sell carbon offset credits in exchange for increasing a forest's carbon dioxide absorptive capacity and conserving forest land at risk of development or degradation.

Conservation Real Estate

- Regulation and public support for conservation creates demand for real estate that can become protected open space (e.g. parks and state forests), sites for renewable energy projects (e.g. wind and solar), and buffers for streams and watersheds.
- Thoughtful investors can identify properties where conservation will drive future use.
- Investment outcomes can be realized through conservation easement and fee sales to government agencies, long-term leases with wind and solar developers, and other transactions that yield conservation outcomes.











In two of its three sub-strategies, Lyme has exclusive partnerships with best-in-class firms that have extensive experience and a track record of successful investments with Lyme

Mitigation Banks

ECO-CAPITAL ADVISORS, LLC

- Four investment professionals with over 35 years of collective private equity investment and asset management experience focused on ecosystem services
- Experience includes investment in and management of over 100 discrete mitigation assets spread across U.S.
- National network of operating partners and environmental consultants

Forest Carbon Sequestration

Finite Carbon 4 6 1

- Experienced team, including President, Sean Carney, and 10 professional foresters and carbon experts
- Leading developer and supplier of compliance forest carbon offsets in the US with 55 million offsets issued by the California Air Resources Board worth over \$600 million
- Expertise in all aspects of project development, registration, and monetization

Conservation Real Estate



- History of providing timely capital and the expertise to realize value when rare opportunities to achieve a conservation outcome surface
- Experience in structuring sales, projects, leases, and agreements











Forest carbon projects capitalize on the carbon sink that forests provide to mitigate climate change and enable emitters with compliance obligations to offset emissions

Damage caused by CO₂ emissions



Companies emit CO_2 , causing pollution and contributing to global warming and climate change. The environmental and social costs of CO_2 emissions are massive, extensive, and grounded in scientific evidence.

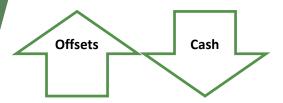
Regulatory requirement to mitigate



In 2013, California implemented a statewide cap on emissions, imposing annual emissions obligations to meet its targets for reducing statewide emissions. Utilities, oil refineries, and heavy manufacturers inside the state, as well as those in neighboring states that sell gasoline and electricity to California customers, are required to comply.

Demand for carbon offsets

Companies who emit carbon and have a regulatory or voluntary commitment to reduce emissions can buy carbon offsets to achieve their targets.



Forests absorb CO₂



Trees absorb CO₂ from the atmosphere and store it in biomass and soils.

Forest managed for CO₂ absorption



Forest landowners can generate carbon offsets by committing to increase a forest's absorptive capacity or protect forestland at risk of development or degradation.

Generation of carbon offsets

Forest offset projects that comply with the California Air Resources Board protocols and are listed in the approved project registry can sell offsets into the marketplace.











Plan to Aggregate Forest Land in Carbon Offset Projects

Elevate

Develop

Attract

Pick away

Aggregat

Roll Out

Elevate the carbon conversation in Vermont

Develop a robust answer to where and how carbon is viable, and share it Attract philanthropy to sticking points

Pick away at the key issues related to scale

Aggregate parcels into demonstration project beginning in late 2018

Develop
additional
demonstration
projects,
alongside
statewide
education,
convening and
policy work
during 2019 –
and beyond



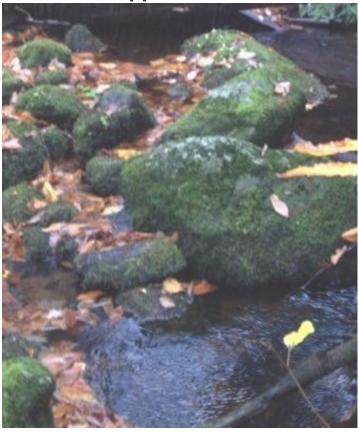








Phase Two Approach



Demonstration Project with Cold Hollow to Canada

- 1. Stakeholder engagement
- 2. Transparency
- Generate transferrable lessons and information

Dissemination, Training, and Referrals

- 1. For landowners
- 2. For county and consulting foresters; others Preliminary Policy Recommendations (State, Regional):
 - 1. RGGI
 - 2. Current Use Value Appraisal
 - 3. Governor's Initiatives on Climate Change
 - Linkages to fragmentation/Act 250/land conservation legislation











Tactical considerations



- Multiparty participation
 - VLT, TNC, SIG, Cold Hollow to Canada
- Aggregation Entity Infrastructure
 - Structuring for 40 years of management
 - Working capital contribution
- Transferring carbon rights
 - By deed or by contract
- Mitigating downside
 - Tax treatment
 - Buffer pool











Where we are now

- Cold Hollow to Canada Demonstration
 - 14 landowners on board
 - 7978 acres represented
- Development terms reached between VLT, TNC & SIG
- Formed aggregation entity: the Vermont Forest Carbon Company
- Inventory complete, contracts with landowners
- Received commitment for first purchase













Summary: Emerging & Disruptive Opportunities

Near Term

- California ARB compliant offsets
- Aggregation Vermont Land Trust
- TNC's Working Woodlands Projects in PA,
 NY, and elsewhere
- CORSAIR UN mandate for airlines, effective 2021
- Voluntary Carbon Markets

Near Future

- Soil Carbon
- Changes in California Compliance Market
- Regional Greenhouse Gas Initiative
- NY State Climate Action Plan



Turn to a Neighbor..

Work individually using your worksheet

Turn to a neighbor and discuss

Be prepared to share your best ideas

Conversation Questions

How might the CCP dramatically increase carbon sequestration in the watershed through the use of carbon markets and other funding streams?

Can you identify any locations or opportunities where we might pursue this strategy?



Initiative Updates 3: Private Capital Investment Conservation Finance Intensive Workshop

Roundtable on Private Capital and Land Conservation

3 Working Groups Established First Meetings on Friday October 25

- 1. State Restoration Policy including Stormwater.
- 2. Working Lands Conservation/Restoration, including Environmental Markets.
- 3. Innovative Policies and Structures.

Chesapeake Conservation Finance Intensive Workshop

December 16-18, 2019 at NCTC

Help mid-career professionals utilize innovative and effective financing strategies for land and resource conservation, restoration, and stewardship.

Content:

- introduction to conservation finance
- public and private funding
- environmental credit markets
- water funds
- carbon finance
- performance-based contracting and partnerships
- conservation investing

Application Deadline: Friday, October 25



Strategic Direction

Table Talk

Discuss the proposed actions at your table

What would you prioritize?
What's missing?
What needs refinement?

Using stickies, dots, and markers, annotate the posters.



Closing Thoughts