New York’s State Forest Action Plan
ESFPA Regional Meeting

Division of Lands and Forests

September 2020
What is a State Forest Action Plan?

A 10-year strategic plan for New York’s forestry community, spearheaded by DEC’s Division of Lands & Forests.

A plan that each state submits to the US Forest Service every 10 years in order to qualify for federal funding, under the federal Farm Bill.
Why would the State Forest Action Plan be important to you?

• Helps NY focus on the most important work or programs.

• Identifies specific regions or issues that could benefit from targeted attention.

• Helps DEC and its partners determine their role in addressing the strategies of the State Forest Action Plan.
Forests as Healthy Forests for People

People for Forests

STATE FOREST ACTION PLAN

Healthy Forests

Forests for People
Forests in New York

18.6 million acres of forest

74%, or 13.6 million acres, of privately owned forestland

3.1 million acres combined between Adirondack and Catskill Preserves (managed by DEC) and New York State Parks system

787,000 of state forestland outside of Blue Line managed for multiple use by DEC

~900,000 acres of DEC held conservation easements statewide

~1.3 million acres of urban canopy cover
## Forests in New York

### New York Forested Acres by Ownership and Status*

<table>
<thead>
<tr>
<th>Owner class</th>
<th>Timberland</th>
<th>All reserved forest land</th>
<th>All forest land</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Federal Lands</td>
<td>109,306</td>
<td>39,390</td>
<td>148,696</td>
</tr>
<tr>
<td>State</td>
<td>1,062,173</td>
<td>3,021,620</td>
<td>4,083,794</td>
</tr>
<tr>
<td>County and municipal</td>
<td>561,085</td>
<td>135,052</td>
<td>696,137</td>
</tr>
<tr>
<td>Private</td>
<td>13,652,193</td>
<td>0</td>
<td>13,677,940</td>
</tr>
<tr>
<td>Total</td>
<td>15,400,403</td>
<td>3,196,062</td>
<td>18,622,212</td>
</tr>
</tbody>
</table>

*US Forest Service FIA Data for New York, 2019
Climate Leadership and Community Protection Act (CLCPA) – Overview

- Carbon neutral economy, mandating at least an 85% reduction in emissions below 1990 levels
  - Remaining 15% can be met by 2050 through sequestration.
- 40% reduction in emissions by 2030
- 100% zero-carbon electricity by 2040
- 70% renewable electricity by 2030
- 9,000 MW of offshore wind by 2035
- 6,000 MW of distributed solar by 2025
- 3,000 MW of energy storage by 2030
- 185 TBtu on-site energy savings by 2025
- Commitments to climate justice and just transition
Forest Carbon in New York

- New York’s Forest are sink for carbon, meaning they remove CO2 from the atmosphere and store it in above ground biomass (trees), below ground biomass and soil.
- The forest C pool has gradually increased over time from about 1,802 MMt C in 1990 to 1,976 MMt C in 2018.
- The strength of the C sink, or the rate of net CO2 removal or flux per year from the atmosphere by growing vegetation, has decreased slowly but steadily at the statewide level since 1990.
- Above ground biomass (trees) explains most of the overall change.
- Diminishing rate can be explained through forest loss, and forest age.
- Forestry can be used to manipulate the above ground biomass within the forest pool.
- Can improved forestry practices also increase the rate of sequestration per year and overall size of the forest carbon pool in New York?
CLCPA: An opportunity for New York’s Forest Sector

- Increase effectiveness of the NY forest sector to sequester and store carbon through:
  - Avoided Conversion
  - Improved Forestry Practices
  - Afforestation or Reforestation
  - Harvested Wood Products
To influence the carbon in New York’s forests we must improve management of private forest lands

- 74% of New York’s forests are privately owned
- Nearly 700,000 landowners own 13.6 Million Acres (National Woodland Owner Survey, 2018)
  - 9.3 Million Acres of 10 acres or more
  - 187,000 private landowners with 10 acres or more.
  - ~1.7 million acres covered by current forest stewardship plans and forest tax law plans
- Only 25% of surveyed private landowners in NYS have used a forester for a harvest
Current DEC Programs to Protect Forestland and Avoid Conversion

- Land Conservation
- Acquisition – fee and conservation easement
  - State – DEC and State Parks
  - Private – land trust
- Funding
  - State
    - EPF – State Acquisition, Municipal Parks, Farmland Protection – CEs for Land Trusts, Community Forest
  - Bond Act
  - Federal
    - Forest Legacy, Community Forest, Pittman Robertson, etc.
- Tax incentives
  - Conservation Easement Tax Credit (NYS)
  - Land Donation Tax Credit (federal)
  - Forest Tax Law (NYS)
DEC programs to assist landowners with management

Private Lands
- Forest Stewardship Program
- Forest Tax Law (480a)
- Environmental Quality Incentives Program (EQIP)
- Cooperating Forester Program
- Regenerate NY?

Other
- Buffer in a Bag
- Trees for Tribs
SFAP: Potential Actions for Private Forests and Climate

• Provide incentives and a policy and regulatory climate that promotes forest product markets while it supports sustainable forestry.

• Work with public and private partners to create new financial and tax incentives to offset the costs of ownership and forest management for private forest landowners.

• Develop and grow the newly created “Regenerate NY” cost-share program to improve forest regeneration on private forestland throughout New York State. This New York State funded cost-share program.

• Develop and grow the Forest Conservation Easement Land Trust Grants program to protect private forestland. This program can focus on protecting smaller parcels, including working forests, from development.
SFAP: Potential Actions for Private Forests and Climate

• Increasing the number of forested acres through planting and the amount of carbon sequestered on those acres by
  • Planting marginal shrublands that have stagnated (overrun by invasive)
  • Maintaining forest corridors and buffers
  • Reforest areas that have been devastated by insects or disease through planting
SFAP: Potential Actions for Private Forests and Climate

- Support the Climate and Applied Forestry Research Institute at SUNY ESF

- CAFRI is a multi-disciplinary team of forest, energy and climate experts based at SUNY ESF who provide policymakers and the public with science-based and practical solutions to address climate change
  - to **study** the role our state’s forest ecosystems can play in climate adaptation and mitigation, including the complexities of how a changing climate, intersecting with other simultaneous drivers of change, will shape this role;
  - to **apply** cutting-edge science and emerging technology to address our state’s multifaceted opportunities and challenges in forest and climate stewardship;
  - to **translate** research outputs into decisions and actions, by engaging public and private sector partners in outreach, education, technology transfer and regulatory efforts;
  - to **guide** and **support** a statewide model of adaptive management of our forest landscapes to sustain their ecosystem services for current and future generations.

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KEY POINTS
1. Atmospheric CO\(_2\) levels are rising primarily because humans have been using carbon that has been locked up in the Earth for millions of years (e.g., geologic carbon) to produce products and energy.
2. Forest products and bioenergy primarily use biogenic carbon, carbon that is already a part of the Earth’s carbon cycle. As long as forests are managed sustainably, forest products and bioenergy do not increase atmospheric CO\(_2\) levels.
3. Creating forest products and bioenergy do produce a small amount of geologic-based carbon emissions because equipment runs on fossil fuels. However, these emissions are significantly less than the fossil fuel-based emissions (1) produced by products made of steel, concrete or plastic, or (2) emitted by the burning of coal, oil, or natural gas to produce energy.
4. As long as forests are managed sustainably, which they are in the US and NY’s forest products and bioenergy provide change benefits by reducing fossil fuel-based carbon emissions. In addition, forest products store carbon in those wood products during their useful life.

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WHAT IS CAUSING CLIMATE CHANGE?
- Climate change is occurring because greenhouse gases (GHGs) levels in the Earth’s atmosphere have been increasing for the past 200 years.
- The most important of these GHGs is CO\(_2\). Atmospheric CO\(_2\) levels have been rising for two reasons.
- First and most importantly, because humans have been removing what is often referred to as geologic carbon that had been locked up in the Earth for 100s of millions of years in the form of coal, oil, and natural gas. These fossil fuels are then burned to produce products and energy and release CO\(_2\) (and other GHGs) into the atmosphere at a rate faster than it can be assimilated in other places in the carbon cycle. As the figure below indicates, this represents the vast majority of CO\(_2\) emissions during the past 50 years.
- Second, humans have been clearing forests and turning them into other land uses such as urban and suburban areas and agriculture (referred to as "Land-use change" in the Figure).
- New York and US forests have been sequestering more carbon than they have been emitting into the atmosphere for decades. At the same time these forests have supported a wide range of industries that rely on wood as a raw material. Thus, forests sequester carbon, support tens of thousands of jobs, generate billions of dollars for the state’s economy, and provide many other services, such as clean water and air, wildlife habitat, and recreational opportunities.

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SFAP: Potential Actions for Private Forests and Climate

• Wood products and biochemicals provide a carbon substitution benefit when replacing products with a larger carbon footprint
  • Promoting traditional wood products to maintain supply chains and existing capacity
  • Future Mass Timber, Cross Laminated Timber products to replace concrete or steel infrastructure
  • Bioplastics and biofuels to replace petroleum-based products
• Create an outreach strategy that clearly explains the “No Markets, No Stewardship” relationship between healthy, thriving forest product markets and healthy thriving forests.
Challenges

• Forest regeneration is struggling in many parts of the state due to deer, competing vegetation issues, poor or nonexistent forest management and forest fragmentation.

• Unprecedented forest health challenges due to invasive forest pests and diseases

• Sound forest management is more expensive now compared to the past

• Resources to get forestry programs to 13.6 million acres of forest land and nearly 700,000 landowners

• No Markets, No Stewardship
Moving Forward

• New York needs professional management of our forests for carbon.
• The right mix of programs, incentives and regulation for the Forest Sector to meet CLCPA targets.
• Forestry friendly policies that support NY forest product markets and sound forest management (Example: Stronger Right to Practice Forestry Act)
• Outreach efforts will be needed to broaden appeal outside of the Forestry Sector “choir”
Regenerate NY?

- Authorized under Climate Adaptation Line of EPF
- 2019-$500,000
- 2020-$500,000
- 2021-????
- Purpose was to provide grants to assist landowners in securing forest regeneration on private forests.
- Four Practices: Afforestation/Reforestation, Forest Stand Restoration, Competing Vegetation Control and Deer Exclosure (including slash walls)
- Intended for release in Spring 2020, delayed due to COVID 19 budget issues.
Policy Questions

• How to bring more forest product markets and sustain existing ones in New York?
• What programs, incentives and regulations will make New York forests healthier and grow more vigorously so they can sequester more carbon and support the forest industry?
• Increase the number of private acres under professional forest management. How much do we need to reach CLCPA goals?
• What type of forest carbon management program will work for private landowners to enroll in high numbers and will be manageable for staff? Public Private partnerships could be the answer.
• What type of carbon credit markets for forest carbon will exist in New York? How can we facilitate their development?
• What types of reforms to we need for our existing programs to meet carbon goals
How can you stay informed?

This is a wonderful opportunity for us to think collectively about what New York’s forests mean to us.

You can find up-to-date information on the New York State Forest Action Plan here: http://www.dec.ny.gov/lands/60829.html

Thank you for your commitment to sustainable forestry in New York!

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