

# Natural & Working Lands Strategy Stakeholder Meeting: Forests



NEW JERSEY  
DEPARTMENT OF  
ENVIRONMENTAL  
PROTECTION



NEW JERSEY  
DEPARTMENT OF AGRICULTURE

3/28/2023

# Ground Rules

- Attendee microphones and cameras are off by default
- Questions or comments can be typed into the chat at any time
- Please limit your input to topics we are discussing today
- After each land type, we will address some questions from the chat and there will be time to raise your hand and speak – we will enable your microphone when you are called on
- All input will be considered, but there will not be a response to comments document
- If you are unable to comment today, please use the comment form at <https://www.nj.gov/dep/climatechange/mitigation/nwls.html>

# Agenda

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- Introduction – Heather Genievich
- Background – Tony Rho
- NWLS Overview – Metthea Yepsen
- Timeline- Metthea
- How recommendations were developed - Metthea
- Overview of how forests sequester carbon – Lauren Siclare
- Major components of the strategy for forests – Lauren Siclare
- Questions for attendees - Heather
- Input from attendees - Heather and Lauren
- Reminder of timeline and ways to send comments - Heather



**50% REDUCTION**

From 2006 baseline

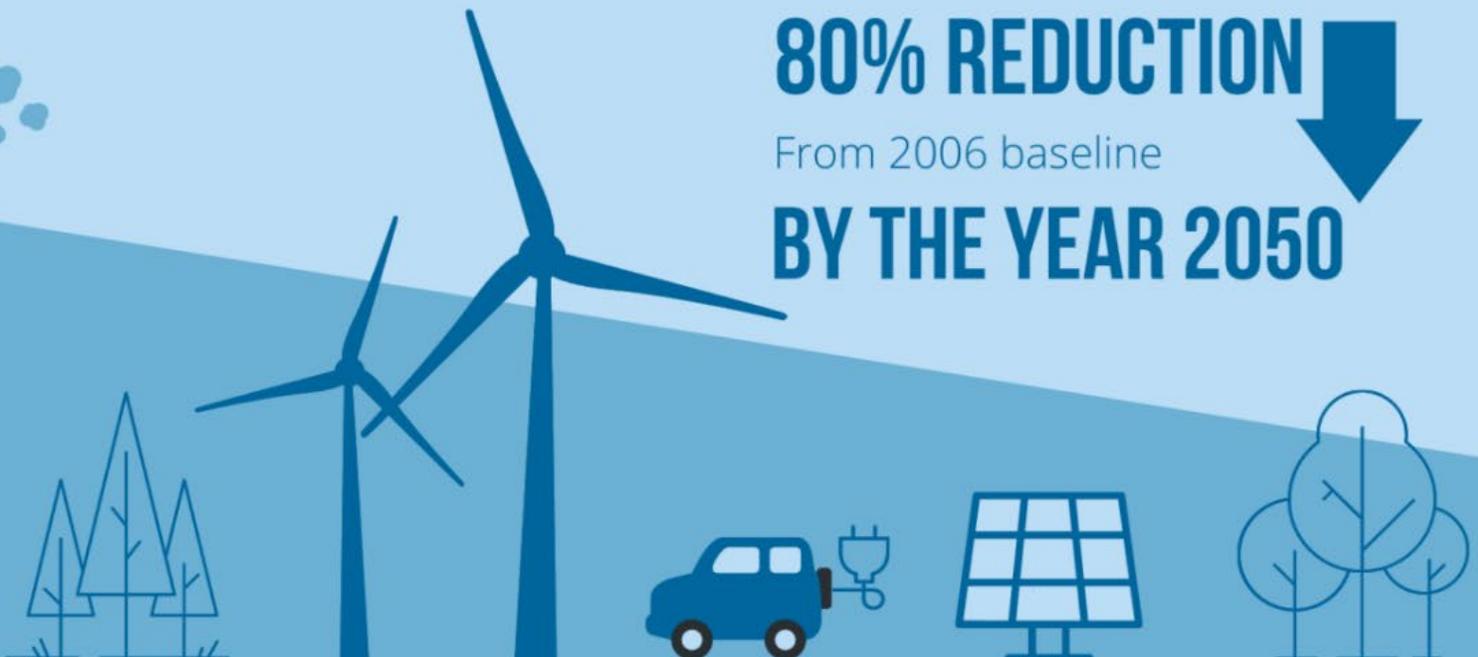
**BY THE YEAR 2030**



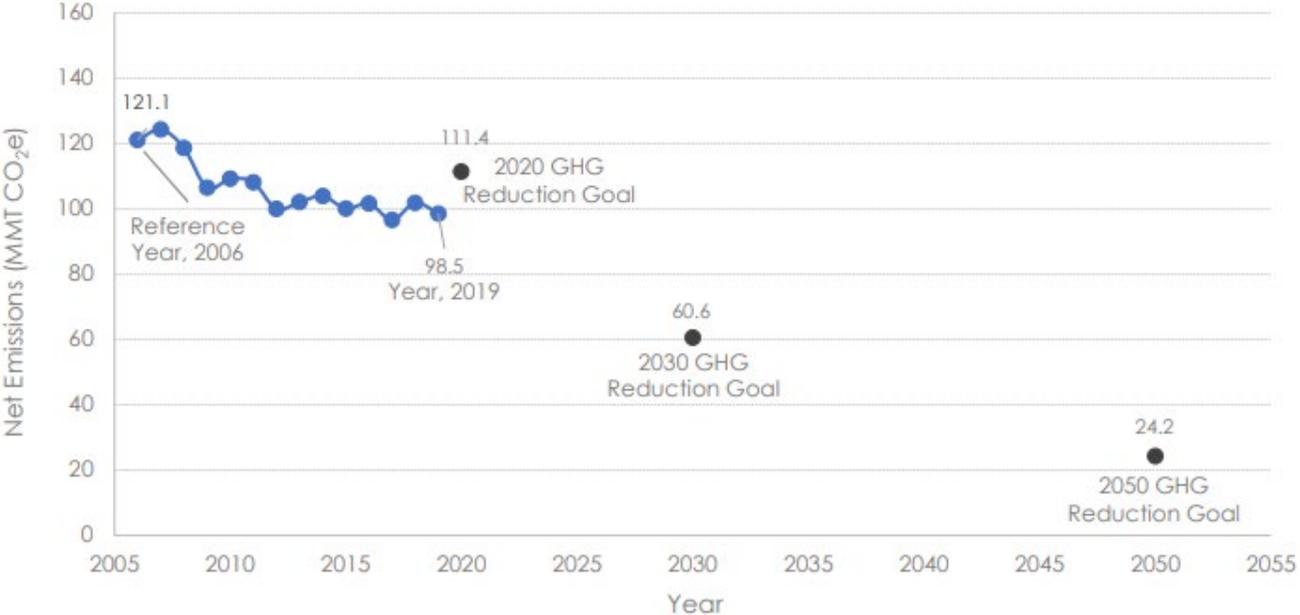
**80% REDUCTION**

From 2006 baseline

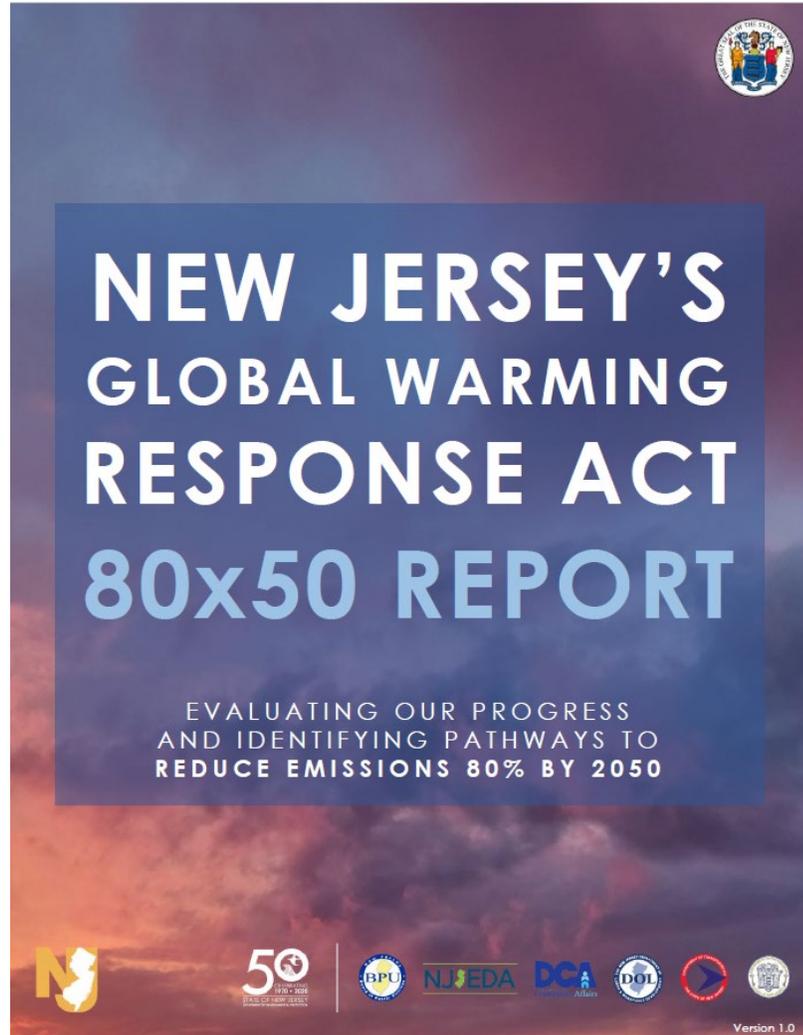
**BY THE YEAR 2050**



# Greenhouse Gas Reduction Goals



# New Jersey's 80x50 Report

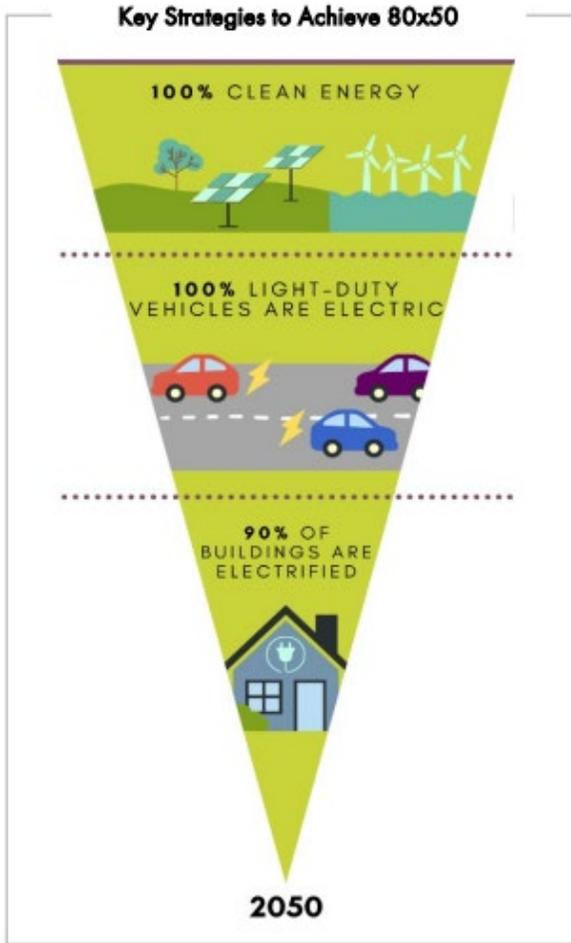


- Seven emission sectors are evaluated to determine how to achieve the 80x50 Goal.
- Each Sector Includes:
  - Business-as-Usual Projection.
  - Emissions Reduction Pathway Projections.
  - Specific legislative and administrative recommendations for achieving emissions reductions.
- Four electric demand scenarios are evaluated based on various levels of electrification throughout the state.

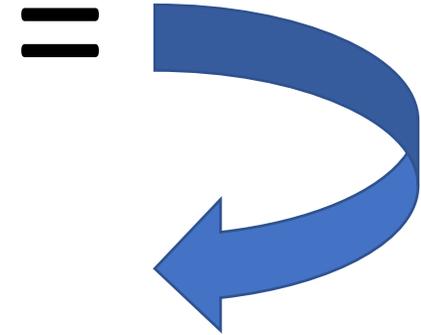
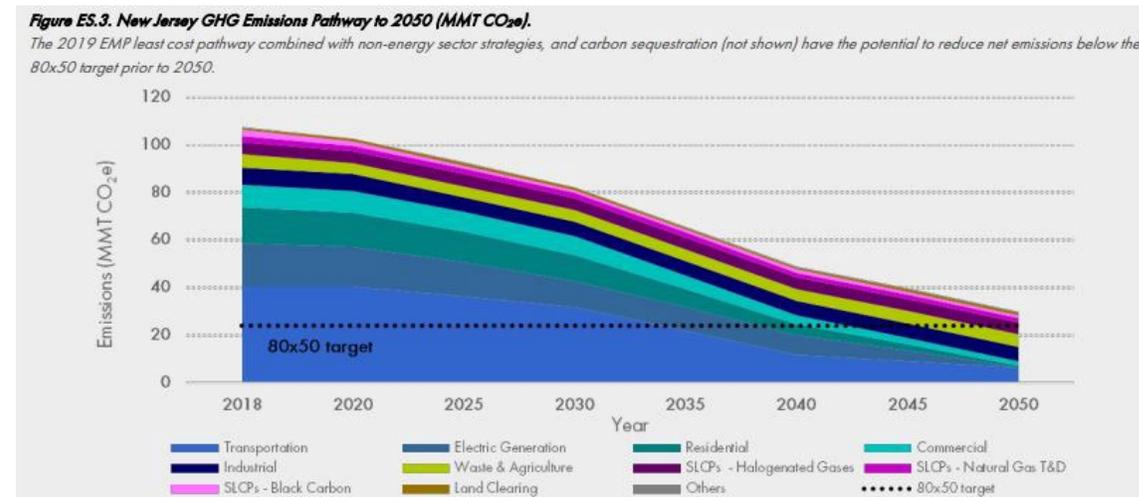
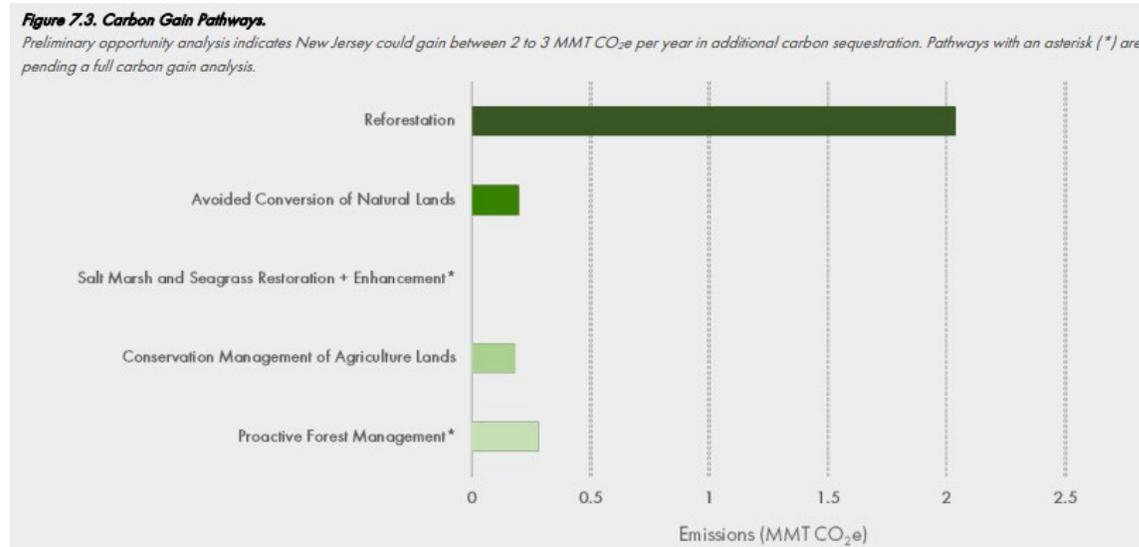
# NJ Greenhouse Gas Reduction Pathways

CO2e Redux:

CO2e Gains:



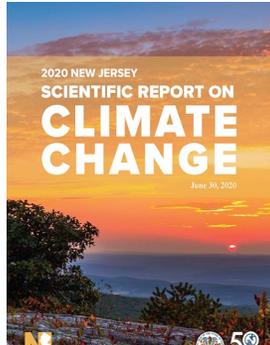
+



**NJ needs CO<sub>2</sub> sequestration through NWL to meet state 2050 goals!**

# A Collaborative Call to Action

Scientific Report on Climate Change



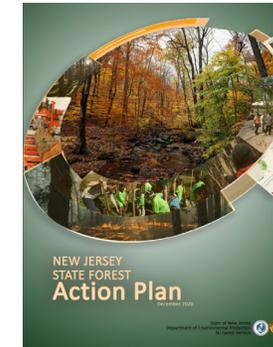
GWRA 80x50 Report



New Jersey Wetland Program Plan



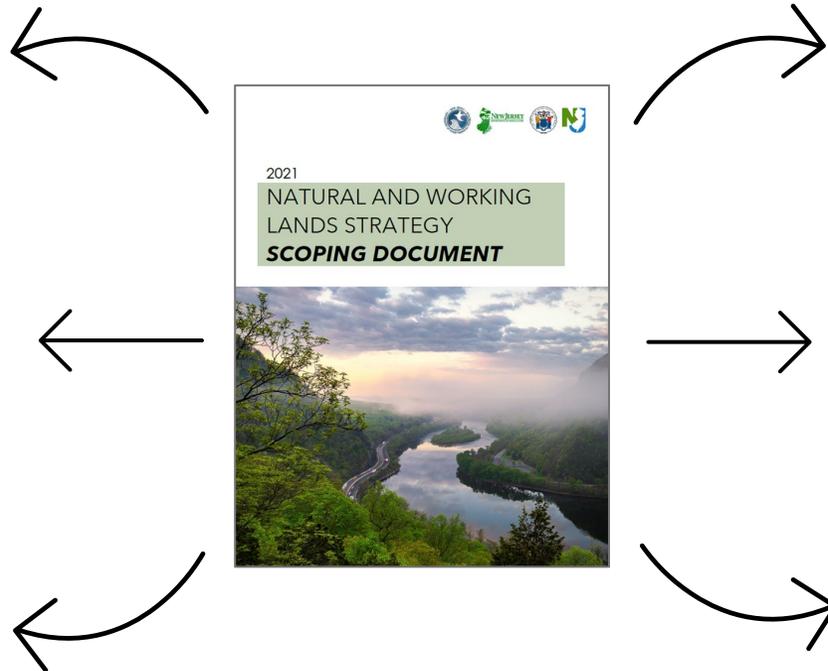
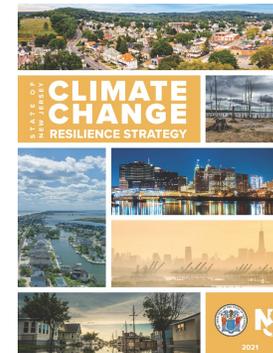
New Jersey Forest Action Plan



RGGI Strategic Funding Plan



Climate Change Resilience Strategy



# Carbon Sequestration Basics

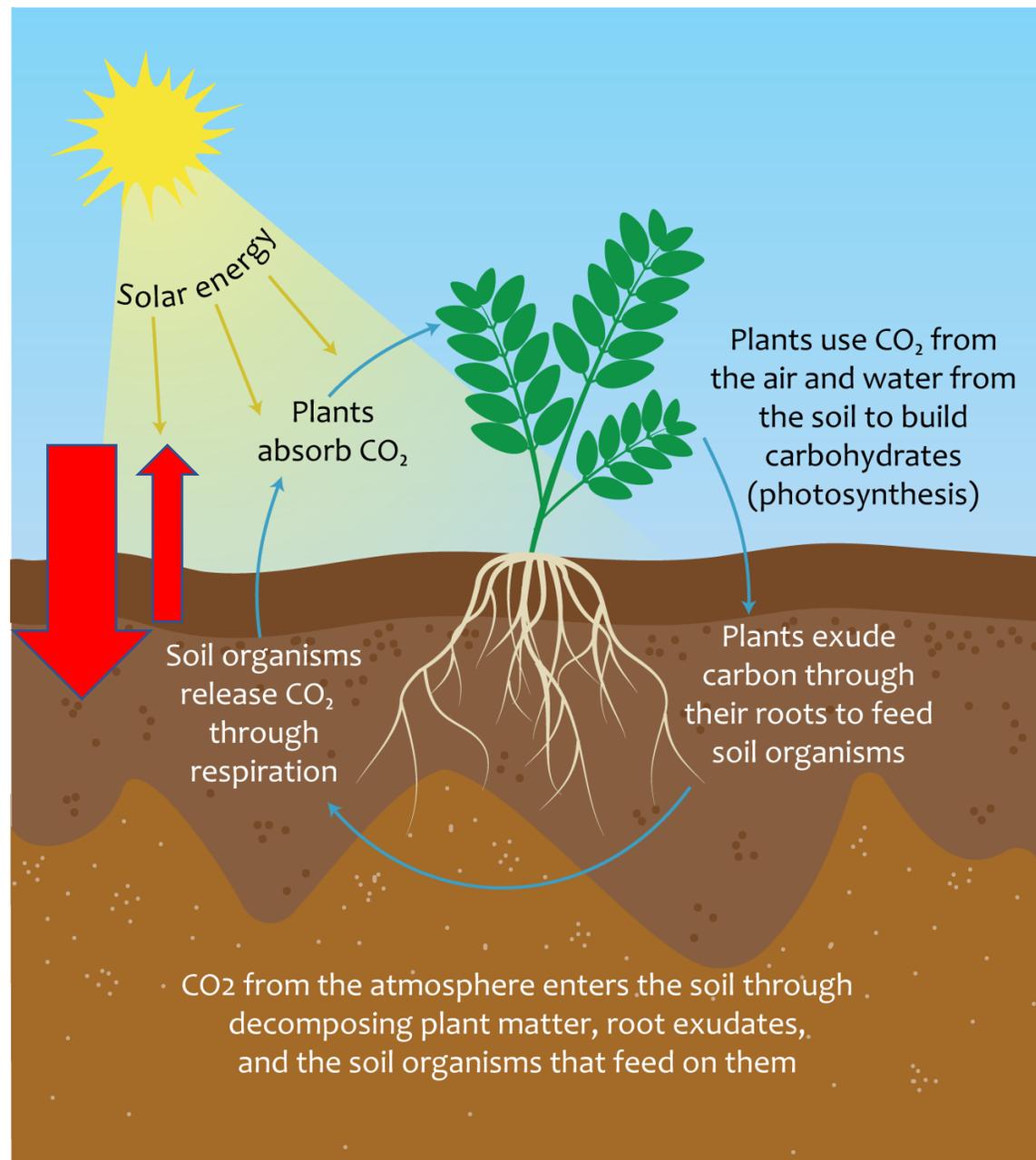


Image from <https://sustainability.colostate.edu/humannature/jocelyn-lavallee/>

# Land Types in the NWLS



Forests

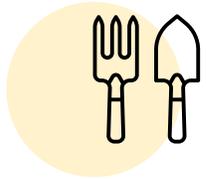
Agriculture

Wetlands

Developed Lands

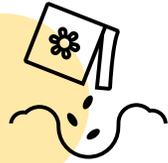
Aquatic Habitats

# Milestones



## NWLS Kickoff

Work on the strategy began in **May 2021**



## Scoping Document

Scoping Document was released **December 2021**

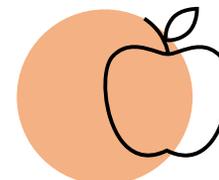


Recommendation and Target Development



## Stakeholdering

Four stakeholder meetings are set for the second half of **March 2023**



## Final Strategy

Release final strategy in **third quarter of 2023**

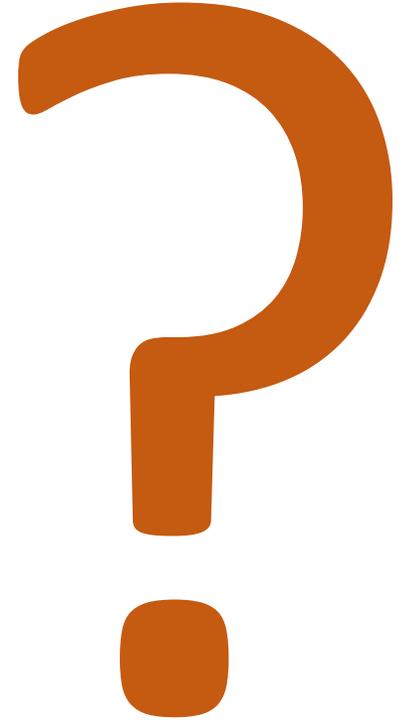
## How was the strategy developed?



- Reviewed other NWLS
- Honed the list for NJ
- Modeling and literature searches:
  - Carbon benefit
  - Cost
  - Scalability
- Recommendation selection
  - Who, what, where, when, why, how
  - Impediments
  - Environmental justice
  - Climate change
  - Other benefits to the ecosystem and people
- Targets
  - 2030 and 2050

# Our questions for you:

1. What is missing from our draft list of targets?
2. Are there any targets that do not belong on these lists?
3. What are key obstacles to achieving these targets?
4. What financing mechanisms are available?



# Forests

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- There are an estimated 1.9 million acres of forest land in NJ
  - NJ is ~ 40% Forested
    - Federal 6%
    - State 33%
    - County/Municipal 15%
    - Private 46%

Distribution of  
Forest Land

Forest  
Nonforest



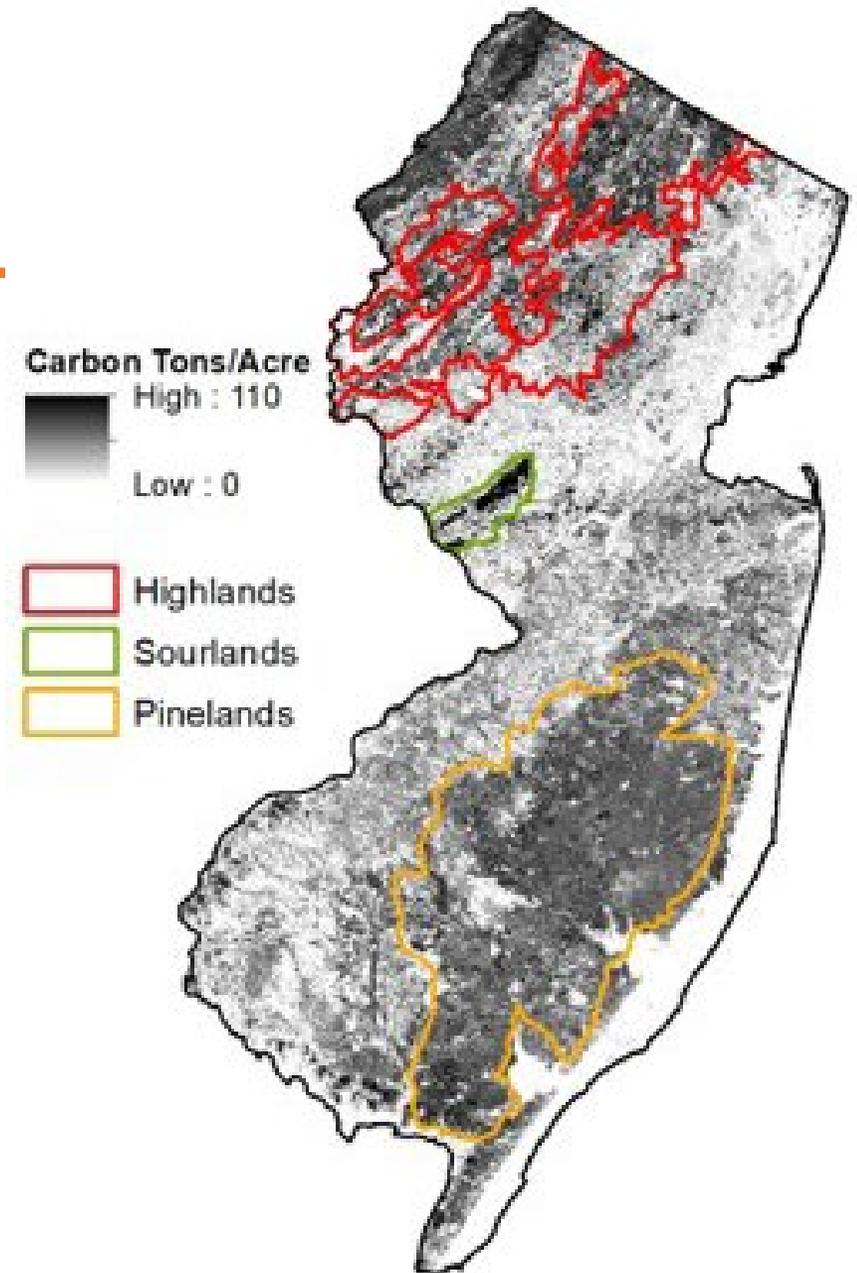
Processing note: This map was produced by linking plot data to MODIS satellite pixels (250 m) using gradient nearest neighbor techniques.

Figure 2. — Distribution of forest land, New Jersey, 2009.

# Forests

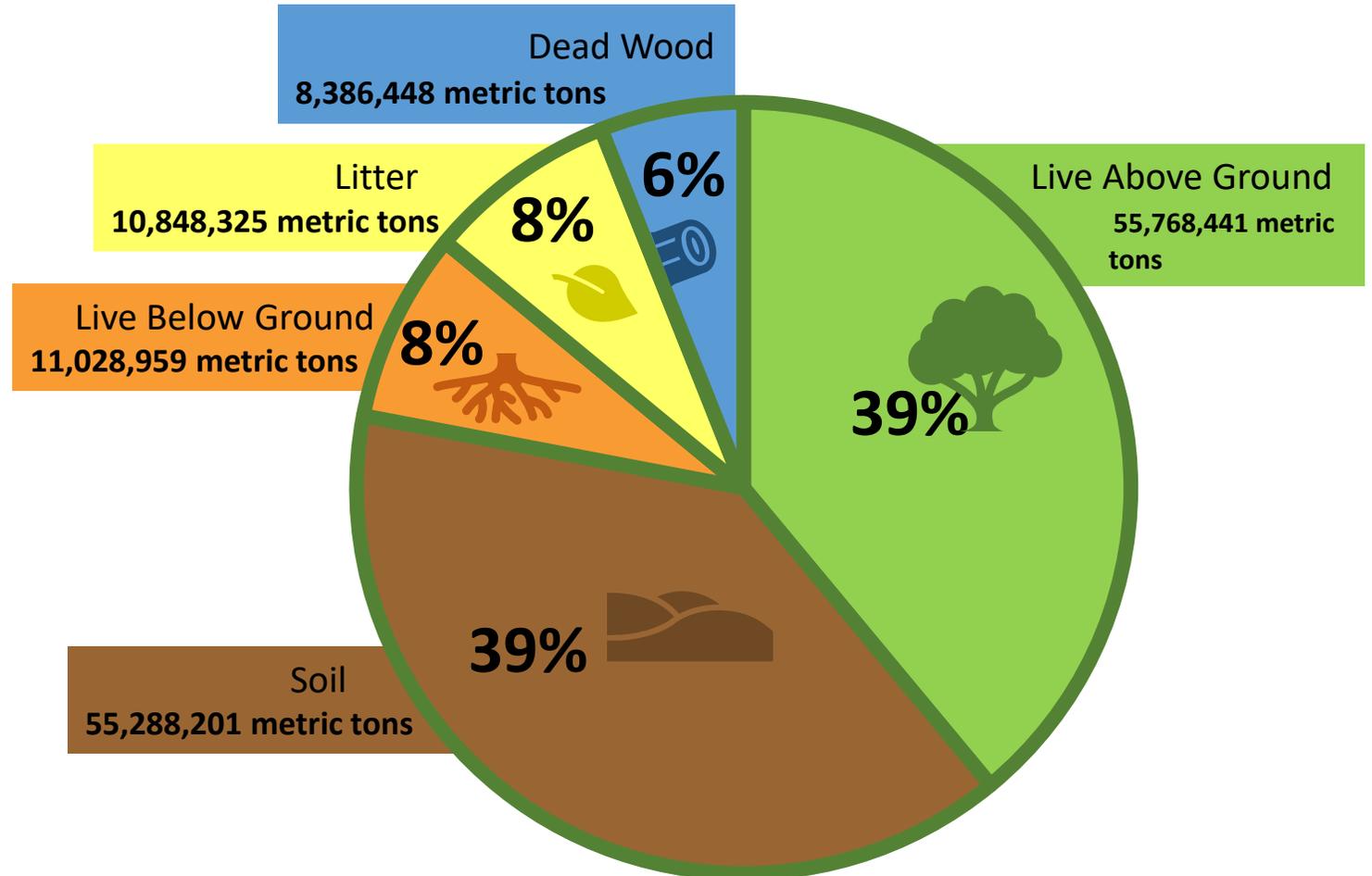
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NJ forests store  
about 1.41  
MMT CO<sub>2</sub>



# Forests

Our forests have 5 different carbon pools, which include: live above ground, live below ground, dead wood, litter, and soil.



# Draft Targets for Forests – Management Practices

Recommendation Type	Target	2030	2050
Afforestation	Identify & Plant non-forested land to a forested condition	1,600 ac (200 ac/yr)	4,000 ac (200 ac/yr)
	Select appropriate species for planting	X	X
	Land Management Review for suitable sites	Maintain	Maintain
	Creation of afforestation Best Management Practices	X	X
	Afforest state-owned golf courses/bogs/etc.	-	X
Avoided Conversion	Minimize conversion of forested lands to non-forest uses	Maintain (4,000 ac/yr)	Reduce (2,000 ac/yr)
	Private Landowner enrollment in forest stewardship program	Increase by 115 prop/yr	All properties enrolled
	Increase acreage of land purchased by Green Acres	-	X
Avoided Emissions	Thin forests to reduce stress/competition	1,500 ac/yr	1,500 ac/yr
	Prescribed Burning to reduce fuel loads	25,000 ac/yr	25,000 ac/yr
	Damage Causing Agent Surveys	Expand	Expand

# Draft Targets for Forests – Management Practices

Recommendation Type	Target	2030	2050
Improved Forest Management	Forest Inventory and Analysis (FIA) Inventory Agreement	Include Phase 3 plots	Include Phase 3 plots
	Creation of a Forest Management Optimization Model	Complete	-
	Review current forestry contracts	X	-
	Provide 10 years of predictive forest management implementation opportunities consistent with the New Jersey State Forest Action Plan	X	X
	Plan ecological forest management	100,000 ac	200,000 ac
	Complete DTSP Natural Resource Stewardship Plan	2,700 ac	-
	Inventory state forest lands	40,000 ac/yr	40,000 ac/yr
Reforestation	Assess regeneration status of forest lands that have been affected by wildfires or damage causing agents	Annually	Annually
	Survey state lands & identify areas where ecosystem function is disrupted	Annually	Annually
	Prioritize sites for reforestation actions	10 sites	40 sites
	Identify & restore degraded forests	800 ac	2,000 ac

# Draft Targets for Forests – Management Practices

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Recommendation Type	Target	2030	2050
Nurturing Forests with the NJ Forest Service Nursery	Increase nursery production to annually service more municipalities & private landowners	20% increase	20% increase
	Nursery Planning & Improvement (Diversify/Propagate Rare, Plant Climate-Resilient, Produce Insect and Pathogen-resistant, & Restore Native)	X	X
Outreach and education focused on educating NJ citizens and landowners on the value of forests and forest management	Improve forest management outreach, programming, and curriculum at State facilities, and add 10 NJ Forest Service-led forest management programs annually	X	X
	Increase geographical reach of forestry programs	X	X
	Webpage on DEP website dedicated to carbon, climate & forest management	X	X

# Draft Targets for Forests – Management Practices

Recommendation Type	Target	2030	2050
Outreach and education focused on educating NJ citizens and landowners on the value of forests and forest management	Include importance of active forest management in all carbon sequestration messaging to the public	X	X
	Public events that focus on forest & forest management	4/year	6/year
	Meetings with internal stakeholders to expand opportunities for outreach & education	Quarterly	Quarterly
	Utilize and enhance State facilities & partner with other DEP programs to enhance NJFS outreach & education	X	X
	Develop & implement a NJFS Interpretive Plan	X	X
	Engage a wider audience by embracing technological advances and installing kiosks throughout state with forest management information	X	X
	Establish a forestry cooperative with the state's land grant institution	-	X

# Draft Targets for Forests – Management Practices

Recommendation Type	Target	2030	2050
Promote urban forests and street trees through stewardship in order to maintain and grow the current carbon resource in urban communities	Annually, 10 new municipality management plans, 10 new/updated inventory grants, & CORE train 100 participating individuals	X	X
	Continue to provide annual grants for tree planting & resiliency planning / ensure compliance from participants	X	X
	Urban FIA Inventory Agreement	Maintain	Maintain
	Implement a state-wide inventory program so that data collection amongst municipalities is consistent	X	-
	Revisit No Net Loss Program & capacity to hire full-time employees	X	-
	Enroll all municipalities in Urban Stewardship programs by 20 years	-	X
	Increase the participation of Overburdened Communities in regard to tree planting, training/education, planning, managing and/or inventory	50 municipalities	100 municipalities

# Draft Targets for Forested Lands – Management Practices

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Recommendation Type	Target	2030	2050
Maintain and increase carbon storage through durable forest products sourced from local forests	Revisit IMPLAN study to review wood products being brought into the state their uses	X	-
	Maintain & update the list of Forest Industry Professionals working & running their businesses using local NJ forest products	X	-
	Maintain working relationship with external organizations that support local forest products	X	-
	Support & collaborate with businesses that are interested in starting niche forest product markets in NJ	-	X
	Improve consumer awareness of the "New Jersey Grown" agricultural designations for wood products to help combat carbon leakage	-	X

# Draft Targets for Forests – Policy Recommendations

Recommendation Type	Target	2030	2050
Afforestation	Urban and Community Forestry grants program for urban planting & maintenance	Expand	-
	Private lands incentive programs for afforestation projects	Maintain	Maintain
	Coordinate with NJDEP Fish & Wildlife for opportunities with Connecting Habitat Across New Jersey (CHANJ)	X	X
	Incentivize Green Acres/Ag to afforest their properties where appropriate	-	X
Avoided Conversion	Enroll state forest land into a carbon market	75,000 ac	dependent on market
	Establish carbon markets for private lands in NJ	X	-
Reforestation	Encourage reforestation on Private Lands	Annually	Annually

# Draft Targets for Forests – Policy Recommendations

Recommendation Type	Target	2030	2050
Support programs that provide incentives to landowners for improved forest management	Continue the trend of about 115 additional properties per year utilizing improved forest management	X	-
	Provide cost share to properties using Regional Greenhouse Gas Initiative funding for improved forest management	100 properties / year	500 properties / year
	All properties eligible for programs be enrolled	-	X
Maintain and increase carbon storage through durable forest products sourced from local forests	Incentivize/ Subsidize keeping harvested wood out of landfills in state contracting	Incentivize	Subsidize
	Explore updating building codes to accommodate & incentivize the use of emerging carbon-positive construction materials such as mass timber over the use of concrete & steel which have significantly larger associated carbon footprints	-	X
	Incentivize the creation of forest products	-	X
	Encourage wood utilization by supporting the creation of a NJ state chapter of the Urban Wood Network	X	-

# Our questions for you:

1. What is missing from our draft list of targets?
2. Are there any targets that do not belong on these lists?
3. What are key obstacles to achieving these targets?
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# What's next?

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- ❑ Virtual stakeholder meetings from 2-4 pm
  - March 21 – developed land
  - March 23 – agriculture
  - March 28 – forests
  
- ❑ Comments on all draft targets are due April 14
  
- ❑ Final strategy to be released in 2023 Q3

<https://www.nj.gov/dep/climatechange/mitigation/nwls.html>

# To review the list of targets:



[Home](#) / Natural and Working Lands Strategy (NWLS)

The Natural and Working Lands Strategy (NWLS) aims to mitigate the effects of climate change through the protection, restoration, and strategic management of New Jersey's natural and working lands. These lands include those that contribute the most to the storage and sequestration of greenhouse warming gases: forests, agricultural lands, wetlands, developed lands, and aquatic resources and habitats.

## NWLS Resources

[FAQ](#)

[NWLS Scoping Document](#)

[Draft NWLS Targets](#)



## NATURAL AND WORKING LANDS STRATEGY TIMELINE



**2021**

Scoping Document Released



**Spring 2023**

Targeted Stakeholder  
Sessions



**September 2023**

Natural Working Lands  
Strategy Released

<https://www.nj.gov/dep/climatechange/mitigation/nwls.html>

# To submit comments after the meeting:

2021  
Scoping Document Released

Spring 2023  
Targeted Stakeholder Sessions

September 2023  
Natural Working Lands Strategy Released

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## Register for a NWLS Webinar

In March 2023, the Department will host a set of targeted stakeholder sessions for the specific natural and working land types that will be the focus of our carbon capture and sequestration efforts. There will be four, topical webinars:

1. Aquatic Habitats, Tidal Wetlands, and Non-Tidal Wetlands
2. Developed Lands
3. Agricultural Lands
4. Forested Lands

The Department looks forward to your comments and participation in the stakeholder sessions to ensure NJ's Natural and Working Lands Strategy effectively assists in mitigating the effects of climate change. Register for each event below.

Aquatic Habitats, Tidal and Non-tidal Wetlands	Developed Lands	Agricultural Lands	Forested Lands
16	21	23	28
March 16   2:00-4:00PM	March 21   2:00-4:00PM	March 23   2:00-4:00PM	March 28   2:00-4:00PM
<a href="#">RSVP Here</a>	<a href="#">RSVP Here</a>	<a href="#">RSVP Here</a>	<a href="#">RSVP Here</a>

[Comment on NJ's NWLS Stakeholder Sessions](#) >

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Questions?

<https://www.nj.gov/dep/climatechange/mitigation/nwls.html>



## NWLS Stakeholder Sessions

### Comment on NJ's NWLS Stakeholder Sessions

To submit a comment on NJ's NWLS, please complete the form below, select the comment topic you are commenting on (if multiple topics are addressed in your comments, please select "other"), and enter your comments in the space provided. Then click the Submit button to send them.

\* indicates required field

We'll never share your email with anyone else.

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